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Effect of Incentive Spirometry on Recovery of Post-Operative Patients: Pre Experimental Study

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Abstract

Objective: Post-operative care is management of patients after any surgery. The main goal of post-operative care is to prevent complications i.e. atelectasis and infection. The other objective is early healing of the surgical incision and return of patient to a state of health. About 17% to 88% of people in postoperative duration will have decreased lung volumes. This decreased lung volume problem can be solved with use of incentive spirometry in postoperative period on Day 1. Incentive spirometer is perioperative respiratory therapy given to postoperative patients to improve lung volume of patients and hasten recovery of patients also. The main aim of study were to identify effect of Incentive spirometry on postoperative patient's recovery.

Method: It was pre-experimental study with pretest- posttest design only, which was done on post-operative patients at All India Institute of Medical Sciences (AIIMS), Rishikesh.

Results: Majority (52 %) of participants were 41 to 50 years age group. Male and female ratio for participants were 46:54. Paired 't' test p value i.e. 0.00* with CI [0.72, 1.03] showed that on Pretest and Day 3 Performance level on incentive spirometry of participants showed a significant value, which indicate that spirometer enhance recovery of post-operative patients by increasing their lung volumes.

Conclusions: This study revealed that incentive spirometry is effective in improving of pulmonary function among post-operative patients, which further improves blood circulation and hasten early recovery of surgical wound. This spirometry should be integral part of Post-operative care. All nurses who are involved in Postoperative units should encourage patients to do it on regular basis and document it as a vital sign. Good compliance to incentive spirometry can improve better outcome of patient's.

Keywords: *Effectiveness, Incentive spirometry, Postoperative Patients, Postoperative Recovery.*

Introduction

Postoperative recovery is main process of being in a state of complete wellness. Postoperative recovery can be achieved by returning of normal health of patient's at a level of independence i.e. activities of daily living patients can do in postoperative patient's as early as possible. It can also be achieved by optimizing psychological well-being of patient's as well.(1)

Postoperative care of patients not only includes early mobilization in which deep breathing and coughing exercises should be included to prevent any pulmonary complications. It also include ensuring patient's for adequate nutrition, preventing pressure sores development, frequent turning of patient and adequate pain control in post-operative period.In America about 95% of hospitals provide incentive spirometer to postoperative patient's prophylactically for treatment

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of atelectasis and other respiratory problems. Incentive spirometer is a reproducible sustained maximal inspiration, which mainly records frequency and rate of respiration at acceptable rate. Incentive spirometry is also widely used routine clinically procedure for prophylactic and treatment regimen as a perioperative respiratory therapy.(2)

Incentive spirometry is also called as sustained maximal inspiration (SMI) and is considered bronchial hygiene therapy. It mainly designed to function as a natural yawning including long, slow, deep breaths. Incentive spirometry is done by using a device which provides patient's visual and positive feedback when they inhale at a predetermined set volume and inflation should sustain for minimum of 3 seconds. (3)

A systematically review was done to identify effect of incentive spirometry (IS) for prevention of postoperative pulmonary complications (PPCs). A through searching of MEDLINE, CINAHL, HealthSTAR, and Current Contents databases for review. After critical appraisal of information, they searched 85 research articles. In 35 of these studies they were unable to accept the stated conclusions. Critical appraisal of remaining 11 remaining studies indicated in 10 studies, there was no positive short-term effect of incentive spirometry in cardiac or abdominal surgery. The only supportive study reported that incentive spirometry, deep breathing and intermittent positive-pressure breathing were equally more effective than no treatment in preventing postoperative pulmonary complications following abdominal surgery. So Incentive spirometry showed significantly effective in preventing postoperative pulmonary complications in abdominal surgery patients. (4)

Research studies on incidence of postoperative complications occurrence showed 61 % patients develop complication after discharge from hospital. The four main problem faced by patients at home were surgical site infection (SSI), urinary infections, functional gastrointestinal problems, and pain management problems after discharge. The main problem in postoperative periods in hospital were cardiac, respiratory, and neurologic complications. So incentive spirometry can be very useful to prevent respiratory complications in postoperative periods. (5)

Anaesthesia has a major effect on pulmonary functions which may continue on post-operative period. General Anaesthesia mainly exhibits its effects by changes in respiratory mechanic. Pulmonary functions are equally affected by anaesthetic agent used for anaesthesia, thus long term effects are changes in lung volumes, airway resistance and respiratory compliances, which alter V/Q ratio. Pulmonary functions can be properly address to prevent potential complications during anaesthesia, after anaesthesia and in post-operative period. As incentive spirometry is helpful to improve pulmonary function of patients. So incentive spirometry can help in over these side effect in postoperative period. (6)

As incentive spirometry is helpful to prevent postoperative pulmonary complications but there was lack of evidence about its effectiveness in postoperative recovery among surgical patients.

The main aim of this study wereto check effect of incentive spirometry on postoperative recovery and asses and compare effect of incentive spirometry on postoperative performance level among post-operative patients.

Material and Method

Study Design used for research was pre-experimental study with pretest- posttest design. Sampling technique were non-probability purposive sampling. Study setting used in study were surgical IPD's of AIIMS, Rishikesh. Study participants were post-operative patients of general surgery IPD who are advised for incentive spirometry.

Formula used for sample size calculation were:

$$n = \frac{(1 - \frac{n}{N}) \times t^2(p \times q)}{d^2}$$

n = Sample size, N= Size of the eligible population.

t^2 = Square value of the standard deviation score that refer to the area under a normal distribution of values.

p = Percentage category for which we are computing the sample size, q = (1-p)

d^2 = Square value of one half to the precision internal around the sample estimate.

Sample size were 50 patients who undergone for any surgery.

Description of Data collection tools: Data collection tools consist of two parts. Part I consist of socio-demographic variable including age, gender, diagnosis.

Part II consist of Observation checklist in which patients were observed when they were doing incentive spirometry **(Take 15 breaths with spirometer in every 2 hours)** [7]on Day 1, 2 and 3 and check their performance level i.e. Score=0, Not able to perform, Score=1 means Inadequate, Score=2 means Moderately Adequate and Score=3 meaning Adequate performance.

Procedure of Incentive Spirometry used in study were: 1. Sit in bed and hold the device. 2. Place mouthpiece of spirometer in mouth. 3. Always make sure that you are making a good seal on mouthpiece with lips. 4. Breath out (exhale) normally. 5. Then Breath in (inhale) slowly. The ball in the incentive spirometer will rise as you breathe in. 6. Try to get this ball to rise as high as you can. 7**. Take 15 breaths with spirometer in every 2 hours.**[7] 8. Repeats this procedure in every 2 hourly and document it. Schedule for incentive spirometry were 6 am, 8 am, 10 am, 12 noon, 2 pm, 4 pm, 6 pm with 15 breaths in every 2 hours. The Pretest observation were recorded before starting of incentive spirometry and then for three consecutive days data recording were collected in above following the schedule.

Data analysis were done by using descriptive statistics and inferential statistics. For socio-demographic data frequency and percentage were calculated. Chi square test was used to find relationship of socio-demographic variables with pre-test and post-test results. T test was applied to identify difference between pre-test and post test results.

Findings: In this study, Data was collected from 50 participants, which were from various surgery IPD departments.

Finding related to Socio-demographic Variables: Majority (52 %) of participants were 41 to 50 years age group. Male and female ratio for participants were 46:54. Majority of participants i.e. 68 % who were observed were having below umbilicus surgery. (Table 1).

Table 1. Frequency and percentage of Socio-demographic Variables N=50

Sr. No.	Variable	Options	Frequency	Percentage
1.	Age	18-30 years	2	4
		31-40 years	16	32
		41- 50 years	26	52
		51- 60 years	6	12
2.	Sex	Male	23	46
		Female	27	54
3.	Diagnosis	Above Umbilicus Surgery	15	30
		Below Umbilicus Surgery	34	68
		Extremities Surgery	1	2

Finding related to association by using Chi square test: Chi square value (0.003*) showed significant association of diagnosis with performance level on Incentive spirometry on Pre-test. So there is a strong association between diagnosis for surgery with performance level on Incentive spirometry on Pre-test i.e. about 21 participants who were having below umbilicus surgery showed moderately adequate performance level on Incentive spirometry on Pre-test. Chi square value (0.039*) also showed significant association of sex with performance level on Incentive spirometry on Day 3 after surgery. So there is a strong association between sex of participants with performance level on Incentive spirometry on Day 3 after surgery i.e. about 21 participants who were female showed adequate performance level on Incentive spirometry on Day 3 after surgery. (Table 2).

Table 2. Chi square value for Diagnosis and Performance level on Incentive spirometry of patients on Pretest and Sex and Performance level on Incentive spirometry of patients on Day 3 after surgery. N = 50

	Performance level on Incentive spirometry on Pretest				
Diagnosis	**Adequate**	**Moderately Adequate**	**Inadequate**	**Pearson Chi-square**	**Asymp. Sig. (2-sided)**
Above Umbilicus Surgery	0	6	9	16.223a df = 4	0.003*
Below Umbilicus Surgery	3	21	10		
Extremities Surgery	1	0	0		
	Performance level on incentive spirometry on Day 3				
Sex	**Adequate**	**Moderately Adequate**	**Inadequate**	**Pearson Chi-square**	**Asymp. Sig. (2-sided)**
Male	10	12	1	6.507a df = 2	0.039*
Female	21	5	1		

Finding related to test of Difference by using paired 't' test : Paired 't' test p value i.e. 0.00* with CI [0.72, 1.03] showed that on Pre-test and Day 3 performance level on incentive spirometry of participants showed a significant difference, which means spirometer enhance post-operative performance level on incentive spirometry of patients. (Table 3) Paired 't' test p value i.e. 0.00* with CI [0.32, 0.63] also showed a difference in Pre-test and Day 2 performance level on incentive spirometry of participants. So spirometer enhance post-operative performance level on incentive spirometry of patients. (Table 4).

Table 3. Paired ' t' test p value with Performance level on Incentive spirometry of patients on Pre-test and Day 3 after surgery. N=50

Days	**Mean**	**Mean difference**	**SD^D**	**SE^{Mean}**	**95 % Confidence Interval (CI)**	**t value**	**p value**
Pretest	2.30	0.88	0.558	0.078	[0.72, 1.03]	11.143	0.00*
Day 3	1.42						

Table 4. Paired ' t' test p value with Performance level on Incentive spirometry of patients on Pre-test and Day 3 after surgery. N=50

Days	**Mean**	**Mean difference**	**SD^D**	**SE^{Mean}**	**95 % Confidence Interval (CI)**	**t value**	**p value**
Pre-test	2.30	0.48	0.543	0.076	[0.32, 0.63]	6.244	0.00*
Day 2	1.82						

Conclusion

Majority (52 %) of participants belongs to middle age group. Majority of participants i.e. 68 % recruited were have below umbilicus surgery. Patients having below umbilicus surgery showed moderately adequate performance level on Incentive spirometry on Day 1 after surgery i.e faster recovery in below umbilicus surgery patients. Female patients showed adequate performance level on Incentive spirometry on Day 3 after surgery. Spirometer enhance performance of postoperative patients on incentive spirometry on Pre-test and Day 3 and Pre-test and Day 2 also.

This study revealed that incentive spirometry is effective in improving of pulmonary function among the

post-operative patients, which further improves blood circulation and hasten early recovery of surgical wound. This spirometry should be integral part of Post-operative care. All nurses who are involved in Postoperative units should encourage patients to do it on regular basis and document it as a vital sign. Good compliance to incentive spirometry can improve better outcome of patient's.

Conflict of Interest disclosure: Nil

Source of Funding: No Funding was taken from any agency for this research project.

Ethical Considerations: Ethical approval were taken Institutional Ethical Committee. (114/IEC/SRS/2017). During recruitment, from each participant written informed consent were taken for study.

References

1. Postoperative recovery and its association with health-related quality of life among day surgery patients [Internet]. [cited 2019 Dec 23]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3534532/
2. Postoperative Care: Definition and Patient Education [Internet]. [cited 2019 Dec 23]. Available from: https://www.healthline.com/health/postoperative-care
3. Incentive Spirometry [Internet]. [cited 2019 Dec 23]. Available from: http://www.rcjournal.com/cpgs/ispircpg.html
4. Overend TJ, Anderson CM, Lucy SD, Bhatia C, Jonsson BI, Timmermans C. The Effect of Incentive Spirometry on Postoperative Pulmonary Complications: A Systematic Review. Chest. 2001 Sep 1;120(3):971–8.
5. Incidence and significance of postoperative complications occurring between discharge and 30 days: a prospective cohort study- ClinicalKey [Internet]. [cited 2019 Dec 23]. Available from: https://www.clinicalkey.com/#!/content/playContent/1-s2.0-S0022480416301949?returnurl=https:%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS0022480416301949%3Fshowall%3Dtrue & referrer=https:%2F%2Fwww.ncbi.nlm.nih.gov%2F
6. Saraswat V. Effects of anaesthesia techniques and drugs on pulmonary function. Indian J Anaesth. 2015 Sep;59(9):557–64.
7. Using an incentive spirometer: MedlinePlus Medical Encyclopedia [Internet]. [cited 2019 Dec 24]. Available from: https://medlineplus.gov/ency/patientinstructions/000451.htm

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A Review Article on Corona Virus 2019-nCoV (COVID-19)

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Abstract

Coronaviruses are a group of viruses that cause diseases in mammals and birds. In humans, the viruses cause respiratory infections which are typically mild, including the common cold; however, rarer forms such as SARS, MERS and the novel coronavirus causing the current outbreak can be lethal. Coronaviruses were discovered in the 1960s. On 31 December 2019, the outbreak was traced to a novel strain of coronavirus, which was labelled as 2019-nCoV by the World Health Organization (WHO). Human to human transmission of coronaviruses is primarily thought to occur among close contacts via respiratory droplets generated by sneezing and coughing. Clinical laboratories performing routine haematology, urinalysis, and clinical chemistry studies, and microbiology laboratories performing diagnostic tests on serum, blood, or urine. There is currently no vaccine to prevent 2019-nCoV infection. The best way to prevent infection is to avoid being exposed to this virus.

Keywords: *SARS, MERS, 2019-nCoV, Orthocoronavirinae, Coronaviridae & Nidovirales.*

Introduction

The name "coronavirus" is derived from the Latin corona, meaning crown or halo, which refers to the characteristic appearance of the virus particles (virions)[1]. Coronaviruses are a group of viruses that cause diseases in mammals and birds. In humans, the viruses cause respiratory infections which are typically mild, including the common cold; however, rarer forms such as SARS, MERS and the novel coronavirus causing the current outbreak can be lethal. In cows and pigs they may cause diarrhoea, while in chickens they can cause an upper respiratory disease. Coronaviruses are viruses in the subfamily Orthocoronavirinae in the family Coronaviridae, in the order Nidovirales these are enveloped viruses with a positive-sense single-stranded RNA genome and with a nucleocapsid of helical symmetry. The genomic size of coronaviruses ranges from approximately 26 to 32 kilobases, the largest for an virus. They have a fringe reminiscent of a royal crown or of the solar corona.[2]

Incidence: Coronaviruses were discovered in the 1960s.[3] In September 2012, a new type of coronavirus was identified, initially called Novel Coronavirus 2012, and now officially named Middle East Respiratory syndrome coronavirus (MERS-CoV).[4&5] Four members of a Chinese family have been diagnosed with coronavirus in the United Arab Emirates.

The earliest ones discovered were infectious bronchitis virus in chickens and two viruses from the nasal cavities of human patients with the common cold that were subsequently named human coronavirus 229E and human coronavirus OC43[6.] In December 2019, a pneumonia outbreak was reported in Wuhan, China. On 31 December 2019, the outbreak was traced to a novel strain of coronavirus, which was labelled as 2019-nCoV by the World Health Organization (WHO).

As of 1st April 2020 (05:09 GMT), there have been 42,334 confirmed deaths and more than 8,59,338 confirmed cases in the coronavirus pneumonia outbreak.[10]

Signs & symptoms: Coronaviruses are believed to cause a significant percentage of all common colds

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in human adults and children. Coronaviruses cause colds with major symptoms, e.g. fever, throat swollen adenoids, in humans primarily in the winter and early spring seasons.[11] Coronaviruses can cause pneumonia, either direct viral pneumonia or a secondary bacterial pneumonia and they can also cause bronchitis, either direct viral bronchitis or a secondary bacterial bronchitis. The much publicized human coronavirus discovered in 2003, SARS-CoV which causes Severe Acute Respiratory Syndrome (SARS), has a unique pathogenesis because it causes both upper and lower respiratory tract infections.[12]

Mode of transmission: The WHO and the US Centers for Disease Control and Prevention (CDC) say it is primarily spread during close contact and by small droplets produced when people cough, sneeze or talk with close contact being within 1–3 m (3 ft 3 in–9 ft 10 in).[14]

Respiratory droplets may also be produced while breathing out, including when talking. Though the virus is not generally airborne.

Laboratory diagnosis: The test is typically done on respiratory samples obtained by a nasopharyngeal swab; however, a nasal swab or sputum sample may also be used.[15]

Microscopy: Light and electron microscopy can rapidly provide the first information on the potential causative agent in clinical materials. However subsequent testing is needed to identify the pathogen.

Culture: Viral culture is often considered the "gold standard" for laboratory diagnosis of viral respiratory infections. Laboratories with the appropriate experience and containment facilities, may attempt to isolate the virus. These recommendations do not cover virus isolation procedures. Culture of virus has important biosafety implications, depending on the type of virus, its pathogenicity and mechanism of spread.

Molecular identification and characterization of a novel pathogen: A number of methods and systems for rapid and sensitive identification of the genetic sequence of novel pathogens have been developed and refined. Sharing such gene sequence information among collaborators is essential to rapidly identify the pathogen and to develop pathogen specific diagnostics.

Prevention: Preventive measures to reduce the chances of infection include staying at home, avoiding crowded places, washing hands with soap and water often and for at least 20 seconds, practising good respiratory hygiene and avoiding touching the eyes, nose or mouth with unwashed hands. Wash hands often with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.

The CDC recommends covering the mouth and nose with a tissue when coughing or sneezing and recommends using the inside of the elbow if no tissue is available. They also recommend proper hand hygiene after any cough or sneeze.

The CDC also recommends that individuals wash hands often with soap and water for at least 20 seconds, especially after going to the toilet or when hands are visibly dirty, before eating and after blowing one's nose, coughing or sneezing. It further recommends using an alcohol-based hand sanitiser with at least 60% alcohol, but only when soap and water are not readily available.[16]

Ethical Clearance: This article is a purely a narrative review article hence it's not required an ethical clearance.

Source of Funding: Self (review article)

Conflict of Interest: Nil

References

1. De Groot RJ, Baker SC, Baric R, Enjuanes L, Gorbalenya AE, Holmes KV, Perlman S, Poon L, Rottier PJ, Talbot PJ, Woo PC, Ziebuhr J. "Family Coronaviridae". In AMQ King, E Lefkowitz, MJ Adams, EB Carstens (eds.). Ninth Report of the International Committee on Taxonomy of Viruses. Elsevier, Oxford. 2011: pp. 806–828. ISBN 978-0-12-384684-6. Available from: https://www.ncbi.nlm.nih.gov/.
2. International Committee on Taxonomy of Viruses. "ICTV Master Species List 2009 – v10". Available from: https://en.wikipedia.org/wiki/Coronavirus
3. "Coronavirus: Common Symptoms, Preventive Measures", & How to Diagnose It". Caringly Yours, 2020:01-28. Available from: https://advocatespedia.com/Coronavirus
4. Doucleef M, "Scientists Go Deep On Genes Of SARS-Like Virus". Associated:2010. Available from: https://en.wikipedia.org/.

5. Falco M, (2012). "New SARS-like virus poses medical mystery". CNN Health. 2013: Available from: https://en.wikipedia.org/.
6. "Laboratory testing of human suspected cases of novel coronavirus (nCoV) infection. Interim guidance.".2020: Available from: http://wikipedia.nd.ax/.
7. "Novel Coronavirus, (2019), Wuhan, China. CDC". 2020: Available from: http://en.wikipedia.org/wiki/Coronavirus
8. "2019 Novel Coronavirus infection (Wuhan, China): Outbreak update". Canada.ca. 21 January 2020: Available from: https://pressfrom.info
9. Geller C, Varbanov M, Duval RE. "Human coronaviruses: insights into environmental resistance and its influence on the development of new antiseptic strategies".Viruses. 2012:4 (11): 3044–3068: Available from: www.ncbi.nlm.nih.gov/.
10. "Operations Dashboard for ArcGIS".The Center for Systems Science and Engineering (CSSE) is a research collective housed within the Department of Civil and Systems Engineering (CaSE) at Johns Hopkins University (JHU): 2020. Available from: http://en.wikibedia.ru/.
11. Liu P, Shi L, Zhang W, He J, Liu C, Zhao C, Kong SK, Loo JF, Gu D, Hu L."Prevalence and genetic diversity analysis of human coronaviruses among cross-border children". Virology Journal. 2017:14 (1):230. doi:10.1186/s12985-017-0896-0. PMC 5700739. PMID 29166910: Available from: https://virologyj.biomedcentral.com
12. Forgie S, Marrie TJ. "Healthcare-associated atypical pneumonia". Seminars in Respiratory and Critical Care Medicine.2009:30(1):67–85. doi:10.1055/s-0028-1119811. PMID 19199189: Available from: https://en.wikipedia.org
13. Bande F, Arshad SS, Bejo MH, Moeini H, Omar AR. "Progress and challenges toward the development of vaccines against avian infectious bronchitis". Journal of Immunology Research. 2015: 1–12: Available from: https://www.hindawi.com/.
14. "Q & A on coronaviruses". World Health Organization: 2020.
15. "Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19)". Centers for Disease Control and Prevention (CDC):2020.
16. Centers for Disease Control. "Coronavirus Disease 2019 (COVID-19): Prevention & Treatment".

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Effectiveness of Mirror Therapy on Motor Function among Patients with Cerebro Vascular Accident

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Abstract

The study was conducted to evaluate the effectiveness of mirror therapy on motor function among patients with cerebro vascular accident . Quasi experimental non- randomized control group design was adopted for the study. The sample were selected out of 60 samples, 30 were in study group and 30 in control group. Mirror therapy was given for 30 minutes to the study group for 10 days and with holded for control group. Post test was done for both study group and control group after 14 days. The findings revealed that, in study group, the mean score on level of motor function among patients with Cerebro Vascular Accident in study group was 1.46 in pre test and 2.46 in post test. The estimated paired 't' value was 8.41 which was significant at $p \leq 0.05$. Hence the research hypothesis (H_1) was accepted. The mean score on level of motor function among patients with Cerebro Vascular Accident in study group was 2.46 and in control group was 0.71. The estimated unpaired 't' value was 6.25 which is significant at $p \leq 0.05$. Hence the research hypothesis (H_2) was accepted. The study concluded that the Mirror therapy is effective to improve the level of motor function among patients with Cerebro Vascular Accident.

Keywords: *Effectiveness, Mirror therapy, Motor function, Cerebro Vascular Disease.*

Introduction

A Cerebro Vascular Accident is also named as stroke or brain attack and is caused by a disruption of the blood supply to a part of the brain by a blood clot or ruptured artery, where the brain does not get the essential nutrients and oxygen needed. There are two major types of stroke: Ischemic and Hemorrhagic stroke. Approximately 88% of stroke are ischemic strokes an ischemic stroke happens when the blood flows through the artery that supplies oxygen gets blocked. Hemorrhagic stroke of approximately 12% of hemorrhagic stroke occurs when a cerebral artery in the brain leaks blood and spills it over the brain tissue[9]. The principle of Mirror therapy is used to create a reflective illusion of an affected limb in order to trick the brain into thinking,that the movement has occurred without pain. Mirror therapy was introduced by Ramachandran and Roger Ramachandran to treat phantom limb pain.The preliminary findings suggest that mirror therapy can be a useful intervention in rehabilitation of Cerebro Vascular Accident patients. It provides simple and cost effective therapy for wrist and hand motor recovery in acute and sub acute stroke patients .Mirror therapy has shown positive effects on its feasibility, treatment of stroke rehabilitation and management of patients regional pain syndrome. The mirror therapy is effective in stroke complex regional pain syndrome, cerebral palsy and fracture rehabilitation[10].

Statement of the problem: A Quasi-experimental Study to Evaluate the Effectiveness of Mirror Therapy on Motor Function Among Patients With Cerebro Vascular Accident in the Selected Hospitals at Kanyakumari District.

Objectives:

- To assess the pretest and posttest level of motor function among patients with Cerebro Vascular Accident in study group and control group.
- To evaluate the effectiveness of Mirror Therapy on motor function among patients with Cerebro Vascular Accident in study group and control group.

To find out the association between pretest level of motor function among patients with Cerebro Vascular

Accident with their selected demographic and clinical variables in study group and control group.

Hypotheses:

H_1: There is a significant difference between pretest and post test level of motor function among patients with Cerebro Vascular Accident in study group and control group.

H_2: There is a significant difference between post test level of motor function among patients with cerebro vascular accident in study group and control group.

H_3: There is a significant association between pre test level of motor function among patients with Cerebro Vascular Accident with their selected demographic and clinical variables in study group and control group.

Research Methodology

Research approach: The researcher utilized Quantitative research approach.

Research design: Quasi Experimental Non Randomized control group design was utilized to perform the study

Research setting: The study was conducted at two hospitals, kanyakumari district.

Population: Patients with Cerebro Vascular Accident

Sample: Patients with Cerebro Vascular Accident at the age group 30-70 years with unilateral stroke

Sample size: 60 samples were selected for this study with unilateral stroke who fulfilled the inclusion criteria 30 samples were in study group and 30 samples were in control group.

Sampling technique: Purposive sampling technique

Description of Tool: The tool used in the study consists of 2 parts

Part-1: Demographic data (Annexure VI): In this part demographic variables such as Age, Sex, Education, Occupation, Marital status, Types of food, Types of family and clinical variables like Types of lesions, Side affected in stroke, Co-morbidities history, Duration of illness, Habits of alcoholism, Habits of smoking.

Part-2: Modified Ashworth Scale: This part of the tool consist of Modified Ashworth Scale to assess the motor function of cerebro vascular accident. Scoring interpretation is No disability, No Significant disability, Slight disability, Moderate disability, Moderately Severe disability, Severe disability

Method of data collection:

Phase I Selection of Cerebro Vascular Accident patient: After obtaining permission from the Principal of St Xavier's Catholic College of Nursing Chunkankadai the participants were selected based on the inclusion and exclusion criteria and oral consent from each sample and proceeded with data collection.

Phase II Pre test: Investigator the Modified Ashworth Scale was used to assess the level of motor function in group and control group

Phase III Intervention: Study group received Mirror therapy and control group received hospital routine care.

Phase IV Post test: The post test was conducted after 14 days with Modified Ashworth Scale.

Results

Table I: Comparison of mean standard deviation and paired 't' value on pre test and post test level of motor function among patients with Cerebro Vascular Accident in study group and control group (N=60)

Variables	Group	Mean	SD	Df	Paired 't' test
Level of motor function	**Study Group** Pre test	1.46	0.61	29	8.41*
	Post test	1.6	0.728		
	Control Group Pre test	2.46	0.61	29	3.98*
	Post test	2.43	0.71		

*Significant at $p < 0.05$

Table II: Comparison of mean, standard deviation and unpaired 't' test on post test level of motor function among patients with Cerebro Vascular Accident in study group and control group. (N=60)

Variables	Group	Mean	SD	Un paired 't' test
Level of motor function	**Study Group** (n=30)	1.46	0.61	6.25*
	Control Group (n=30)	2.43	0.71	

*Significant at $p<0.05$

Discussion

The aim of the study was done to evaluate the effectiveness of Mirror Therapy on motor function among Cerebro Vascular Accident patient. Mirror therapy was an effective, inexpensive and non pharmacological measure for improving upper extremity motor function. The finding reveals that, the mean score on level of motor function among patients with Cerebro Vascular Accident in study group was 1.46 and the control group was 0.61. The estimated unpaired 't' value was 6.25 which was significant at $p\leq0.05$. It shows that mirror therapy was effective and reduced the level of motor function. Hence the research hypotheses H_1 was accepted. In study group and control group the calculated value of demographic variables were lesser than table values which indicate that, there is no significant association between mirror therapy and demographic variables. Hence the hypotheses (H_2) was not accepted .As per the study that the Mirror therapy was effective to improving the level of motor function among patients with Cerebro Vascular Accident.

Based on the data collected the mean score on the level of motor function in study group was 3 in pre test and 1.6 in post test the paired 't' test value is 8.41 which is significant at $p<0.05$. It shows that the mirror therapy is effective in reducing the level of motor function among patients with Cerebro Vascular Accident. From the result the researcher concluded that mirror therapy was effective in improving the level of motor function among patients with Cerebro Vascular Accident.

Conclusion

The study concluded that providing mirror therapy was effective to improving the level of motor function among patients with Cerebro Vascular Accident.

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Conflict Interest: There was no conflict of interest

Source of Fund: Self funded

Ethical Clearance: The proposed study was conducted after the approval of the dissertation committee of St. Xavier's

Catholic College of Nursing Permission was obtained from Directors of PS Medical Trust and Kevin Neuro Centre. Oral consent was obtained from each participants before starting the data collection. Assurance was given to the study participants regarding the confidentiality of the data collection.

Reference

1. Basavanthappa, B.T. Medical Surgical Nursing: Ist ed. New Delhi :Jaypee Medical;2006.
2. Black. Medical Surgical Nursing Ist ed. New Delhi: Elsevier; 2008.
3. Brunner & Suddarth's. Medical Surgical Nursing 12th ed. New Delhi : Wolters Kluwer; 2010.
4. Elakkuvana. Nursing Research and Statistic Ist ed. New Delhi : Mosby; 2014.
5. Lalit K, Recent Advances in stroke rehabilitation: ASA. 2012 Jan; 38:235-237.
6. Maria AE, Canario IS et al. Brain activity during lower limb: Neurol. Res. Int. 2019 Nov; 11(17): 1-14.
7. Thieme H, Mehrholz J, Pohl M, Behrens J, Dohle C. 'Mirror therapy for patients with severe arm paresis after stroke.'Clin. Rehabil. 2016 Jul; 27(4): 10-14.
8. TimbyBarbara,K. Introductory Medical Surgical Nursing 11th edi. China : Wolters Kluwer; 2014.
9. Usha,R. Text Book of Medical Surgical Nursing 2nd ed. New Delhi: Jaypee;2007.
10. Wu CY, Huang PC, Chen YT, Yang HW. 'Effect of Mirror Therapy on Motor and sensory Recovery in Chronic Stroke.'Arch Phys Med and Rehabil. 2013 Jun; 94(6):1023-1030.

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Effectiveness of Facilitated Tucking on Physiological and Behavioral Responses among Neonates Receiving Hepatitis B Vaccination

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Abstract

The study was conducted to evaluate the effectiveness of Facilitated tucking on Physiological and Behavioral responses among neonates receiving Hepatitis B vaccination. Quasi experimental non-randomized control group design was adopted for the study. The structured questionnaire was developed to collect the data. The sample were selected by purposive sampling technique and data collection was carried out among 60 neonates in a selected hospital. Pretest and posttest conducted before and after facilitated tucking. The finding reveals that the physiological responses of 't' value in heart rate was 3.01 respiration 1.52 and oxygen saturation 3.59 and behavioural responses of 't' value was 5.6 which significant at $p<0.05$. It shows that Facilitated tucking was effective in enhancing physiological and behavioral responses among neonates. There was a significant association between the age, gender, weight of neonates with physiological and behavioural responses. The study concluded that providing facilitated tucking was very effective in enhancing physiological and behavioral responses among neonates.

Keywords: *Effectiveness Facilitated Tucking, Physiological Response, Behavioral Response, Among Neonates, Hepatitis B Vaccination.*

Introduction

Newborn is the most crucial period in a child life. Every child is a gift from the God. The birth of the baby is a complex process. It is the wonderful and finest gift of nature. At the time of birth a newborn is still attached to the mother. The most profound physiological change required of the neonate is transition from fetal or placental circulation to independent respiration. The immediate adjustments include respiratory system, circulatory system and all the systems are trying to adjust to extra uterine life[10]. Normal newborn behaviour may develop at different rates but they still exhibit many of the same behaviour like sleep, cry, reflex, vision, hearing and breathing. Facilitated tucking is one of the simplest non-pharmacological and cost effective techniques replicate the condition of being in uterus[3]. This makes the newborn comfortable, more secure with direct response[9]. It facilitates self-regulation by decreasing the physiologic response like prolonged heart rate elevation that leads to the disequilibrium associated with pain and stress. Facilitated tucking improves the emotional security and reduces the pain perception[3].

Statement of the Problem: A study to evaluate the effectiveness of facilitated tucking on physiological and behavioral responses among neonates receiving Hepatitis B vaccination in a selected hospital at Kanyakumari District.

Objectives:

- To assess the pre test and post test level of physiological responses among neonates receiving Hepatitis B vaccination in study group and control group.
- To assess the post test level of behavioral responses among neonates receiving Hepatitis B vaccination in study group and control group.
- To evaluate the effectiveness of facilitated tucking on physiological and behavioral responses among

neonates receiving Hepatitis B vaccination in study group and control group.

- To associate the post test level of physiological and behavioral responses with the selected demographic variables in study group and control group.

Hypotheses:

H_1: There is a significant difference between pre test and post test level of physiological responses among neonates in study group and control group.

H_2: There is a significant difference between post test level of behavioral responses among neonates in study group and control group.

H_3: There is a significant association between posttest level of physiological and behavioral responses among neonates with the selected demographic variables in study group and control group.

Research Methodology

Research approach: The researcher utilized Quantitative research approach.

Research design: Quasi experimental non-randomised control group design was used in the study.

Research setting: The study was conducted at Health Centre, Kanyakumari District.

Population: Neonates receiving Hepatitis B vaccination.

Sample: Neonates between the age group of 0 to 28 days receiving Hepatitis B vaccination.

Sample size: 60 Neonates who are receiving Hepatitis B vaccination

Sample technique: Purposive sampling technique.

Description of Tool

The tool used in this study consisted of three parts

Part 1: In this part, structured questionnaire was used to collect the demographic variables such as age, gender, weight, mode of delivery, gestational age and position during sleep of neonates.

Part 2: This part of the tool consists of physiological parameters such as heart rate, respiratory rate and oxygen saturation was checked with the help of pulseoximeter. Scoring interpretation of physiological parameter is low, normal, high.

Part 3: This part of the tool consists of Modified Neonatal Infant Pain Scale to assess the behavioral responses of neonates. Modified Neonatal Infant Pain Scale. Scoring interpretation of behavioral parameter is state I, state II, state III.

Method of Data Collection:

Phase 1 Selection of Neonates: After obtaining initial permission from thePrincipal of St. Xavier's Catholic College of Nursing and Administrator of Health centre, participants were selected based on inclusion and exclusion criteria. The investigator obtained oral consent from the each mother of neonates and proceeded with the data collection.

Phase 2 Pre test of Neonates: Investigator gathered the demographic data from the mothers of neonates in both study and control group and the pulse oximeter was used to assess the physiological responses.

Phase 3 Intervention: Study group received Facilitated tucking and control group received hospital routine care. The intervention was given before Hepatitis B vaccination.

Phase 4 Post test: The post test was conducted after vaccination with pulse oximeter and Modified Neonatal Infant Pain Scale.

Results

Table 1: Comparison of mean, standard deviation and unpaired 't' test value of posttest level of physiological responses among neonates in study group and control group. N=60

S.No.	Variables	Group	Mean	SD	Unpaired 't' Test	TableValue
1	Heart Rate	Study Group	148.75	2.30	3.01*	0.360
		Control Group	143.95	3.80		

S.No.	Variables	Group	Mean	SD	Unpaired 't' Test	TableValue
2	Respiration	Study Group	49.32	2.18	1.52*	0.46
		Control Group	45.44	2.83		
3	Oxygen Saturation	Study Group	95.12	3.74	3.59*	0.68
		Control Group	92.9	3.82		

*Significant at p≤ 0.05

Table 2: Comparison of mean, standard deviation and unpaired 't' test value of posttest level of behavioral responses among neonates in study group and control group. N=60

S.No.	Variables	Group	Mean	SD	Unpaired 't' test	Table value
1	Behavioral Response	Study Group	2	1.06	5.6*	1.671
		Control Group	3.4	1.05		

*Significant at p≤ 0.05

Discussion

The study was done to determine the effectiveness of facilitated tucking on physiological and behavioral responses among neonates in a selected hospital. Based on data collected the mean score on the level of physiological responses in the study group heart rate was 148.75 and the unpaired 't' value was 3.01, which is significant at the level of p≤0.05, respiration 49.32 and the unpaired 't' value was 1.52, which is significant at level of p≤ 0.05, saturation (SPO2) 95.12 and the unpaired 't' value was 3.59, which is significant at level of p≤ 0.05 and level of behavioral response 2 and the unpaired 't' value was 5.6, which is significant at the level of p≤0.05. Physiological responses in control group heart rate was 143.95 and the unpaired 't' value was 3.01, which is significant at the level of p≤0.05, respiration 45.44 and the unpaired 't' value was 1.52, which is significant at level of p≤ 0.05, saturation (SPO2) 92.9 and the unpaired 't' value was 3.59, which is significant at level of p≤ 0.05 and level of behavioral response 2 and the unpaired 't' value was 5.6, which is significant at the level of p≤0.05. The association between the level of physiological and begavioral responses among neonates with selected demographic variables such as mode of delivery, gestational age and position during sleeping of the neonates indicated no association. The age, gender, weight of neonates showed a significant association.

Conclusion

The study concluded that providing facilitated tucking was very effective in enhancing physiological and behavioral responses among neonates. Therefore the investigator feels that Facilitated tucking was effective in enhancing physiological and behavioral responses.

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Conflict Interest: There was no conflict of interest.

Source of Fund: Self

Ethical Clearance: The proposed study was conducted after the approval of the dissertation committee of St.

Xavier's Catholic College of Nursing. Prior permission was obtained from Administrator of Health Centre,Oral consent was obtained from mothers of neonates before starting data collection. Assurance was given to the mothers of neonates regarding the confidentiality of the data collected.

References

1. Bala T. Fundamentals of Biostatistics: 4th ed. New Delhi: Ane; 2007.
2. Basavanthappa BT. Nursing Theories: 2nd ed. Bangalore: Jaypee; 2008.
3. Coriff KE, Seideman R, Venketaraman PS, Lutes L, and Yates B. "Facilitated tucking: A non pharmacological comfort measure for pain in preterm neonates. J Obstet Gynecol Neonatal Nurs. 1995 Feb;24(2):143-7.
4. Datta P. Pediatric Nursing: 2nd ed. New Delhi: Jaypee; 2007.
5. Florence G. Nursing care of Children: 1sted. Philadelphia: Lippincott; 1998.
6. JaneC, Bindler. Pediatric Nursing care for children: 1st ed. Philadelphia: Mosby; 2000.
7. Kyle, Tyre. Essential of pediatric nursing: 2nd ed. New Delhi: Wolters Kluwer; 2009.
8. Luke Seavard. Managing Stress Principles and Strategies for Health and Wellbeing: 2nd ed. Philadelphia: Lippincott; 2009.
9. Taksand AM, Vilhekar YK, Jain M, D Chitre. 'Pain Response of Neonates to Venipuncture.'Indian J Pediatr. 2005 Sep;72(9):751-3.
10. Tayebe Reyhani,Seyedeh Zahra Aemmi, Tahere Mohebbi, Hasan Boskabadi. 'Facilitated Tucking (FT) During Venipuncture on Duration of Crying in Preterm Infants' International Journal of Pediatrics, 2014 Dec; 2(12): 4-3.

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Effectiveness of Guided Imagery on Level of Stress among Old Age People

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Abstract

A experimental study was conducted to evaluate the effectiveness of level of stress among nursing students at Kanyakumari district. While assessing the pre test level of stress among old age people, none of them were low stress, 23(46%) of them were moderate stress and 27(54%) were with high stress. While assessing the post test score of stress among old age people, 29(58%) of them were low stress, 21(42%) of them were moderate stress and none of them were with high stress. While revealing effectiveness, at a significant level of $p<0.05$, the mean pretest value was 21.78 with the standard deviation 4.19. The mean post test value was 10.48 with the standard deviation 2.41 and the calculated 't' value was 29.62*. The calculated' value was greater than the table value, so there was a significant difference between pretest and post test score. There was a significant association between the pretest level of stress among old age people with demographic variables such as age,sex, religion, education, previous occupation, previous income, present income. Hence the research hypothesis (H_2) is accepted. As per the study the investigator concluded that the level of stress among nursing students.

Keywords: *Effectiveness, Guded Imagery, Level of stress.*

Introduction

[1]Stress is the body's way of responding to any kind of demand or threat. When sense danger whether it's real or imagined, the body's defences kick into high gear in a rapid, automatic process known as "fight-or-flight" reaction or the "stress response". The stress response is the body's way of protecting the persons. When working properly, it helps to stay focused, energetic, and alert. In emergency situations, stress can save life giving extra strength to defend.Worldwide the life expectancy is increasing.[2]Currently about 10% of population is made up of older adults (aged 60 years and above). Unfortunately old age has now become a prevalent social problem in our society. In modern society, where money is the scale of everything, old age people are measured as an economic liability and a social load. In addition the old age is unavoidable, problem-ridden stage of life that one individual compelled to live, marking time until our final exit from life itself**.**Guided imagery has a direct relationship with well being of an individual. That is both physical and physiological wellbeing.[10] Guided imagery helps to improve health, to increase wellbeing and to promote peace in the world through personal transformation. It is non-religious, non-sectarian and non-political.

Statement of Problem: A Pre Experimental Study to Evaluate the Effectiveness of Guided Imagery on Level of Stress among Old age people in a selected old age home at Kanyakumari district.

Objectives:

- To assess the pretest and posttest level of stress among old age people.
- To evaluate the effectiveness of guided imagery on level of stress among old age people.
- To find out the association between pre test level of stress among the old age people with their selected demographic variables.

Hypotheses:

H_1- There is a significant difference between pretest and posttest level of stress among the old age people.

H_2- There is a significant association between the pretestlevel of stress among the old age people with their selected demographic variables.

Research methodology:

Research approach: Quantitative research approach was used for the study.

Research design: Pre experimental one group pre-testpost test research design was used in this study.

Research setting: The study was conducted at Rojavanam old age home in South Thamaraikulam at Kanyakumari district.

Population: All the old age people with stress

Sample: Patient with stress at the age age group of above 66 years.

Sample size: Sample size consisted of 50 old age people.

Sample technique: Purposive sampling technique

Description of Tool:

The tool used in this study consisted of two parts

Part-1: A Structured interview schedule to collect the demographic variables like age, sex, marital status, previous occupation, educational status, source of income, previous type of family, number of children, duration of stay at old age home, reason for joining in old age home and medical illness.

Part-2: Sheldon Cohen's Perceived Stress Scale (1983) was used as the data collection tool. It is a 5 point rating scale with 10 items.

Scoring interpretation of Perceived Stress Scale:

Score	Level of Stress
0-13	Low
14-26	Moderate
27-40	High

Method of data collection

Phase 1 Pre test: After obtaining formal permission from the Principal of St.Xavier's Catholic College of nursing and Mr. Gopi, director of Rojavanam old age home. The investigator obtained oral consent from each sample and proceeded with data collection. The data was collected from the selected participants and the Sheldon Cohen's perceived stress scale was used to assess the level of stress.

Phase 2 Intervention: Guided imagery was provided for the old age people with low and moderate and severe stress for 20 minutes once a day for 25 days.

Phase 3 Post test: The post test was conducted on 25th day with Sheldon Cohen's perceived stress scale.

Results

Table I: Frequency and Percentage distribution of level of stress among old age people

S.No.	Level of stress	Pre test		Post test	
		f	%	f	%
1.	Low stress	0	0	29	58
2.	Moderate stress	23	46.00	21	42
3.	High stress	27	54.00	0	0

Table II: Comparison of mean, standard deviation, and paired 't' test value of pre-test and post-test level of stress among old age people. n=50

S.No.	Variables	Mean	SD	Paired 't' test	Table value
1.	Pretest	21.78	4.19	29.62*	1.68
2.	Posttest	10.48	2.41		

*significant at $p<0.05$

Discussion

The aim of the study was to assess the effectiveness of guided imagery on level of stress among old age people. A review of related literature enabled the researcher to develop the conceptual framework and methodology for the study. The conceptual framework adopted by King's goal attainment theory. Quantitative research approach was used; pre experimental one group pre-test post-test design was adopted to evaluate the effectiveness of guided imagery on level of stress among old age people. The study was conducted in rojavanam old age home. Purposive sampling technique was used to select 50 old age people. Data collection was done by using demographic data perceived stress scale. Guided imagery was given to old age people who were low stress, moderate and high stress. Post-test was done. The data gathered were analysed by descriptive and inferential statistics method and interpretation were done on the basis of the objectives of the study. The level of significance was assessed at $p<0.05$ to test the hypothesis. The pre test mean score among old age people was 21.78 with standard deviation 4.19 and in the post test mean score was 10.48 with standard deviation 2.41. The paired 't' value was 29.62* which is significant at $p\leq0.05$. It shows that Guided Imagery was effective in reducing the level of stress. Hence the research hypotheses (H_1) is accepted.The calculated value of selected demographic variables such as age, sex, religion, education, previous income, present income, previous type of family, marital status, numbers of children, duration of stay at old age home, and reason for joining old age home is greater than the table value. Hence, the research hypothesis (H2) is accepted.

Conclusion

The study concluded that guided imagery therapy was very effective in reducing the level of stress among elderly peoples.

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Conflict of Interest: There was no conflict of interest

Source of Fund: Self funded

Ethical Clearance: The proposed study was conducted after the approval of the dissertation committee of st. Xavier's catholic college of nursing. Permission was obtained from Administrator of both hospitals. Oral consent was obtained from each participants before starting the data collection. Assurance was given to the study participants regarding the confidentiality of the data collection.

Reference

1. Sreevani, N. A guide to Mental Health and Psychiatric Nursing, 1st ed. New Delhi: Jaypee, 2007.
2. Mary, C Town send. Essential of Psychiatric Mental Health Nursing, 5th ed. Philadelphia: F.A. Davis. 2010.
3. Kothari, C.R. Research Methodology Method and Techniques, 2nd ed. New Delhi: Wiswa Parkas. 2007.
4. Polit. F. Demise and Hunglers, P. Bernadette. Nursing Research and principles and method 6th edi. Philadelphia: Lippincott Williams and Wilkin, 1999.
5. Neeraja, K.P. Essential of mental Health and psychiatric nursing, 1st ed. Newdelhi: Jaypee. 2000.
6. Lalitha K.mental Health and psychiatric nursing, 4th edi.. Bangalore: VMG book house. 2010.
7. Kaplan & shaddock. synopsis of psychiatry, 10th ed. wolterkolver Lippincott Williams and wilkins.
8. Alldwin cm, stress, coping and development; an integrate perspective, 1st ed, New York: Guild ford, 2002.
9. Gail w, stuart. synopsis of psychiatric nursing, 7th ed. Philadelphia: Mosby. 2015.
10. Caplan Gerald. D. principles of preventive psychiatry, 1st ed. New York: wiley. 1964.

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Effectiveness of Leg Ergometric Exercise on Level of Fatigue among Patients with Chronic Kidney Disease Undergoing Haemodialysis

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Abstract

The study was to evaluate the effectiveness of leg ergometric exercise on level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis.Quasi experimental non randomized control group design was utilized to perform the study. The samples were selected by purposive sampling technique. Data were collected from the patients with Chronic Kidney Disease undergoing Haemodialysis who fulfilled the inclusion criteria. The tool used in this study consists of demographic data and modified FACIT (Functional Assessment of Chronic Illness Therapy) scale. The findings revealed that unpaired "t" test value was 5.60, which was significant at $p<0.05$. It shows that leg ergometric exercise is effective in reducing the level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis. There was a significant association between age and duration of illness with level of fatigue. The study concluded that providing leg ergometric exercise was very effective in reducing the level of fatigue among patients with chronic kidney disease undergoing haemodialysis.

Keywords: *Effectiveness, Leg Ergometric Exercise, Level of Fatigue, Chronic Kidney Disease, Haemodialysis.*

Introduction

Kidney is one among the vital organs and its main function is removing the waste products and excess water from the blood. The kidney purifies about 200 litres of blood and also has the substantial function of producing two litres of urine everyday[1]. Many adults have unhealthy diet pattern, lack of physical activity, substance abuse, unprotected sexual activity and unsafe driving. The current generation of adults are obese and more vulnerable to many illness. Chronic kidney disease involves progressive, irreversible loss of kidney function. It is defined as either the presence of kidney damage or GFR <60ml/min for 3 months or larger. (Normal GFR is about 125ml/min and is reflected by urine creatinine clearance measurements)[2]. Dialysis is a technique in which the metabolic waste move from the blood into a dialysis solution (dialysis) through a semipermeable membrane, an artificial membrane, usually made of cellulose – based or synthetic materials, which stays in contact with the patients blood in haemodialysis and helps to correct the imbalances between fluid and electrolytes and removes the waste products from the blood[7]. Fatigue is one of the most common and frequent complaint of haemodialysis patients, where documentation of fatigue is looked upon as anegative symptom, on patients diagnosed with End Stage Renal Disease[6]. Ergometric exercise is considered as an simple physical exercise, safe and effective in clinical practice modality among patients undergoing haemodialysis. Ergometric exercise helps to decrease the level of fatigue and increase the activities of daily living[10].

Statement of the problem: A quasi experimental study to evaluate the effectiveness of leg ergometric exercise on level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis in selected hospitals at Kanyakumari district.

Objectives:

- To assess the pre test and the post test level of fatigue among patients with Chronic Kidney

Disease undergoing Haemodialysis in study group and control group.

- To evaluate the effectiveness of leg ergometric exercise on level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis in study group and control group.
- To associate the pre test level of fatigue on leg ergometric exercise among patients with Chronic Kidney Disease undergoing Haemodialysis with their selected demographic and clinical variables in study group and control group.

Hypotheses:

H_1: There is a significant difference between the pre test and post test level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis in study group and control group.

H_2: There is a significant difference between the post test level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis in study group and control group.

H_3: There is a significant association between pre-test level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis with their selected demographic and clinical variables in study group and control group.

Research Methodology

Research approach: The researcher utilized Quantitative research approach.

Research design: Quasi experimental non randomized control group design was utilized to perform the study

Research setting: The study was conducted at 2 hospitals, Kanyakumari District.

Population: Patients with Chronic Kidney Disease undergoing Haemodialysis.

Sample: Patients with Chronic Kidney Disease undergoing Haemodialysis at the age group of 18-60 years.

Sample size: 60 samples were selected for this study. 30 samples were in study group and 30 samples were incontrol group.

Sample technique: Purposive sampling technique.

Description of Tool: The tool used in this study consists of two parts.

Part-I: In this part, structured questionnaire was used to collect the demographic and clinical variables. The demographic variables consist of age, gender, religion, marital status, occupation, hours of working, residence, educational status, family income, type of diet and clinical variables consist of number of haemodialysis per week, duration of illness and associated illness.

Part-II: This part of the tool consists of Modified FACIT (Functional Assessment Of Chronic Illness Therapy)scale to assess the level of fatigue.

Table 1: The scoring was categorized as follows,

S.No.	Score	Level of Fatigue
1.	>30	Severe fatigue
2.	≤30	Better quality of life

Method of data collection

Phase 1 Selection of patients with Chronic Kidney Disease undergoing Haemodialysis: After obtaining formal permission from the Principal of St.Xavier's Catholic College of Nursing, Chunkankadai and Administrator of both hospitals, participants were selected based on the needed criteria. The researcher obtained the oral consent from each patient with Chronic Kidney Disease undergoing Haemodialysis and proceeded with the data collection.

Phase 2 Pre test: The demographic data was collected from the selected participants and modified FACIT scale was used to assess the level of fatigue.

Phase 3 Intervention: The researcher explained the importance of leg ergometric exercise and demonstrated to the study group.

All patients were verbally encouraged and motivated at the onset of dialysis session regarding the exercise program, consisting of warm up (flexion, extension of the knee, and ankle), biking on the leg ergometer and cooling down (stretching).

The total length of exercise program was performed for 40 minutes divided as five minutes before the session of haemodialysis and thirty five minutes during the haemodialysis session.

Phase IV Post test: The post test was conducted on the following 4th week with modified FACIT scale.

Results

Table II: Comparison of mean, standard deviation and unpaired "t" test on post test level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis in study group and control group. N=60

Variables	Group	Mean	SD	Unpaired "t" test
Level of fatigue	**Study group** n=30	21.83	6.06	5.60*
	Control group n=30	29.56	5.21	

*Significant at p≤0.05

Table III: Comparison of mean, standard deviation and unpaired "t" test on post test level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis once, twice and thrice a week in study group and control group. N=60

S.No.	Number of Haemodialysis/week	Study Group		Control Group		df	Unpaired "t" test value
		Mean	SD	Mean	SD		
1.	Once	15.33	2.30	29.33	4.72	4	4.66*
2.	Twice	22.76	6.44	29.42	4.99	40	3.85*
3.	Thrice	21.83	4.01	30.16	6.96	10	4.60*

*Significant at p≤0.05

Discussion

The aim of the study was done to evaluate the effectiveness of Leg Ergometric Exercise on level of fatigue among patients with Chronic Kidney Disease undergoing Haemodialysis. Table II shows, In study group the mean score was 21.83 with the standard deviation 6.06. In control group the mean score was 29.56 and the standard deviation was 5.21. The estimated unpaired "t" test value was 5.60, which was significant at p≤0.05. It shows that leg ergometric exercise was effective in reducing the level of fatigue in study group patients with Chronic Kidney Disease undergoing Haemodialysis. Table III shows, In study group the mean score was 15.33 with the standard deviation 2.30 and in control group the mean score was 29.33 with the standard deviation 4.72 for patients undergoing haemodialysis once a week. The estimated unpaired"t" test value for once in a week was 4.66, which was significant at p≤0.05. The mean score of study group was 22.76 with the standard deviation 6.44 and in control group, the mean score was 29.42 with the standard deviation 4.99 for the patients undergoing haemodialysis twice in a week. The estimated unpaired"t" test value for twice in a week was 3.85, which was significant at p≤0.05. The mean score of study group was 21.83 with the standard deviation 4.01 and in control group the mean score was 6.96 with the standard deviation 10 for the patient undergoing haemodialysis thrice in a week. The estimated unpaired"t" test value for thrice in a week was 4.60, which was significant at p≤0.05. The association between the level of fatigue among patients with chronic kidney disease undergoing haemodialysis with selected demographic and clinical variables such as gender, religion, marital status, occupation, hours of working, residence, educational status, family income, type of diet, number of haemodialysis/week and associated illness indicated no significant association. Age and duration of illness showed a significant association with level of fatigue.

Conclusion

The study concluded that leg ergometric exercise was very effective in reducing the level of fatigue among patients with chronic kidney disease undergoing haemodialysis.

Acknowledgement: I thank God almighty for all wisdom, strength and guidance throughout the study. My respectable gratitude to Dr.A. Reena Evency., Principal, Dr. G.Feby., Vice Principal, Prof. Mrs. C. Margret Nisha., HOD, Medical Surgical Nursing Department in St.Xavier's catholic college of nursing, Chunkankadai. My heartful thanks to my beloved parents, sister and my lovable husband for their constant encouragement and support for this study.

Conflict of Interest: There was no conflict of interest

Source of Fund: Self funded

Ethical Clearance: The proposed study was conducted after the approval of the dissertation committee of St.Xavier's Catholic College of Nursing. Permission was obtained from Administrator of both hospitals. Oral consent was obtained from each participants before starting the data collection. Assurance was given to the study participants regarding the confidentiality of the data collected.

References

1. Anne W. Anatomy and physiology in health and illness: 10th ed. China: Elsevier; 2008.
2. Barbara K.T. Introductory medical surgical nursing: 11th ed. China: Lippincott; 2014.
3. Basavanthappa B.T. Nursing Theories: 2nded. Bangalore: Jaypee; 2008.
4. Chugh. Text book of medical surgical nursing: 1st ed. Delhi: Avichal; 2013.
5. Geri L.W. Nursing research methods, Clinical approach and utilization: 2nded.United States of America: Mosby; 1990.
6. Ignatavicius. Medical surgical nursing patient centered collaborative care: 7thed. United States of America: Elsevier; 2013.
7. Joyce, Jane, Annabelle. Medical surgical nursing clinical management for positive outcomes: 6th ed. Noida: Saunders; 2001.
8. Lemone, Burke. Medical surgical nursing critical thinking in client care: 4thed.India: Pearson education; 2008.
9. Manoj K.Y. Textbook of Biostatistics: 1st ed. Jalandhar: Lotus; 2009.
10. Maria T. 'Effectiveness of intradialytic exercise on quality of life in patients with chronic kidney disease.' Medscape J Medicine. 2008 October; 10(10): 226.

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Knowledge and Frequency of Experience of Workplace Incivility among the Staff Nurses

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Abstract

Now a day's health care setting shows increase in incidences of workplace incivility. Workplace incivility has a greater impact on quality of nursing care by causing stress and dissatisfaction of job among the staff nurses. The present study was conducted to assess the knowledge and frequency of experience of workplace incivility among the staff nurses. Quantitative cross-sectional descriptive survey approach was used to conduct the present study. A total of 34 staff nurses were selected by convenient sampling technique from the wards and ICU of selected Multi-speciality hospital. Structured self- administered knowledge questionnaire was used to collect the data regarding knowledge and frequency of experience of workplace incivility. Findings of the study showed that mean age of the participants was 32 years. Majority (91%) were females and they studied General Nursing and Midwifery. Majority (76%) of the participants had up to 15 years of working experience and 44% of them were temporary employees. Almost 56% of them were working 8 hours per day. Assessment of knowledge regarding workplace incivility revealed that the majority (82%) of the staff nurses had inadequate knowledge regarding workplace incivility and majority (77%) experienced incivility in their workplace.

Keywords: *Workplace incivility, staff nurse, knowledge, experience.*

Introduction

Nurses are the primary member of the health care team in a hospital setting. Nurses work round the clock to ensure the quality of care and safety of the patients. This may be possible if they live in a healthy and conducive working environment. Advancement in science and technology created a competitive and stressful clinical environment which has also encourages the growth of abusive behaviour among the staff nurses. Workplace incivility is a milder, more nascent form of workplace aggression.[1] Anderson and Pearson defined the workplace incivility as "low-intensity deviant behaviour with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviours are characteristically rude and discourteous, displaying lack of regard for others."[2] Workplace incivility is becoming a formidable force that is threatening the both physical and mental well-being of staff nurses.

At individual levels, a strong link has appeared between healthcare professionals' behaviour, job performance, and patient safety.[3] A study on impact of workplace incivility (WPI) on staff nurses related to cost and productivity was conducted among 659 staff nurses using Nursing Incivility Scale and Work Limitation Questionnaire. Results of the study showed that 85% experienced workplace incivility in the past one year. It also revealed that nurses working in healthy work environment report lower workplace incivility scores compared with nurses working in the standard work environment (P G .001), and scores varied between

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types of unit they were working. Nurses' perception of their manager's ability to handle WPI was negatively associated with WPI scores (P G .001).[4]

Background of the study: Review of literature shows that the incidence of workplace incivility, to be ranging between 11 to 99%.[5-8] The incidence of workplace incivility may be evident as a tip of iceberg but its impact on mental health of the nurses is huge. "Many people experience incivility, but they choose not to speak, because they need the job or worry about retribution," stated Dr. Wang. Uncivil acts of workplace incivility, also termed as micro aggressions, have been cited as a major cause of employee turnover, poor workplace climate and job dissatisfaction.[1] Johnson and colleagues stated that experiencing such rude behaviour reduces employees' self-control and leads them to act in a similar uncivil manner.[5] Consequences of repeated exposure to workplace incivility was well expressed in incivility spiral as started from thoughtless act and it may lead to physical threat.[2]

The sequence of workplace violence can be viewed from low-level nonphysical workplace violence to physical violence.[9] Workplace is flourished with workplace violence; however the more insidious forms of workplace violence, such as workplace incivility (WPI), can have long-lasting effects in an organization.[2] It is very difficult for some of the employee to identify an acceptable behaviour from the unacceptable behaviour of workplace incivility because of lack of knowledge and very limited study available regarding knowledge of staff nurses regarding workplace incivility. Hence the researcher is interested to assess the knowledge and of frequency of workplace incivility among the staff nurses.

Objectives of the study: To assess the knowledge regarding workplace incivility among the staff nurses.

To findout the frequency of experience of workplace incivility among the staff nurses.

Methodology

Formal permission was obtained from the ethical committee and selected setting.

Research Design: Cross- sectional quantitative descriptive research design was adopted to conduct the present study.

Study population: Using non-probability purposive sampling technique 34 registered nurses, having minimum one year of experience and working in the staff nurse's cadre at selected setting were included in the study.

Research tool: Validated structured self-administered knowledge questionnaire was used to collect the data. The developed tool consisted of two sections, socio demographic variables and structured knowledge questionnaire. Socio demographic variables included age, education, experience,hours of work per day,type of employment and category of employment. Test retest method was used to test the reliability of the structured knowledge questionnaire. It was r = 0.9. Validity index of the knowledge questionnaire was 0.9. Structured knowledge questionnaire consisted of 20 multiple choice questions which include meaning, causes, effect, prevention and management of workplace incivility.

It also assessed one item regarding frequency of experience of workplace incivility, gender and types of the perpetrator, and how much nurses worried about the prevalence of workplace incivility.

Method of data collection: Formal permission was obtained from the selected setting and ethical committee. Explanation regarding the purpose of the study and questionnaire was given to the subjects. Once obtaining the written consent the questionnaire was distributed and they were given 45 minutes to fill the questionnaire. Confidentiality and anonymity were maintained throughout the study.

Score key: Correct response was given score of one and incorrect answers was awarded zero. The maximum score for the knowledge questionnaire was 20 with the minimum possible score being zero.

Data management and analysis: The collected data was analysed using SPSS for Windows23 and presented below.

Results

The survey was completed by 34 staff nurses. Their characteristics were shown in table 1.

Table 1: Characteristics of staff nurses (n = 34)

Sl.No.	Socio demographic variables		Frequency (f)	Percentage (%)
1	Age in years	20-35	24	70
		36- 50	7	21
		>50	3	9
2	Gender	Male	3	9
		Female	31	91
3	Educational level	GNM	31	91
		B.Sc	2	6
		PcB.Sc	1	3
4	Work experience	1- 15 years	26	76
		16- 30 years	5	15
		>30 Years	3	9
5	Type of employment	Permanent	12	35
		Temporary	15	44
		Contract	7	21
6	Working Hours / Day	6	12	35
		7	3	9
		8	19	56

Table 1 depicts the frequency and percentage distribution of socio demographic characteristics of the staff nurses. Majority (70%) of the staff nurses were aged between 20 – 35 years, 21% of them belonged to 36 – 50 years of age group and only 9% were aged above 50 years. The mean age group of the staff nurses was 32 years. Majority (91%) of them were females. Majority (91%) of the staff nurses undergone General Nursing and Midwifery (GNM) course and 9% of the staff nurses were graduates. Experiences of the staff nurses shows that majority (76%) of them had upto 15 years of experience, 15% of the participants had 16 – 30 years of experience and 9% of the staff nurses had more than 30 years of experience. Regarding the type of employment, majority (44%) were working as temporary staffs, 35% were permanent staffs and remaining 21% of the staff nurses were employed on contract basis. Majority (56%) of the staff nurses were working for eight hours per day.

Table 2: Staff nurses' knowledge regarding workplace incivility (n = 34)

Sl.No.	Knowledge scores	Frequency (f)	Percentage (%)
1	Inadequate knowledge (<= 9)	28	82
2	Moderately Adequate knowledge (10 – 15)	6	18
3	Adequate knowledge (> 15)	-	-

Maximum score = 20 Minimum score =0

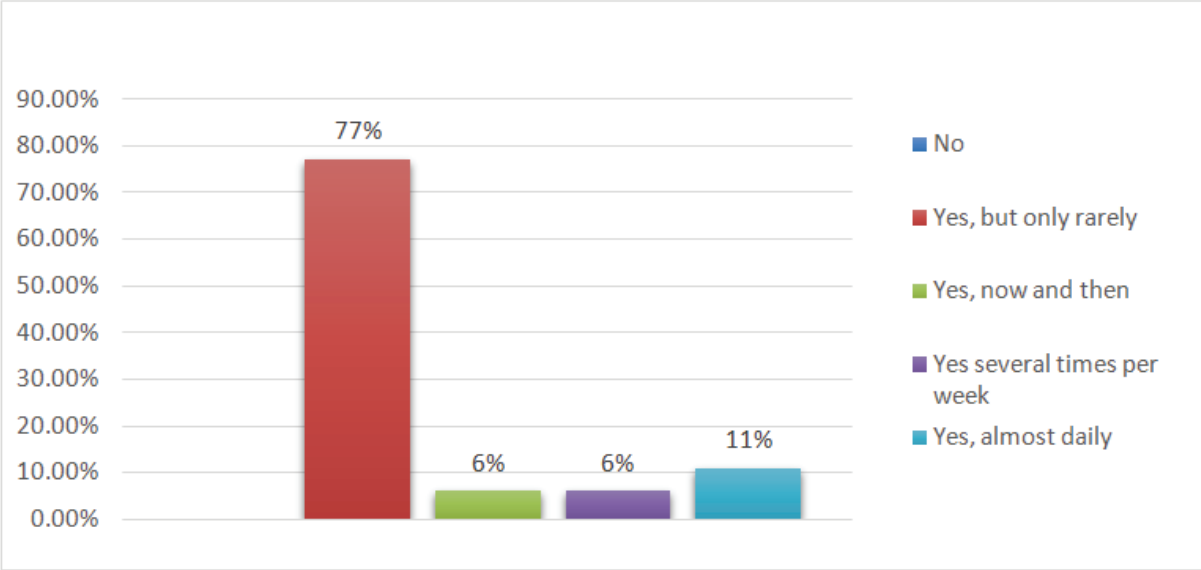

Fig. 1: Frequency of experience of workplace incivility by staff nurses

Response to the knowledge questions by the staff nurses were depicted in table 2. It shows that majority (82%) of the subjects had inadequate knowledge and 16% of the staff nurses had moderately adequate knowledge regarding workplace incivility. It also shows that none of the staff nurses had adequate knowledge regarding the workplace incivility. The mean knowledge score obtained was 7.

Figure 1 represents that 77% of the staff nurses experienced workplace incivility rarely and 6% of them experienced several times per week,now and then. There were 11% of them experience incivility almost daily at their workplace.

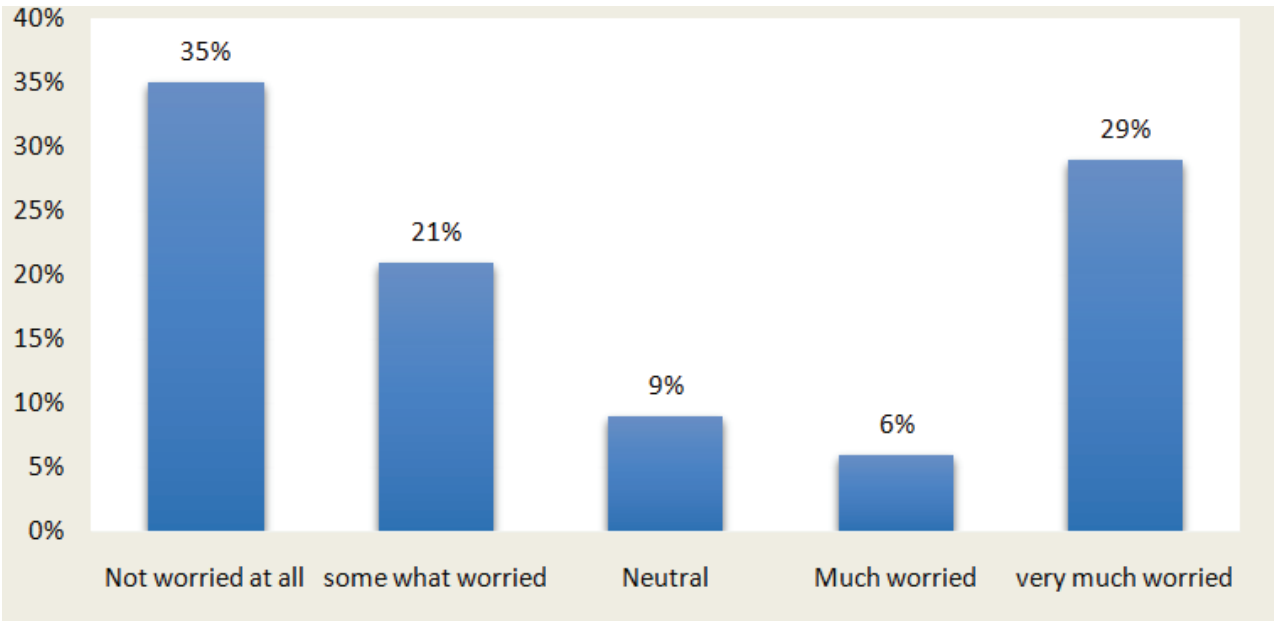

Fig. 2: Staff nurses' worries about experience of workplace incivility

Figure 2 represent that there were 35% of the staff nurses not worried about the prevalence of incivility and 29% of the staff nurses very much worried about the prevalence of incivility in their workplace.

Discussion

The present study identified the knowledge, frequency of experience and worries of the staff nurses regarding workplace incivility. The result of the study showed that majority (82%) of the staff nurses lack knowledge about workplace incivility. Regarding the different aspects of workplace incivility, 38% of the staff nurses knew the meaning of workplace incivility and only 26% of them had knowledge regarding the causes of workplace incivility. Among 34 respondents, 39% of the staff nurses understand the impact of workplace incivility and 40% of the staff nurses know the strategies to overcome the workplace incivility. Only 42% of the staff nurses learned prevention of incivility in their workplace. The response to workplace incivility differs from one staff nurse to another, depends upon how much they aware and perceive the act of incivility. Abdollahzadeh F and his colleague stated that good knowledge regarding workplace incivility is necessary for the staff nurses to prevent incivility at workplace.[10]

The present study also found that 77% of the staff nurses experienced workplace incivility out of which 11% experienced it almost daily. This shows the higher prevalence of workplace incivility in the selected health care settings. A study conducted on incidence and impact incivility in the workplace by Cortina et al reported that majority (71%) of the employees' experience workplace incivility.[11] An another study conducted by Heydari A, Mojtaba R, Mostafa Rshowed that 24.6% of nurses had been victims of incivility by their matrons for one or two instances. whereas, 7.8% of nurses reported one or two instances of incivility per month. More than 66.5% of nurses had not seen any incivility from their matrons. Although the frequency is reported to be one or two times, nonetheless, such behaviours do exist between nurses and matrons.[13] A study conducted in India with an objective of creating awareness on workplace incivility among restaurant employee's shows that, 32.86 percent reported that their employers and co-workers directed rude and derogatory remarks to them at least once a week.[14]

In the present study 65% of the staff nurses worried about the prevalence and frequency of experiencing workplace incivility in the working environment. Many of their productive time were spent to find the way to escape from the workplace incivility. This notion was supported by Andersson, L. M., & Pearson, C. M. in his study that the destructive spiral of workplace incivility may be a building block in a negative work environment.[15] Many studies demonstrated that prevalence of workplace incivility is associated with job dissatisfaction and high level of turn over intention.[16-17]

The present study also identified that majority of the perpetrators and victims of workplace incivility were females. Majority of the staff nurses experience incivility from the supervisor, co-nurses and patients. Study by Keashley et al, identified that the supervisor were the perpetrators.[12]

Implication to nursing:

Nursing practice: The present study shows the prevalence of workplace incivility irrespective of their area (unit) of work. Nursing administrators has the responsibility to create awareness regarding workplace incivility, understand the consequences and take measures to prevent workplace incivility.

Nursing education: The present study demonstrated that nurses had poor knowledge regarding workplace incivility. Hence it is the responsibility of nurse educator to organizing workshop, conferences and CNE programme regarding workplace incivility.

Nursing administration: Nurse administrator has the responsibility to create safe, healthy working environment for the staff nurses so that it will improve the quality of nursing care. It is also her responsibility to develop the systematic reporting system in case of workplace incivility.

Nursing research: Finding of the study shows that there were limited research studies in India regarding the workplace incivility. Further research is needed to assess the prevalence and severity of workplace incivility in India.

Conclusion

Understanding the construct of workplace incivility and its underlying determinants are necessary for developing effective interventions to stop workplace incivility among the staff nurses. Nurses must be aware about the workplace incivility and the resulting negative consequences in order to change the inappropriate

behaviour. Nurse administrator has the responsibility to create awareness and sustain a healthy working environment for the staff nurses in order to keep the staff morale high.

Limitations: The study was carried out in one setting with limited number of staff nurses selected purposefully. Hence the generalizability of the study findings is limited.

Conflict of Interest: None

Financial support and Sponsorship: Self

Ethical Clearance: Study was approved by Ethical committee and written informed consent was obtained from the study participants.

References

1. Texas A & M University. "Workplace incivility: The silent epidemic." Science Daily. 31 October 2017.
2. Andersson L. M. and C. M. Pearson, "Tit for tat? The spiralling effect of incivility in the workplace," Academy of Management Review. 1999; 24(3): pp. 452–471.
3. Ditmer D. A safe environment for nurses and patients: halting horizontal violence. Journal of Nursing Regulation. 2010; 1(3): 9–14.
4. Lewis P S and Malecha C A. Impact of workplace incivility on the work environment, manager skill and productivity. The journal of nursing administration. 2011; 41(1): 41-47.
5. Johnson SL, Rea RE. Workplace bullying: Concerns for nurse leaders. J Nurs Adm. 2009;39:84–90.
6. Simons S. Workplace Bullying Experienced by Massachusetts Registered Nurses and the Relationship to Intention to Leave the Organization. ANS Adv Nurs Sci. 2008;31:48–59.
7. Cortina LM, Magley VJ, Williams JH, Langhout RD. Incivility in the workplace: Incidence and impact. J Occup Health Psychol. 2001;6:64–80. [PubMed]
8. Porath CL, Pearson CM. The cost of bad behaviour. Organ Dyn. 2010;39:64–71.
9. Pearson CM, Andersson LM, Porath CL. Workplace incivility. In: Fox S, Spector PE, eds. Counterproductive Work Behaviour: Investigations of Actors and Targets. Washington, DC: American Psychological Association; 2005; 177-200.
10. Abdollahzadeh, F., Asghari, F., Ebrahimi, H., Rahmani, A., & Vahidi, M. How to Prevent Workplace Incivility?: Nurses' Perspective. 2017; 22(2): 157-163.
11. Cortina, L. M., Magley, V. J., Williams, J. H., Williams J. H., & Langhout, R. D. Incivility in the workplace: Incidence and impact. Journal of Occupational Health Psychology. 2001; 6(1): 64-80.
12. Keashley, L., Trott, V., & MacLean, L.M. Abusive behaviour in the workplace: A preliminary investigation. Violence and Victims. 1994; 9. 341-357.
13. Heydari A, Mojtaba Rad, Mostafa Rad Evaluating the Incivility between Staff Nurses and Matrons Employed in Iran. Scientific journal of the faculty of medicine in Nis. 2015; 32(2): 137-46
14. Sharma, N., and Singh V.K. Effect of workplace incivility on job satisfaction and turnover intentions in India. South Asian Journal of Global Business Research. 2016; 5(2): 234 – 49.
15. Andersson, L. M., & Pearson, C. M. Tit for tat? The spiralling effect of incivility in the workplace. Academy of Management Review. 1999; 24: 452−471
16. Muchinsky, P. M., & Morrow, P. C. A multidisciplinary model of voluntary employee turnover. Journal of Vocational Behaviour. 1980; 17: 263–290.
17. Dion, Michael John, "The impact of workplace incivility and occupational stress on the job satisfaction and turnover intention of acute care nurses". 2006; Doctoral Dissertations. AAI3221535.
18. Nisar, Q. A. Does a Workplace Incivility influence employee's job stress and turnover intentions by Moderating role of Psychological. International Journal of Scientific and Engineering Research. 2016; 7(12):16- 30.
19. M. Griffin. "Teaching cognitive rehearsal as a shield for lateral violence: an intervention for newly licensed nurses." Journal of Continuing Education in Nursing. 2004; 35(6): 257–263.

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A Study to Assess the Effectiveness of Self Instructional Module (SIM) on Knowledge Regarding Post Operative Care of Cesarean Mothers among Staff Nurses in Selected Government Hospitals of Haryana

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Abstract

Introduction: The post-operative period demands appropriate guidance from nurse, so by preventive and primitive postoperative care the women can be helped to avoid the post-operative problems and complications, which can help in early recovery.

Objectives:

- To evaluate the pre - post test knowledge of staff nurses working in maternity Hospital regarding post-operative care of caesarean mothers.
- To evaluate the effectiveness of self instructional module on post-operative care of caesarean mothers among staff nurses working in selected hospitals of Haryana.
- To find out association between pre - post test knowledge regarding post operativecare of caesarean section with their selected socio-demographic variables.

Methodology: The study was pre- experimental one group pre- test and post-test design. The sampling technique used for the study was Non-probability convenience sampling technique. Sample consists of 60 staff nurses3 Government hospitals (BheemSenSacchar Hospital of Panipat), (Nagrik Hospital of Jind), (Nagrik Hospital of Sonipat) Haryana.

Result: There was a good effectiveness of Self instructional module on postoperative care after caesarean section. The researcher also found the association between post – test knowledge and age of the samples. Hence self instructional module is very much effective for staff nurses.

Conclusion: The study concluded that there was a good effectiveness of self instructional module on post operative care after cesarean section.

Keywords: *Evaluate, Effectiveness, Self instructional module, Knowledge, Post operative care, Caesarean mothers.*

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Introduction

Cesarean section increases the health risk for mothers and babies as well as the costs of healthcare compared with normal deliveries. Some developed countries have approximately controlled the increase in cesarean section, although the rates may still be high. However, in

other developed countries cesarean section rates are still increasing[1]. A cesarean section is a surgical procedure in which incisions are made through a woman's abdomen and uterus to deliver her baby. Modern medical improvements and practices have led to an increase in the rate of caesarean births over recent years[2]. Post-partum care after cesarean section is similar to post operative care with exception of palpating the fundus for firmness. During recovery, the mother is encouraged to turn, cough, deep breathing exercise to clear the lungs. Walking stimulates the circulation to avoid formulation of clots and promotes bowel movement[3].

Need for the study: The maternal mortality rate is highest in the postpartum period, so special consideration needs to be given to the care of the mother. If you are a single or your partner has to return to work shortly after the birth of the child, try to organize a support a support team prior to the birth of your child to help during the postpartum period[4].

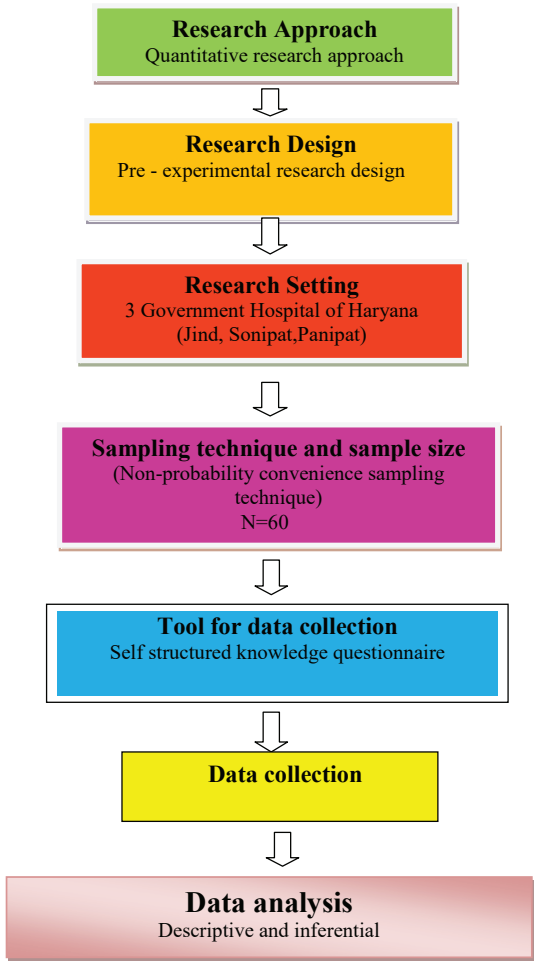
A well-organized care system lowers the operative risk of emergency cesarean section even in developing countries. Based on the statistical findings and research reviews the investigator finds the need to educate the staff nurses on post operative care of caesarean mothers and to maintain the health of mother and child to build a healthy society[5].

Problem Statement: A study to assess the effectiveness of self instructional module (SIM) on knowledge regarding post operative care of cesarean mothers among staff Nurses in selected Government Hospitals of Haryana."

Objectives:

1. To evaluate the pre - post test knowledge of staff nurses working in maternity Hospital regarding post operative care of cesarean mothers.
2. To evaluate the effectiveness of self instructional module on post operative care of cesarean mothers among staff nurses working in selected Hospitals of Haryana.
3. To find out association between pre - post test knowledge regarding post operative care of cesarean section with their selected socio-demographic variables.

Methodology



Schematic Representation of Research Methodology

Data Analysis & Interpretation: The purpose of the analysis is to reduce data into an intelligible and interpretable form so that the relations of research problems can be studied and tested.

Table 1: Showing frequency and percentage distribution of sample characteristics (n=60)

S.No.	Variables	Options	Percentage	Frequency
1.	Age in Years	20-30 years	23	14
		31-40years	75	45
		41-50 years	2	1

S.No.	Variables	Options	Percentage	Frequency
2.	Marital Status	Married	97	58
		Unmarried	3	2
		Divorce	0	0
		Separated	0	0
		Widow	0	0
3.	Professional Qualification	GNM	60	36
		Bsc Nursing	0	0
		Post Basic	25	15
		Msc.Nursing	15	9
4.	Clinical Experiences in years	0-5years	30	18
		6-10years	35	21
		11-15years	35	21
5.	Maternity Ward Experiences in years	0-2years	0	0
		3-5years	82	49
		6-8years	18	11

Table II: Frequency and Percentage Distribution of Samples According to Pre – test knowledge level of staff nurses regarding post operative care of cesarean mothers (n = 60)

S.No.	Pre – Test Level of Knowledge	Frequency	Percentage
1.	Inadequate	0	0
2.	Moderate	29	48.3
3.	Adequate	31	51.7

With regard to pre – test knowledge on post – operative care of cesarean section a little above one half of the samples 31 (51.7%) had adequate knowledge and less than one – half of the samples 29 (48.3%) had moderate knowledge and none of the samples had inadequate knowledge.

Table III: Frequency and Percentage Distribution of Samples According to Post – test knowledge level of staff nurses regarding post operative care of cesarean mothers (n = 60)

S.No.	Post–Test Level of Knowledge	Frequency	Percentage
1.	Inadequate	0	0
2.	Moderate	1	1.7
3.	Adequate	59	98.3

In post – test an overwhelming majority of the samples 59 (98.3%) had adequate knowledge regarding post – operative care of caesarean section. Only one sample had moderate level of knowledge and none of the samples had inadequate knowledge.

Table IV: Effectiveness of Self – Instructional Module on postoperative care of cesarean mothers (n = 60)

Tests	Mean	Mean Difference	Standard Deviation	Paired 't' test value	'p' value
Pre - Test	22.35	4.28	1.74	17.579	0.0000
Post - Test	26.63		2.11		

From the above table it was understood there was a significant different in knowledge between pre – test and post – test. So the null hypothesis was rejected and the alternate hypothesis which states there will be an effectiveness of self-instructional module on post operative care of cesarean mothers among staff nurses was accepted.

The researcher also found the association between post – test knowledge and age of the samples. The chi – square value was 6.0 for the degree of freedom 6 at level of significance 0.000. No other demographic variables were statistically associated with pre – test and post – test knowledge.

Discussion

The current study sought to establish the baseline level of knowledge of staff nurses regarding post-operative care of cesarean section. Nurses in this study had a mean pre – test knowledge score of 22.35 (74.50%), the post – test mean value was 26.63 (88.78%) Previously a study had almost similar results showing that pre – test mean score was 4.57 and SD value 1.66 and the mean and SD values after SIM was 8.90 and 2.16 respectivel[6].

In current study there was a statistically significant association between post – test knowledge level with age [($\chi 2 = 6.000$, dof = 2 and TV = 5.991)]. This finding was supported by the study done by Rina Shrestha (2017) a significant association was found between knowledge of staff nurses with demographic variables such as age, religion, marital status, educational qualification, total years experiences, monthly income, and previous sources of information[7].

Limitations:

- The limited sample size limits on the generalization of the study findings.
- Long term follow up could not be carried out due to time constraints.
- It is limited only to the staff nurses.
- Sampling technique used in this study is Non-probability convenience sampling technique

Conclusion

The purpose of the study was to assess the knowledge regarding post operative care after cesarean section at selected government Hospitals of Haryana. Based on the findings of the study, it is concluded that most of the subjects have good knowledge regarding post operative care after cesarean section.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Review: The present study got ethical clearance from the Nursing research ethical committee of Ved Nursing College. Panipat.

References

1. Fesseha N, Getachew A, Hiluf M, Gebrehiwot Y, Bailey P. A national review of cesarean delivery in Ethiopia. Int J Gynaecol Obstet. 2011 Oct;115(1):106–11.
2. Downward trends in surgical site and urinary tract infections after cesarean delivery in a French surveillance network, 1997-2003. - PubMed - NCBI [Internet]. [cited 2019 Nov 8]. Available from: https://www.ncbi.nlm.nih.gov/pubmed/18257692
3. Narchi NZ. Exercise of essential competencies for midwifery care by nurses in São Paulo, Brazil. Midwifery. 2011 Feb;27(1):23–9.
4. Fixation and unfixation of Folley catheter in cesarean section, a comparative study [Internet]. [cited 2019 Nov 8]. Available from: https://pjms.com.pk/issues/aprjun109/article/article8.html
5. Tsai P-S, Hsu C-S, Fan Y-C, Huang C-J. General anaesthesia is associated with increased risk of surgical site infection after Caesarean delivery compared with neuraxial anaesthesia: a population-based study. Br J Anaesth. 2011 Nov;107(5):757–61.
6. Gong S-P, Guo H-X, Zhou H-Z, Chen L, Yu Y-H. Morbidity and risk factors for surgical site infection following cesarean section in Guangdong Province, China. J ObstetGynaecol Res. 2012 Mar;38(3):509–15.
7. Sedykh SV. [PERIOPERATIVE ANALGESIA INFLUENCE ON MOTHER REHABILITATION PERIOD AFTER CESAREAN SECTION]. Anesteziol Reanimatol. 2015 Aug;60(4):27–9.
8. Schwartz MA, Wang CC, Eckert LO, Critchlow CW. Risk factors for urinary tract infection in the postpartum period. Am J Obstet Gynecol. 1999 Sep; 181(3):547–53.
9. Toh-adam R, Srisupundit K, Tongsong T.

Short stature as an independent risk factor for cephalopelvic disproportion in a country of relatively small-sized mothers. Arch Gynecol Obstet. 2012 Jun;285(6):1513–6.

10. Freitas PF, Savi EP. [Social inequalities in post-cesarean complication rates: a hierarchical analysis]. Cad Saude Publica. 2011 Oct;27(10):2009–20.

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Level of Holistic Health & Wellness and its Percieved Influencing Factors among Baccalaureate Nursing Students: A Mixed Approach

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Abstract

Background: A Nurse of strong mind, body, and spirit will deliver better patient care, resulting in better outcomes, satisfaction scores & ultimately, reimbursements. The health and well-being of student nurses is of at most importance when considering their inexperience in the field, the demands of the course and profession, as well as the implications for patient care Because research proves that high levels of burnout adversely affect patient outcomes & satisfaction.

Aim: To Check the level of holistic health & wellness among baccalaureate nursing students.

Design and Method: A mixed non-experimental & qualitative approach was adopted. 120 Baccalaureate Nursing Students selected using Simple Random sampling. Holistic Health & Wellness survey tool was used for data collection.

Result: Showed that 34.2% of Baccalaureate nursing students had excellent level of holistic health and wellness, 55% had good level of holistic health and wellness, 9.2% had fair and 1.7% had below average. ANOVA test for finding the difference in between the groups reveled that there is significant difference between year of course at (p=0.003) level and no difference found with area of residence (p=0.681) and gender (p=0.105). post hoc test done to find out exactly which intergroup differed one another and result showed difference between first year & second year at (p=0.02) and first year & forth year (p=0.03). Chi square test was found to be insignificant. Based on Focused group discussion two themes emerged, which influenced the level of holistic health & wellness such as i) materialistic & environmental factors ii) motivational determinants & barriers.

Keywords: *Level of Holistic Health and Wellness, Focused group discussion, Baccalaureate Nursing Students.*

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Abstract

According to the American Nurses Association (ANA), Nurse of strong mind, body, and spirit will deliver better patient care, resulting in better outcomes, satisfaction scores, and ultimately, reimbursements. In these challenging times in health care, 40 percent of

nurse's report feeling burnout and 20 percent plan to leave their jobs this year. Because research proves that high levels of burnout adversely affect patient outcomes and satisfaction, stress is not only a problem for nurses, but all health care organizations.[1] The numerous and complicated changes in health care these past eight years require more time, attention and precision from nurses and health care teams.[3]

Holistic nurses with their presence, intent, unconditional acceptance, love, and compassion can facilitate growth and healing and help their clients to find meaning in their life experiences, life purpose, and reason for being. [4]Although nurses are educated to take outstanding care of others, they themselves often have poor health outcomes, including high rates of depression and obesity, which are associated with stressful work environments. [6]

Nursing has shifted the focus of its praxis toward a commitment to holistic care. This holistic perspective suggests each nurse must bring an authentic self as the essential element of therapeutic participation with another human being. The artful use of self provides an opportunity for expansion and personal growth and actualizes the potential to expand the good of all. [2] Holistic nursing integrates the body, mind, and spirit into care. [11]

Holistic nurses value themselves and mobilize the necessary resources to care for themselves. They endeavor to integrate self-awareness, self-care and self-healing by engaging in practices such as self assessment, meditation, yoga, good nutrition, movement, art, support and lifelong learning. They strive to achieve balance and harmony in their own life and help others do the same.[8] Holistic Nursing attends to the individual as an integrated person, caring for their mind, body and spirit. Modalities practiced elicit an individual's intrinsic healing potential. Holistic Nursing defines health as a state of inter-relatedness of one's values to the expression of such values. In the absence of such inter-relatedness, comes suffering.[13]

Aims:

- Check the level of holistic health & wellness among baccalaureate nursing students.
- Find out the difference in levels of holistic health & wellness among different groups.
- Check association between level of holistic health and wellness with sociodemographic variables.
- Explore factors influencing levels of holistic health & wellness using focused group discussion

Methodology

A mixed non-experimental & qualitative approach was undertaken to assess the level of holistic health & wellness among baccalaureate nursing students. Approval from the college research ethical committee was obtained. To ensure the confidentiality of the information, all participants were allocated a code number. The study was conducted at Shri Shankaracharya College of nursing in Bhilai city, Chhattisgarh state,India on 27-09-2019. Probability simple random sampling method was used to select samples. Total 120 samples were selected 30 from all four year of course that make 30 x 4=120. Holistic health and wellness survey tool was used for assessing levels of holistic health & wellness. Semi-structured interview was used for qualitative data collection to Explore factors influencing levels of holistic health & wellness.10 students were selected 5 males and 5 females. Interview protocol was prepared for semi-structured interviews. In this technique face-to-face conversation has done for gathering relevant information. Open ended questions are used. Interviewees were encouraged to express their experience. The duration of all these interviews was 30 to 60 minutes. Each interview was tape recorded, and then each interview was transcribed into written form for the purpose of analysis. The data analysis was started with the reading of the written transcript interviews several times; memo writing was done for a description of the interviews. For data analysis grounded theory was used. Grounded theory analyzed data systematically, this is an inductive approach. It provides opportunity to collect data, and then generate conclusions out of that. Other Data was analyzed & interpreted in descriptive statistical technique such as mean and standard deviation & for inferential statistics chi square test, one-way ANOVA & post-hoc turkey test were done. Focused group discussion was done in qualitative analysis.

Result Findings

Table 1: Overall Level of Holistic Health & Wellness (N=120)

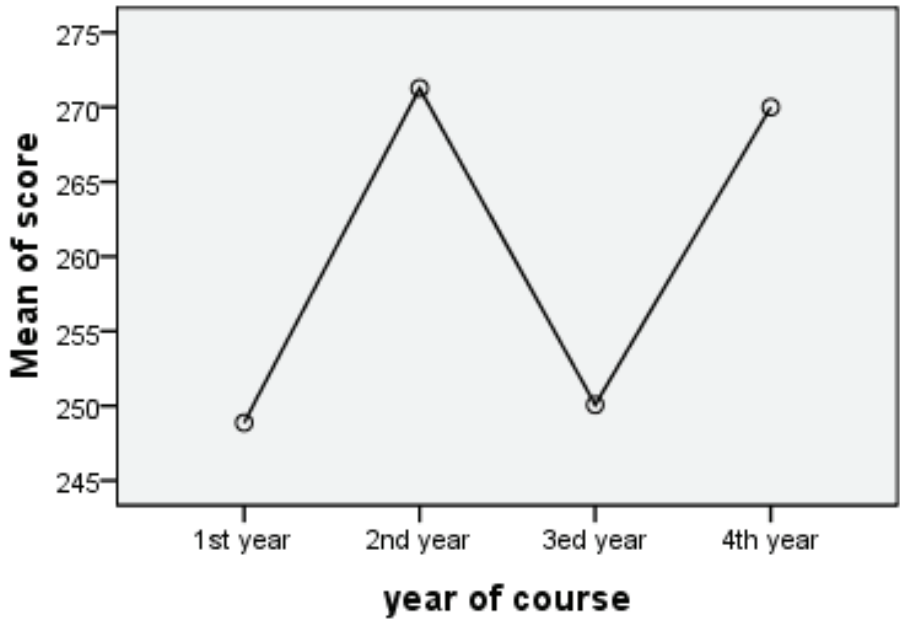
Level of Holistic Health & Wellness	Score Criteria	Frequeny	Percentage	Mean Score	SD
Optimal	325 - 375	Nil	-	260	31.785
Excellent	275 - 324	41	34.2		
Good	225 - 274	66	55		
Fair	175 - 224	11	9.2		
Below Average	125 - 174	02	1.7		
Poor	75 - 124	Nil			
Extremely Unhealthy	0 – 75	Nil			

Table 2: Analyses to find diffrenece in levels of holistic health & wellness among groups anova test result

Groups	Sum of squares	df	f	p	Significance
Year of course	9822.967	3	3.44	0.019	Significant
Area of residence	787.855	2	0.386	0.681	Not significant
Gender	2654.920	1	2.665	0.105	Not significant

Table 3: Multiple comparision by post hoc turkey test to find groups with significant difference in levels of holistic health & wellness

(I)	(J) year of course	Mean Difference (I-J)	Std. Error	Sig.
1st year	2nd year	-22.400*	7.832	.026
	3rd year	-1.200	7.832	.999
	4th year	-21.133*	7.832	.039
2nd year	1st year	22.400*	7.832	.026
	3rd year	21.200*	7.832	.039
	4th year	1.267	7.832	.998
3rd year	1st year	1.200	7.832	.999
	2nd year	-21.200*	7.832	.039
	4th year	-19.933	7.832	.058
4th year	1st year	21.133*	7.832	.039
	2nd year	-1.267	7.832	.998
	3rd year	19.933	7.832	.058



Graph 1: Mean Plotted Graph

Chi square analysis: There was no significant association between level of holistic health & wellnes and selected demographic variables.

Result Description

Description of sample characteristics showing overall frequency & percentage of socio-demographic variable: The samples most of them were females (84.2%).hostlers were (45%) day scholars were (43.3 %) and 11 % were paying guest students. Regarding education of the fathers only (17.5%) were post graduates and for education of mothers majority of them have completed only primary education(37.5%) and higher secondary education (35%) & (17.5) mothers were graduate . monthly family income was more than 30000 INR in (40%) and (15%) reported income less than 10000 rs/month. Regarding their religion 81.7% were Hindu 14.2 % were Christian 2.5% were Muslims 1.7 % of samples belong to other religion. The 70.8 % samples lives in nuclear family & 29.2% samples lives in joint family

Overall level of holistic health & wellness: Majority of the samples have good level of holistic health & wellness level i.e. 66 samples (55%), 41 (34.2%) samples have excellent level of holistic health & wellness, 11 samples (9.2%) belongs to fair criteria & 2 samples (1.7%) have poor holistic health & wellness.

Analysis to find difference in level of holistic health & wellness among groups (anova test result): The test shows significant difference among the year of course with the p value of 0.019. No significant difference was found among area of residence (p= 0.681) & among gender (p=0.105)

Multiple comparisons to find group with significant difference (post-hoc turkey test):

A significant difference was found among

- First year and second year Baccalaureate Nursing Students
- First year and fourth year Baccalaureate Nursing Students
- Second year and third year Baccalaureate Nursing Students

Association level of holistic health & wellness and selected socio demographic variables (chi-square test result): There was no significant association between level of holistic health & wellness with selected socio demographic variables.

Explore factors that influence the level of holistic health & wellnss (focused group discussion): 10 students were selected to join the Focus group discussion. Semi-structured interview was used. Interview protocol was prepared for semi-structured interviews. The

duration was 30 to 60 minutes. Each interview was recorded, and then each interview was transcribed into written form for the purpose of analysis. In this face-to-face conversation has done for gathering relevant information. Usually Open ended questions are used. The researchers identified frequently repeated and consensus statements as those which should be considered as most significant. Based on these significant statements and the themes, the authors wrote an exhaustive description of what the Factors influencing the level of holistic health & wellness. Participants were asked to address the following questions from Focus group discussion guide which are based on the study objectives and nature of research variable.

1. What are the factors that influence your physical and mental health?
2. What are the factors that influence your spiritual and social health?

Two themes emerged; participants described their feelings towards factors influencing holistic health & wellness

1. **Materialistic and environmental:** Baccalaureate nursing students, when they are getting notified with the terms physical and mental health. They reported that,as usual life is running almost fair, so they are not much concerned about physical and mental health and they believed that they are physically and mentally fit (1A). Domestic works in living setups also draw them back in performing physical and mentally health acquiring tasks (1B)
2. **Motivational determinants and barriers:** Participants projected various motivational factors that were positive & negative. Role of teachers helped them more in generating positive awareness towards holistic health & wellness (2A) .role of internet was reported both as motivational and as a barrier, (One significant participant verbatim to add here) when I start using internet it takes away my time for completing many other works like play, prayer, talk with friends etc. (2B) . Work load also reported as a minimal barrier (2C).

Coding Schemata

1. Materialistic and environmental factors influencing holistic health & wellness.
   - 1A. Taking the concept of holistic health & wellness less seriously
   - 1B. Domestic works
2. Motivational determinants and barriers that influence holistic health & wellness
   - 2A. Teachers concern and motivation is positively reported
   - 2B. Internet both motivational and barrier
   - 2C. Work load minimally affects, reported negatively

Discussion

In a demanding field such as nursing, it can be easy to get lost in daily cycle; therefore keeping the mind active can boost health as well as work output.[1] Even though the nurses had good and average perception about holistic nursing care the level of holistic health nurses possessed was not optimal.[5] The nurses are not fully optimal at their level of holistic health & wellness. It directly & in directly affects their profession.[12]

The findings of our study shows that maximum of the baccalaureate nursing students scores good level of holistic health & wellness (55%), 34.2% were in excellent level of holistic health & wellness & 9.2% were having fair level of holistic health & wellness & about 1.7% students were in below average score criteria. The % of students having optimal level of holistic health & wellness were nil.

In an effort to find the factors affecting holistic health & wellness, after Focus group discussion mainly two themes emerged;firstly Materialistic and environmental Reasons and secondly motivational determinants and barriers.

The study underscores the need to ensure the highest level of health and well-being among nursing students while they are undergoing training for their professional roles as nurses. [9]

Gray and Dier (1992) state that the health and well-being of student nurses is of upmost importance when considering their inexperience in the field, the demands of the course and profession, as well as the implications for patient care.[15]

The students expressed the need to have a healthier body in nursing discipline in order to take better care of patients, In order to advocate healthy life style and to be an effective model, nurses are expected to pay more attention to their own health.[14] It is seen in many studies that the personal spirituality perception of nurses and nursing students and their self-spiritual practices have an effect on perceiving patients' spiritual needs, identifying them and on how practices should be planned and applied.[16],[17]

Despite increased recognition of self-care and self-awareness as core competences for health care professionals, little attention is paid to these skills during their education.[7] Giving students the opportunity to interact with nurse experts in an individual, informal setting is a useful educational strategy that increases knowledge, promotes socialization to the nursing profession, and offers students opportunities for professional networking.[10]

Conclusion

In conclusion, level of holistic health & wellness was at excellent level in maximum of baccalaureate nursing students (55%) but still no one had an optimum level of holistic health & wellness. Therefore, to provide quality care and to increase patient outcome there should be an optimal level of holistic health & wellness among baccalaureate nursing students so that they can contribute effectively to their profession. Regular monitoring and interventional packages will help to attain this.

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Conflict of Interest: No conflict of interest.

Ethical Clearance: Approval from the college research ethical committee was obtained.

Reference

1. Yemi Faleti, Mind, Body, and Spirit: How Nurses Stay Healthy through Stress, available on https://www.stevenson.edu/online/blog-news-events/mind-body-and-spirit, assessed on 13/07/2019
2. The Integration of Mind-Body-Soul and the Practice of Holistic Nursing Practice. [Online] Available at: http://journals.lww.com/hnpjournal/Abstract/2001/04000/The_Integration_of_Mind_Body_Soul_and_the_Practice.10.aspx [Accessed 21 Oct. 2019].
3. Nurses of Strong Mind, Body, and Spirit Deliver Better Care. [Online] Available at: https://campaignforaction.org/nurses-of-strong-mind-body-and-spirit-deliver-better-care/ [Accessed 21 Oct. 2019].
4. Erickson, H. Philosophy and Theory of Holism. Nursing Clinics of North America, (2007) 42(2), pp.139-163.
5. Holistic Nursing Care As Perceived By Nurses Working In Wards and Critical Care Units at Menoufiya University Hospital - [online] Available at: https://vdocuments.mx/holistic-nursing-care-as-perceived-by-nurses-working-in-wards-and-critical.html [Accessed 22 Oct. 2019].
6. Melnyk, B., Hrabe, D. and Szalacha, L. Relationships Among Work Stress, Job Satisfaction, Mental Health, and Healthy Lifestyle Behaviors in New Graduate Nurses Attending the Nurse Athlete Program. Nursing Administration Quarterly, (2013), 37(4), pp.278-285.
7. Van Vliet M, Jong M, Jong M. A Mind–Body Skills Course Among Nursing and Medical Students: A Pathway for an Improved Perception of Self and the Surrounding World. Global Qualitative Nursing Research. 2018;5:233339361880534.
8. Welcome to AHNA: What is Holistic Nursing? Ahna.org, (2015). [Online] Available at: http://www.ahna.org/About-Us/What-is-Holistic-Nursing. [Accessed 21 Oct. 2019]
9. Aboshaiqah, A. and Cruz, J. Quality of Life and Its Predictors among Nursing Students in Saudi Arabia. Journal of Holistic Nursing, (2018). 37(2), pp.200-208.
10. Christiaens, G., Abegglen, J. and Gardner, A. Expert Holistic Nurses' Advice to Nursing Students. Journal of Holistic Nursing, (2010). 28(3), pp.201-208.
11. Students' perceptions of holistic nursing care. [Online] Available at: https://reference.medscape.com/medline/abstract/24245384 [Accessed 21 Oct. 2019].
12. Melnyk, B., Orsolini, L., Tan, A., Arslanian-Engoren, C., Melkus, G., Dunbar-Jacob, J., Rice, V., Millan, A., Dunbar, S., Braun, L., Wilbur, J., Chyun, D., Gawlik, K. and Lewis, L. A National Study Links Nurses' Physical and Mental Health to Medical Errors and Perceived Worksite Wellness. Journal of Occupational and Environmental Medicine, (2018). 60(2), pp.126-131.
13. Fenske, J. Holistic Nursing Practiced as Intensive Care Nursing. Journal of Behavior Therapy and Mental Health, (2018). pp.1-20.
14. Hosseini, M., Ashk Torab, T., Taghdisi, M. and Esmaeili Vardanjani, S. Study on Situational Influences Perceived in Nursing Discipline on Health Promotion: A Qualitative Study. ISRN Nursing, 2013, pp.1-9.
15. Health and Wellbeing: A Student Nurse's Perspective. [Online] Available at: http://rn-journal.

com/journal-of-nursing/health-and-wellbeing-a-student-nurses-perspective [Accessed 22 Oct. 2019].

16. Moon F. Chan, Yuet L. F. Chung, Alex S. C. Lee, Weng K. Wong, G. S. C. Lee, Catherine Y. Lau, W. Z. Lau, T. T. Hung, May-Lien Liu, and J. W. S. Ng. "Investigating spiritual care perceptions and practice patterns in Hong Kong nurses: Results of a cluster analysis." Nurse Education Today 26 (2006): 139–50.
17. Linda Ross, Rene van Leeuwen, Donia Baldacchino, Tove Giske, Wilfred McSherry, Aru Narayanasamy, Carmel Downes, Paul Jarvis, and Annemiek Schep-Akkerman. "A student nurses perceptions of spirituality and competence in delivering spiritual care: A European pilot study." Nurse Education Today 34 (2014): 697–702

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Effectiveness of Soya Beans Versus Diaphragmatic Breathing Exercise on Level of Menopausal Symptoms among Postmenopausal Women

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Abstract

The study was conducted to evaluate the effectiveness of soya beans versus diaphragmatic breathing exercise on level of menopausal symptoms among postmenopausal women. Quasi experimental design was adopted for the study. The structured interview questionnaire was developed to collect the data. The sample were selected by simple random sampling (lottery) method and data collection was carried out among 70 postmenopausal women in selected villages. Pretest was conducted with Modified Greene Climacteric Scale and Post test was conducted on 21st day. The findings revealed that the mean score level of menopausal symptoms among postmenopausal women in study group I was 39.25 in pre test and 36.34 in post test respectively. The paired 't' value of 1.69 which is significant at $p<0.05$. It shows that soya beans was effective in reducing the menopausal symptoms. In study group II the mean score on level of menopausal symptoms among postmenopausal women was 36.71 in pre test and 29.62 in post test respectively. The estimated paired 't' value was 1.69 which was also significant at $p<0.05$. In this study the investigator concluded that soya beans and diaphragmatic breathing exercise are effective in reducing menopausal symptoms, but diaphragmatic breathing exercise was more effective than soya beans.

Keywords: *Effectiveness, diaphragmatic breathing exercise, soya beans, menopausal symptoms, postmenopausal women.*

Introduction

Women experience various turning points in their life cycle, which may be development or transitional. Midlife is one such transitional period which brings about important changes in women[9]. Menopause is a unique stage of female reproductive life cycle, a transition from reproductive to non-reproductive stage. All women who live up to 50 years or more go through a period of transition from reproductive to non-reproductive stage of life[8]. Soy products contain isoflavones are part of a group of plant based chemicals called phytoestrogens .These chemicals act like a weaker form of estrogen in the body. The main isoflavoens in soy are genistein and daidzein. When consuming soy, bacteria in your intestines break it down into its more active forms. Soy isoflavones bind to the same receptors as estrogen .Receptors are like docking stations on the surface of cells. When isoflavones bind to some receptors, they mimic the effects of estrogen . When is flavones mimic estrogen, they might help reduce hot flashes and other symptoms of menopause[10]. Diaphragmatic breathing, or deep breathing, is breathing that is done by contracting the diaphragm, a muscle located horizontally between the thoracic cavity and abdominal cavity. Air enters the lungs, the chest does not rise and the belly expands during this type of breathing. Diaphragmatic breathing is also known scientifically as eupnoea, which is a natural and relaxed form of breathing in all mammals[10].

Statement of the Problem: A Quasi experimental study to compare the effectiveness of soya beans versus diaphragmatic breathing exercise on level of menopausal symptoms among postmenopausal women in selected villages at Kanyakumari district.

Objectives:

- To assess the pretest and posttest level of menopausal

symptoms among postmenopausal women in study group I and study group II.

- To evaluate the effectiveness of Soya beans and Diaphragmatic breathing exercise on level of menopausal symptoms among postmenopausal women in study group I and study group II.
- To compare the effectiveness of Soya beans and Diaphragmatic breathing exercise on level of menopausal symptoms among post postmenopausal women in study group I and study group II.
- To find out the association between pretest level of menopausal symptoms among postmenopausal women with their selected demographic and clinical variables in study group I and study group II.

Hypotheses:

H_1: There is a significant difference between pre and posttest level of menopausal symptoms among postmenopausal women in study group I and study group II.

H_2: There is a significant difference between posttest level of menopausal symptoms among postmenopausal women in study group I and study group II.

H_3: There is a significant association between pretest level of menopausal symptoms in study group I and study group II among postmenopausal women with their selected demographic and clinical variables.

RESEARCH METHODOLOGY

Research approach: The investigator utilized quantitative research approach study

Research design: Quasi experimental design was adopted for the study,

Research setting: The study was conducted at villages, Kanyakumari district.

Population: The population under study constituted postmenopausal women with menopausal symptoms

Sample: Postmenopausal women with menopausal symptoms between the age group 40 to 60 years.

Sample size: 70 postmenopausal women with menopausal symptoms.

Sampling technique: Simple random sampling technique (lottery method).

Description of tool: The tool used in the study consisted of three parts

Part I and Part II: Demographic and Clinical variables

In this part, structured questionnaire was used to collect the demographic variables such as age, education, occupation, marital status,type of family, dietary pattern, previous knowledge on soyabeans and diaphragmatic breathing exercise and the Clinical variables such as Body Mass Index, age at menarche, number of children, type of delivery, history of medical illness, under any treatment and duration of menopausal symptoms.

Part III: Modified Greene Climacteric Scale

Modified Greene Climacteric Scale was used to assess the level of menopausal symptoms among postmenopausal women. The total score was 66 and it was categorized as follows

Range Level of Menopausal Symptoms

0-22 Mild

23-44 Moderate

45-66 Severe

Method of data collection

Phase I: Pretest: After obtaining formal permission from the Principal of St. Xavier's Catholic College of Nursing, Chunkankadai and the Block Medical Officer, Structured interview schedule was used to collect the demographic and clinical variables.

Pretest was conducted from the selected postmenopausal women with Modified Greene Climacteric Scale in study group I and study group II.

Phase II: Intervention: The investigator explained the postmenopausal women about the importance of soyabeans and diaphragmatic breathing exercise to reduce the menopausal symptoms. 50 gram of boiled soyabeans, once daily for 21 days before breakfast for 35 women in study group I and diaphragmatic breathing exercise twice a day for 21 days for 35 women in study group II.

Phase III: Post test: The post test was conducted on 21st day with Modified Greene Climacteric Scale. Analysis of the data was done by using descriptive and inferential statistics.

Results

Table 1: Comparison of mean SD and paired ~t| value on pretest and posttest level of menopausal symptoms among postmenopausal women in study group I and study group II. N=70

S.N.	Group	Mean	SD	df	Paired ~t| test
1	Study group I n=35 pretest	39.25	5.57	34	1.69
	post test	36.34	4.45		
2	Study group II n=35 pre test	36.71	9.64	34	1.69
	post test	29.62	4.47		

Significance at < 0.05

Table 2 Mean standard deviation and value of posttest level of menopausal symptoms of soya beans versus diaphragmatic breathing exercise in study group I and study group II N= 70

Variable	Study group-I n = 35		Study group II n = 35		~t| value	Table value
Level of menopausal symptoms during post test	Mean	SD	Mean	SD	4.57	2.776*
	35.48	4.54	29.62	4.47		

Significance at <0.05

Discussion

The study is to compare the effectiveness of Soyabeans and Diaphragmatic breathing exercise on level of menopausal symptoms among postmenopausal women. Based on the data collected, the mean score on level of menopausal symptoms post test value was 35.48 in study group I and mean score in 29.62 post test in study group II .The unpaired' t' value is 2.77. It shows that Diaphragmatic breathing exercise is more effective in reducing the menopausal symptoms among postmenopausal women.

Conclusion

The study concluded that soya beans and diaphragmatic breathing exercise are effective in reducing menopausal symptoms, but diaphragmatic breathing exercise was more effective than soya beans.

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Conflict of Interest: There was no conflict of interest.

Source of Funding: Self

Ethical Clearance: The proposed study was conducted after the approval of the Dissertation Committee of St . Xaviers Catholic College of Nursing, Chunkankadai.

References

1. Chandraiah. P. Nursing research: 1st edition, Hyderabad: Florence; 2012.

2. D.C Dutta's. Textbook of Gynecology :6th Edition,New Delhi: Jaypee;2013.
3. Howkins J, Hudson C. Shaw's Textbook of Operative Gynaecology: 5th edition, New Delhi: Chruchil Livingstone; 1994.
4. Howkins J, Bourne G. Shaw's Textbook of Gynaecology: 9th edition, New delhi; B.I publications;1986
5. HartD.M, Norman J, Gynaecology illustrated: 5th edition, China: Chruchil Livingstone; 2001.
6. Haber J. Nursing research: 7th Edition,China: Mosby Elsevier;2006.
7. Jacob A. A Comprehensive Textbook of midwifery and Gynecological Nursing; 3rd edition, New Delhi: Jaypee; 2012.
8. Lowdermilk, Perry, Cashion, Alden. Maternity and Womens Health Care: 11th edition, U.S.A: Elseveir; 2016.
9. Lowdermilk, Perry, Cashion, Alden. Maternity and Women's Health Care:10th edition, United States of America: Elsevier; 2012.
10. Swaminathan,M. Hand book of food and nutrition : 1st edition, India : Bangalore Printing;2004.

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Effectiveness of Foot Reflexology on Level of Depression among Old Age People

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Abstract

Depression is the most common mental disorder among old age in India and one of the most disabling condition worldwide. It is difficult to differentiate clinical symptoms of depression in old age from symptoms of normal ageing. Depression is found among 15% to 50% of residents in long term care depending on old age home. It is possible to improve mental capacities and coping skills that are affected by depression with daily activities that delay the onset of behavioural disturbances and reduce caring time. Foot reflexology would be the tool that may help to preserve mental capacity of old age people. The study was conducted to evaluate the effectiveness of foot reflexology on level of depression among old age people. Pre experimental one group pre-test post-test design was adopted to evaluate the effectiveness of foot reflexology on level of depression among old age people. 50 participants were selected using purposive sampling technique. Yesavage's Geriatric Depression scale was used to assess the level of depression among old age people. Pre-test was done among old age people with depression and foot reflexology was given to the selected participants with mild and severe depression for 20 minutes, once in every three days for 10 sessions. The post-test was done after the intervention with the same scale. Findings reveals that pre-test score of depression among old age people, none of them were normal, 38(76%) of them had mild depression, 12(24%) of them had severe depression. While analysing the post-tests core of depression among old age people, 26(52%) of them were normal, 18(36%) of them had mild depression, 6(12%) of them had severe depression. The mean pre-test value was 17.94, the mean post-test value was 10.86,the standard deviation was 4.948 and the calculated 't' value was 26.2*. The calculated 't' value was greater than the table value, so there was a significant difference between pre-test and post-test score. Hence the research hypothesis (H_1) is accepted. The score represents that foot reflexology was effective in reducing the depression among old age people.

Keywords: *Effectiveness, foot reflexology, depression, old age people.*

Introduction

Depression is a condition which can impact the entire body. It changes how we think about ourselves and other people. Depression impacts our nervous system, influences how we react to some situations, and changes our mood. Although depression can be treated and managed with traditional medicine, reflexology has promised to work wonders in terms of depression treatments[4].

World's populations of old age people between 2015 and 2050 will nearly double from 12% to 22%. Mental and neurological problem among old age people may be 6.6% of the total age group. Approximately 15% of old age people will suffer from a mental disorder[3].

There are issues involving in the old age are neurological disorders, substance use problem, diabetes, hearing loss, osteoarthritis. In 2050 the proportion of the world's old age population is about 22%; this is an expected increase from 900 million to 2 billion people over the age of 60. At this age people face physical and mental health problems which need to be treated. These disorders in old age people account for 17.4% of years lived with disability. In the world's old age population 7% affected with depression and dementia, 3.8% of old age population affected by anxiety disorder, 1% affected by substance use problems.

In worldwide depression is a common illness. Depression is different from mood fluctuations and emotional responses. Depression may become a serious

health condition if mood fluctuations and emotional responses long lasting. In the family depression can cause the person to suffer greatly and function poorly at work. Depression may cause suicide. Suicide results in an estimated death of 1 million per year. Depression can cause impairment in functioning of daily life. Symptoms of depression untreated due to co-occur with other problems[4].

Even though there are effective treatment for depression, many of those affected in the world is not receive such treatments. Lack of resources, lack of trained health care providers, and social stigma associated with mental illness are the barriers to effective treatment. Inaccurate assessment also a barrier to effective care. Even in some high income countries, depression is not correctly diagnosed and in some occasion people are misdiagnosed by the medical professionals. The burden of depression is on the rise globally[6].

Reflexology is aimed at promoting health in body organs and releasing stress from the body. Bystroking, massageing and applying pressure to such points, therapist can unblock energy flow and release stress from the nerve endings. According to ancient chinesephilosophy, energy flow can be blocked in the nerve endings and cause disease like depression[3].

Statement of the Problem: A Pre experimental Study to Evaluate the Effectiveness of Foot reflexology on Level of Depression among Old age people in Selected Old age homes at Kanyakumari district.

Objectives:

- To assess the pretest and posttest level of depression among old age people.
- To evaluate the effectiveness of foot reflexology on level of depression among old age people.
- To find out the association between pretest level of depression among the old age people with their selected demographic variables.

Hypotheses:

H_1- There is a significant difference between pretest and posttest level of depression among old age people.

H_2- There is a significant association between pretest level of depression among old age people with their selected demographic variables.

Research Methodology

Research approach: The investigator utilized Quantitative Research approach.

Research design: Pre experimental one group pretest posttest research design was used in this study.

Research setting: The study was conducted at old age home, Kanyakumari District.

Population: Old age people with depression.

Sample: The investigator selected old age people with mild and severe depression between the age group of 61 to 80 years.

Sample size: Sample size consisted of 50 old age people with mild and severe depression.

Sampling technique: Purposive sampling technique was used to select the old age people.

Description of Tool: The tool used in this study consisted of two parts.

Part-1:

Demographic data: A Structured Interview schedule was used to collect the demographic variables like age, sex, religion, education, previous occupation, previous income, present income, previous type of family, marital status, number of children, duration of stay at old age home, reason for joining in old age home, medical illness.

Part-2:

Yesavage's Geriatric depression scale (1983) Assessment

J.A. Yesavage's Geriatric depression scale (1983) consisted of 30 items, scores ranged from 0 to 30, the Yesavage's geriatric depression scale questions are answered as "yes" or "no". One point was assigned to each answer and the total score was rated on scoring grid.

Scoring interpretation of Yesavage's Geriatric Depression Scale (1983)

Score	Level of depression
0-9	Normal
10-19	Mild depression
20-30	Severe depression

Description of Intervention: Foot reflexology is a

therapeutic method of relieving pain by stimulating pre-defined pressure points on the feet and hand. Explain procedure to the old age people. P rovide comfortable position to the old age person. Provide warmth to the left foot by simply massageing the foot. Start from the left foot. Provide massage to the solar flexes for 5 times. Massage upward for 5 times from the solar flexes. Massage downwards toward the foot for 5 times from the solar flexes. Rotate each toe 5 times in clockwise likewise in anticlockwise motion. Massage the upper part of the foot and then ankle of foot. Give pressure in the base of big toe. Do the same for the right foot.

Method of Data Collection

Phase-I: Selection of old age people: After obtaining formal permission from the Principal of St. Xavier's catholic college of nursing, Chunkankadai and Administrator of old age home, Old age people were selected based on the criteria of sample selection. The investigator obtained oral consent from each participant and proceeded with data collection.

Phase-II: Pre test: The data was collected from the selected old age people and the Yesavage's Geriatric Depression Scale was used to assess the level of depression. Among them 50 old age people had mild and severe depression were selected for the study.

Phase-III: Intervention: Foot reflexology was given to selected old age people who were mild and severe depression. The intervention was given for the duration of 20 minutes once in every three days for 10 sessions. 50 old age people were divided into three groups. Foot reflexology was given to the 1st group for 1st day, 2nd group for 2nd day, 3rd group for 3rd day. Accordingly the foot reflexology was given for 10 following sessions.

Phase-IV: Post test: The post test was conducted at the end of fourth week by using Yesavage's Geriatric Depression Scale.

Findings: The distribution of demographic variables of the participants of 50 old age people with mild and severe depression. Regarding age, 16(32%) of them were 61- 65 years old, 5(10%) of them were 76-80 years old. Regarding sex, 21(42%) of them were males, 29(58%) of them were females. Analysingreligion, 36 (72%) of them were christians, 14 (28%) of them were hindu. According to education, 21 (42%) of them were illiterate, 1 (2%) of them did higher secondary education. With regard to the previous occupation, 26(52%) of them were self-employed, 1 (2%) of them was private employed. Regarding to previous income, 20 (40%) of them got Rs.1000-5000, 2 (4%) of them got above Rs.20000. According to present income, 1(2%) of them were getting Rs.1000-5000, 48 (96%) of them were not getting any income. Regarding to previous type of family, 35 (70%) of them belongs to nuclear family, 1 (2%) of them belong to extended family. Analysing marital status, 6 (12%) of them were separated, 24(48%) of them were widower. According to number of children, 14 (28%) of them don't have children, 8 (16%) of them had more than 3 children. With regard to duration of stay in old age home, 8 (16%) of them were staying for 1-3 years, 22 (44%) of them were staying for more than 3 years. Analysing reason for joining old age home, 6 (12%) of them were joined due to poor economic status, 19 (38%) of them were joined due to family conflicts. According to medical illness, 16 (32%) of them had illness, 34 (68%) of them had no illness.

Figure 1 shows that during pre-test, 38 (76%) were had mild depression, 14 (24%) were had severe depression. During post-test 26 (52%) of them were normal,18 (36%) of them were mild depressive, 6 (12%) of them were severe depression.

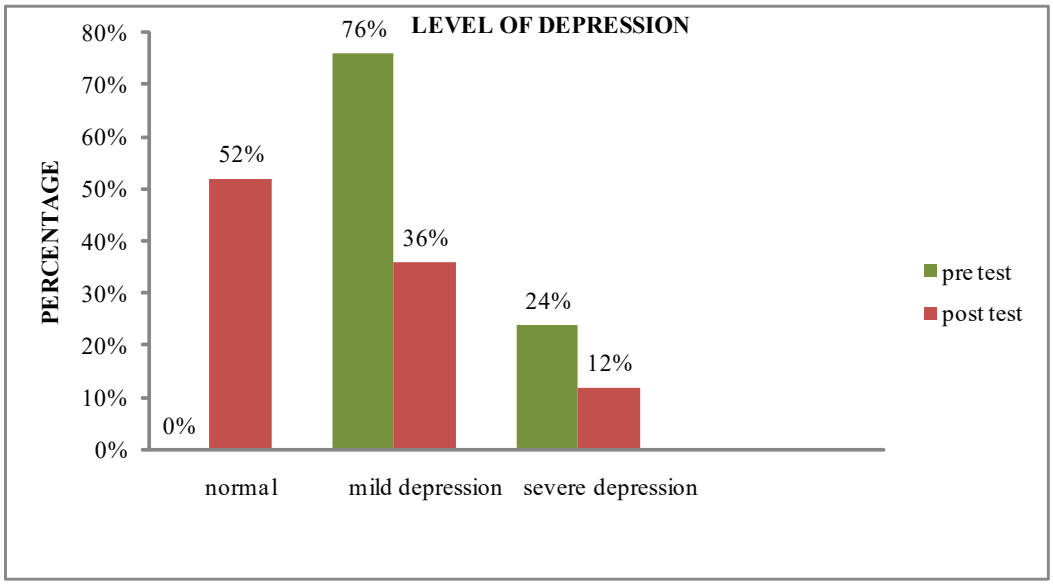

Figure 1: Pre-test and post-test percentage distribution of level of depression among old age people.

Table 1: Comparison of mean, standard deviation, and paired 't' test value of pre-test and post-test level of depression among old age people. n=50

S.No.	Variables	Mean	Standard deviation	't' value	Table value
1.	Pre-test	17.94	4.637	26.2*	2.02
2.	Post-test	10.86	4.948		

*Significant at p<0.05

Table 1 shows that the pre-test mean score of depression was 17.94 and standard deviation was 4.637. In post-test mean score was 10.86 and standard deviation score was 4.948. The 't' value between pre-test and post-test score was 26.2*. The calculated 't' value was greater than the table value which was significant at $p < 0.05$. Hence the foot reflexology was effective in reducing depression.

Discussion

The prevalence of level of depression among old age people, 28(31.1%) were normal, 38(42.2%) were mild depressive, 24(26.6%) were severe depressive. During pre-test, 38 (76%) were had mild depression, 14 (24%) were had severe depression. During post-test 26 (52%) of them were normal,18 (36%) of them were mild depressive, 6 (12%) of them were severe depression.

The pre-test mean score of depression was 17.94 and standard deviation was 4.637. In post-test mean score of depression was 10.86 and standard deviation score was 4.948. The 't' value between pre-test and post-test score was 26.2*which was significant at p<0.05. The calculated 't' value was greater than the table value so there was significant difference between pre-test and post-test score. It shows that foot reflexology was effective in reducing depression among old age people.

Conclusion

The study concluded that providing foot reflexology was effective in reduce depression among old age people.

Conflict of Interest: Nil

Source of Funding: The study was self funded.

Ethical Clearance: Obtained permission from institutional ethical clearance committee. Confidentiality of subjects was ensured.

References

1. Ahuja, N. A short text book of psychiatry: 9th ed. New Delhi: JP Brother's;2016.
2. Ajit, A., and Shiv, G. Geriatric psychiatric

clinical practice guide lines:2nd ed. Jaipur: Indian psychiatric society; 2014.

3. Basavanthappa, B.T. Nursing Research: 2nd ed. New Delhi: Jaypee's;2015.
4. Boyd, M.A. Psychiatric Nursing Contemporary Practice: 4th ed. New Delhi: Lippincott; 2012.
5. Daniel. Biostatistics: A Foundation for analysis in the Health sciences: 2nd ed. Philadelphia: John Wiley and Sons; 2014.
6. Donald. Complementary and alternative medicine: 2nd ed. Missouri: Mosby Company; 2015.
7. Foley, M. Lippincott's Handbook for Psychiatric Nursing and Care Planning: 2nd ed. London: Lippincott William and Wilkins; 2010.
8. Garg, P.D. Concise Psychiatric: 2nd ed. Sirmore: Arya; 2006.
9. Gelder. Oxford Text Book of psychiatry: 5th ed. London: Oxford University Press; 2000.
10. George, J.B. Nursing Theories:2nd ed. New Delhi: Pearsons; 2011.

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Prevalence of Dental Caries and the Effectiveness of Demonstration on Dental Hygiene among Primary School Students in Selected Schools of Rural Community, Assam

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Abstract

Introduction: Oral health promotion through schools is recommended by WHO for improving knowledge, attitude and behaviour related to oral health and for prevention of dental diseases among school children. In India, 70 -72% of population live in the rural areas of which more than 40% are children. These children tend to be more vulnerable to oral health problems.

Aim and Objective: To assess prevalence of dental caries and the effectiveness of demonstration on dental hygiene among primary school students.

Material and Method: The study was a cross-sectional study conducted at selected schools of Rani rural community of Kamrup District, Assam. 118 primary school students of class IV and V were selected using consecutive sampling technique. The subjects were assessed for the presence of dental caries using dmft scoring and observed for their practice of brushing with Fones method of brushing. Later demonstration for the Fones method was given to the participants and post test was done to evaluate the effectiveness of demonstration. The collected data was analyzed using SPSS version 20 software. **Results:** The study showed that more than half i.e., 92 (78%) of the students have dental caries. It was found that in pre-test, 79 (61%) of the participants have good practice of dental hygiene which was increase to 93 (78.8%) in post test. Again, in pre-test 46 (39%) of the participants have poor practice of dental hygiene, which was reduced to 25 (21.2%) in post test. The mean post test practice score (7.03) is higher than the mean pre test practice score (4.70) of dental hygiene. The median post test practice score (7) is also higher than the median post test practice score (5) of dental hygiene and the post test SD (0.67) seems to be less disperse than the pre test SD (0.73) of dental hygiene. It also shows that the "t" value (-28.482) and p -value 0.00 is highly significant at 0.05 level of significance. So it is evident that the demonstration on Fones method of brushing is effective in increasing the dental hygiene practice among the students.

Conclusion: Regulating good practice of dental hygiene is important during the early school period. As health personnel, community nurse can take active role in imparting information on dental hygiene practice among students by conducting school health programme and demonstrating on brushing technique. And also recommending inclusion of dental hygiene in the curriculum of the school.

Keywords: *Practice of dental hygiene, Fones method of brushing.*

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Introduction

"Children are like wet cement; whatever falls on them makes an impression." —Haim Ginott

School children represent about 25% of total population in India. This very size of the population

suggests that health care of the school children can contribute to the overall health status of the country. The health and well being of school children has become a high profile issue, lying at the heart of numerous government initiatives and policies and receiving considerable public attention.[1] Dental caries is one of the most common chronic disease that affect individuals at all ages. The ages for greatest vulnerability are 4-8 years for the primary dentition and 12-15 years for the secondary (or) permanent dentition. Dental caries, if untreated, result in total destruction of involved teeth.[2]

There is a saying that "Mere teaching of cleanliness of body and surrounding is not enough unless it is effectively demonstrated". "Cleans" to be observed by all children include clean environment, clean hands, clean food, clean water, clean mouth, clean teeth and clean tongue. Therefore, the mouth has to be kept clean and healthy. School age is a period of overall development. If proper oral hygiene habits are cultivated during this period, habits will go a long wayin maintaining the oral health of a child throughout the life.[4]

According to Osler "Oral cavity is a mirror of rest of the body." Dental caries remain one of the commonest disorders affecting the teeth, starting right from the early age. School ages are lost because of dental problems and dental visit, with poor children reporting almost 12 times restricted activity day due to dental related illness than higher income children. Between 11% to 72% of poor children have been found to have early childhood caries. One study found that school age dental decay could be predicted in toddler by determining the frequency of brushing and other variables. This suggests the importance of regular brushing of young children.[6]

WHO reports that 60-90% of school children worldwide have experienced dental caries, with the disease being most prevalence in Asia and Latin America.[1] The scenario in India also shows similarities with other developing countries. Prevalence study on dental caries in India has shown a results ranging from 31.5% to 89% (Wolters et al. 2011).[7]

Healthy, clean, strong and good teeth are like a valuable possession. Therefore, attention should be paid to the dental care.

Material and Method:

A quantitative research approach was considered to be the most appropriate and adopted for the study.

Research Design: A pre-experimental one group, pre-test post test design has been used to attain the objectives of the present study.

Group	Pre-test	Intervention/ Treatment	Post test
Experimental group (class IV and V students of primary schools in Rani rural community)	O_1	X	O_2

O_1- Pre-test: Observation on correct practice of brushing among primary school children.

X- Intervention: Demonstration on Fones method of brushing teeth.

O_2- Post test: Observation on correct practice of brushing among school going children.

A total of 118 primary school students of class IV and V from selected schools of Rani rural community of Kamrup District, Assam, were selected using consecutive sampling technique for the study.

The data were collected from 4th February to 4th March 2019. The investigator checks for the presence of dental caries of all the participants one by one. The time taken to check the oral condition for each student was 2-3 minutes. Later observation of their practice of brushing teeth with the observation checklist on Fones method of brushing teeth. The time taken by each student was 3-5 minutes. Followed by demonstration on Fones method of brushing teeth using model of denture and toothbrush for 5 minutes. On the 8th day, post-test was done to observe the skills in practice of brushing teeth by the participants using the same tool.

Ethical approval was obtained from Institutional Ethical Committee of Army Institute of Nursing Guwahati. Formal permission was taken from the Headmaster/ Headmistress of the selected schools of Rani rural community. Informed consent was taken from the parent/guardian of the participants prior to the study. Privacy and confidentiality was maintained throughout the study.

Findings: Data analysis was done using spss version 20.

Description of selected demographic variables: a total of 118 students were present in the study, out of which 61(52%) of participants are girl and 57(48%) of them are boy. Most of the participants have one sibling

(39.8%) and (46.6%) of the participants are first child of their parent. More than half of the participant's parent was daily wagers by occupation (70.3%) and only few (2.5%) of the participant's parent have completed their senior secondary standard.

Prevalence of Dental Caries: The prevalence of dental caries in this study is found to be high i.e. 92 (78%) out of 118 are having dental caries and only few i.e., 26 (22%) of them does not have dental caries.

Table 1: Frequency and Percentage Distribution of Participants with Dental Caries N =118

Dental Caries	f	Percentage
Present	92	78%
Absent	26	22%

Effectiveness of demonstration: It was found that in pre-test, 79 (61%) of the participants have good practice of dental hygiene which was increase to 93 (78.8%) in post test. Again, in pre-test 46 (39%) of the participants have poor practice of dental hygiene, which was reduced to 25 (21.2%) in post test. The mean post test practice score (7.03) is higher than the mean pre test practice score (4.70) of dental hygiene. The median post test practice score (7) is also higher than the median post test practice score (5) of dental hygiene and the post test SD (0.67) seems to be less disperse than the pre test SD (0.73) of dental hygiene. It also shows that the "t" value (-28.482) and p -value 0.00 is highly significant at 0.05 level of significance. So it is evident that the demonstration on Fones method of brushing is effective in increasing the dental hygiene practice among the students.

Table 2: Frequency and Percentage Distribution of Practice of Dental Hygiene of the Participants. N=118

Category	Pre-test			Post test		
	Score range	f	%	Score range	f	%
Poor practice	0-4	46	39%	0-6	25	21.2%
Good practice	5-8	79	61%	7-8	93	78.8%

Table 3: "t" Test of Pre Test and Post Test Practice Score on Dental Hygiene. N=118

Knowledge Score	Mean	Median	Standard deviation	"t" value	P value
Pre test	4.70	5	0.73	-28.482	.000
Post test	7.03	7	0.67		

Conclusion

Dental caries is one of the common problem of children. The education has a vital role in improving practice of the students regarding dental hygiene. Since school education is an integral part of medical and dental services, nurses can play an important role in health educational programme, making the children an important channel for disseminating the health information to the families and the communities. Frequent screening for dental caries and demonstration on correct technique of brushing teeth can help in reduction in prevalence of dental caries among the primary school students.

Limitations:

The present study has following limitations:

- Small sample size from selected schools of Rani rural community of Kamrup district, Assam, which limits the generalization of the findings.
- Sample of the study was limited to class IV and V students only.
- Sampling technique was non- probability consecutive sampling technique.

Recommendations:

- A comparative study can be conducted on the prevalence of dental caries among rural and urban primary school children.
- A follow-up study can be conducted to determine the effectiveness of the demonstration method of teaching on dental hygiene for school children.

Conflict of Interest: There is no conflict of interest.

Source of Funding: Self

Ethical Clearance: The study was approved by Institutional Ethical Committee of Army Institute of Nursing Guwahati, Assam on 4th May 2018.

Reference

1. Peterson PE. The global burden of oral diseases and risk to oral health. Bulletin of the World Health Organization. 2005; 83(9):661-69.
2. Abeer A, Subait A, Alausaine M, Amritha G, Ali A, Ashraf EM. Oral health among Saudi children. The Saudi Journal for Dental Research. 2016 [cited 2015January 25]; 7(3): 45-50. Available from: http:// creativecommons.org/licenses/by-nc-nd/4.0/
3. Ponnudurai A, Kumar SM, Jeevarathan J. Prevalence of dental caries among school children in Chennai. Journal of Clinical and Diagnostic Research. 2014 [cited 2016 April]; 10(4):9-12. Available from: www.jcdr.net
4. Kaur MP. A Pre-experimental study to assess effectiveness of structured teaching programme on knowledge about dental caries and its prevalence among students in selected schools of district Gurdaspur, Punjab. Int. J. Nur. Edu. and Research. 2016[Cited 2017 March]; 5(1): 83-6. Available from:www.anvpublication.org
5. Arangannal P, Mahadev SK, Jeevarathan J. A study to assess the prevalence of dental caries among school children in Chennai. Journal of Indian pedodontics and preventive dentistry.2016 [Cited 2015 April 29]; 34(3): 249-256. Available from: https://www.researchgate.net/publication/303711947
6. Dr Thakur K, Renuka. A pre-experimental study to evaluate the effectiveness of planned teaching program on knowledge and practice of oral hygiene among school children. Journal of Clinical and Diagnostic Research. 2012 [Cited 2013 Dec]; 7(12): 3107-10.
7. Datta P and Datta PP. Prevalence of dental caries among school children in Sundarban, India. ISSN.2013[Cited 2013 July 25];4(3):2-4. Available from:http://dx.doi.org/10.4172/2161-1165.1000135
8. Ashok GV, Krishnaprasad. A study on oral hygiene among school children in a rural area of Tamilnadu. International journal of contemporary medical research. 2015 [cited 2016 September 6]; 3(9): 2454-7379. Available from: http: //www.whocotlab.od.mah.se/index.html.
9. Kumar Y, Sanadhya, Effectiveness of oral health education among fishermen's children in India. Int Marit Health. 2013 [cited 2014]; 65(3): 99–105. Available from:htpp://www.intmarhealth.pl
10. Umarani J, Nayana. Knowledge of children regarding oral hygiene: A schoolbased descriptive study. Journal of Scientific and Innovative Research. 2014 [Cited 2014 April 08]; 3 (2): 134-8. Available online at: www.jsirjournal.com.
11. Kalita C, Choudhary B, et al. Caries prevalence of school-going boys and girls according to cleaning methods and soft drink-taking frequency in different localities, in and around Guwahati city. Journal of Indian society of pedodontics and preventive paediatrics. 2016 [Cited 2018 June 4]; 34:249-56. Available from: http://www.jisppd.com/text.asp?2016/34/3/249/186755
12. Andegiorgish, Amanuel Kidane a et al. Prevalence of dental caries and associated factors among 12 years old students in Eritrea. BMC Oral Health. 2017 [Cited 2017 Dec]; 17(9):169. Available from: www.biomedcentral.com/submit

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Facilitators and Barriers in Initiation of Breastfeeding within One Hour of Child Birth among Women at Selected Community

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Abstract

Introduction: Most of the world's new-born are left waiting too long to begin breastfeeding. In 2017, 78 million new-borns were estimated to wait more than one hour to be put to the breast. This study aimed to assess the facilitators and barriers in initiation of breastfeeding within one hour of child birth.

Methodology: A retrospective study was conducted at selected community in Chennai with a sample size of 60 mothers through purposive sampling technique. Data was collected using demographic variable proforma, obstetrical variable proforma, checklist to assess the facilitators and barriers in initiation of breastfeeding within one hour of childbirth.

Results: In initiation of breastfeeding Majority of the mothers felt antenatal preparation (100%) and support from health professionals (54.4%) as Facilitators,96% of the mothers considered Pain during labour and new-borns refused to feed as the barriers. There was significant association between initiation of breastfeeding within one hour of childbirth and selected Variables such as age of the mother ($\chi 2$= 5.1428), knowledge about breastfeeding ($\chi 2$=4.826) and source of information from health professionals ($\chi 2$= 4.343, p>0.50).

Conclusion: This study helps in understanding the facilitators and barriers in initiation of breastfeeding. By analysing these factors, Nurses and nursing students can step up to empower mothers to promote early breastfeeding.

Keywords: *Facilitators, Barriers, Initiation of Breast feeding.*

Introduction

The first hours and days after birth are one of the riskiest periods of a child's life — but getting an early start to breastfeeding offers a powerful line of defence. India ranks 56th among the 76 countries that were analysed. The report, released ahead of World Breastfeeding Week (August 1 to 7), says that only two in five newborns are breastfed within the first hour of life across the world.[1]

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According to NFHS 2017, Mishra, Secretary, Ministry of Health and Family Welfare, stated that about 20% new-born deaths and 13% under-five deaths can be prevented by early initiation of breastfeeding. At about 99.9% in both urban and rural areas, Kerala has the highest institutional births in the country. Tamil Nadu is close to second position with 99.2% institutional births in urban areas and 98.7% in rural areas. Yet, In Tamil Nadu only 55% of them only were initiated to breastfeed within one hour of birth[2].

Breastfeeding within the first hour of life has been shown to reduce high neonatal mortality by 22%. A Study was conducted on Delayed Breastfeeding Initiation Increases Risk of Neonatal Mortality. The analysis was based on 10947 breastfed singleton infants born between

July 2013 and June 2014 who survived to day 2 and whose mothers were visited in the neonatal period. The results showed that breastfeeding was initiated within the first day of birth in 71% of infants and by the end of day 3 in all but 1.3% of them; 70% were exclusively breastfed during the neonatal period. Thus promotion of early initiation of breastfeeding has the potential to make a major contribution to the achievement of the child survival millennium development goal[3].

Today, breastfeeding continues to play an important role in infant and child health. Skin-to skin contact immediately after delivery will help us in the promotion of early initiation of breast feeding which would save 1.45 million lives of new-born. Therefore the investigator has conducted this study to evaluate the facilitators and barriers in initiation of the breast feeding within one hour of childbirth that can enhance the initiation of breastfeeding at the earliest which is safe and can be easily practiced by the health personnel.

Statement of the Problem: A Community Based Retrospective Study on Facilitators and Barriers in Initiation of Breastfeeding within One Hour of Child Birth among Women in Selected Community.

Objectives:

1. To assess the facilitators and barriers in initiation of breastfeeding within one hour of delivery among mothers
2. To find out the association between the selected demographic variables and initiation of breastfeeding within one hour of delivery among mothers
3. To find out the association between the selected obstetrical variables and initiation of breastfeeding within one hour of delivery among mothers.

Null Hypotheses:

H01: There will be no significant association between the selected demographic variables and initiation of breastfeeding within one hour of delivery among mothers.

H02: There will be no significant association between the selected Obstetrical variables and initiation of breastfeeding within one hour of delivery among mothers.

Materials and Method

The study was conducted after obtaining ethical clearance from IEC of the institution and setting permission from concerned authorities. Rapport was established by explaining the research purpose to the participants. Sixty participants were selected using Purposive sampling technique. The sample includes mothers with babies of 6 months to 1 year of age. The data was collected using tools such as Demographic and Obstetric Variable proforma. Check List to assess the facilitators in initiation of breastfeeding consists of 10 items. Checklist to assess the barriers in initiation of breastfeeding consist of 15 items. The data was collected through interview method.

Results

The collected data was entered in excel and analysed with appropriate descriptive (frequency, percentage, mean and SD) and Inferential (chi-square) statistics using SPSS-20.

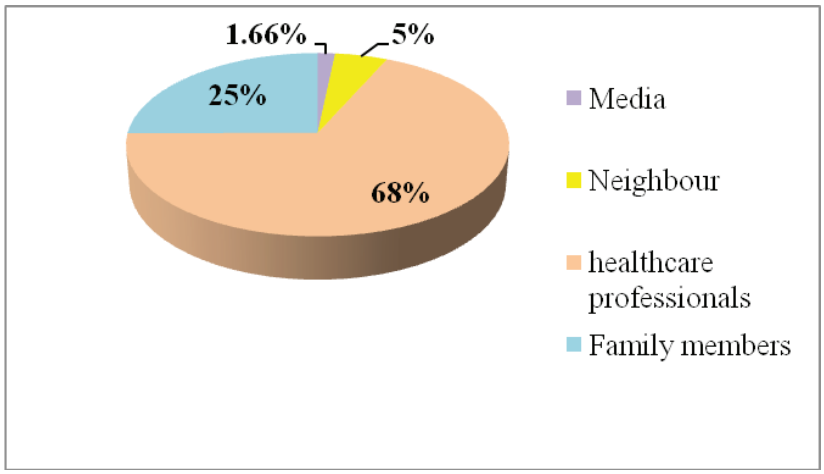

Figure 1. Percentage Distributions on Source of Information on Initiation of Breastfeeding among Mothers

Results show that in the demographic variable proforma, majority of the mothers age were between 21 – 30 yrs. (63.33%). Nearly half of the mothers lived in nuclear family (48.33%) and in the urban (46.66%) and majority of the mothers responded that they were aware about early initiation of breastfeeding (73.33%).

Figure 1 Depicts that majority of the mothers' source of information on breastfeeding was from health care professionals (68.33%).

Table 1 Frequency and Percentage Distribution of Obstetrical Variables in Initiation of Breastfeeding within 30 to 60 mts of Delivery among Mothers (N=60)

Obstetrical variables	f	%
Parity		
Primi para	38	63.33
Multi para	22	36.66
Gestational age at birth		
38-40 weeks	49	81.66
41-42 weeks	11	18.33
Mode of delivery		
Normal vaginal delivery	25	41.66
LSCS	35	58.33
Breast condition of the mother		
Normal	59	98.33
Breast complications	1	1.66

Table 2 depicts majority of the mothers were primi mothers (63.3%), gestation age at the time of delivery was 38 to 40 weeks (81.6%), delivered through LSCS (58.3%), babies born were boys (66.6) and didn't have any complications during labor (98.33%). More than half of the mothers had difficulty in promoting an effective latch of the baby (58.3%).

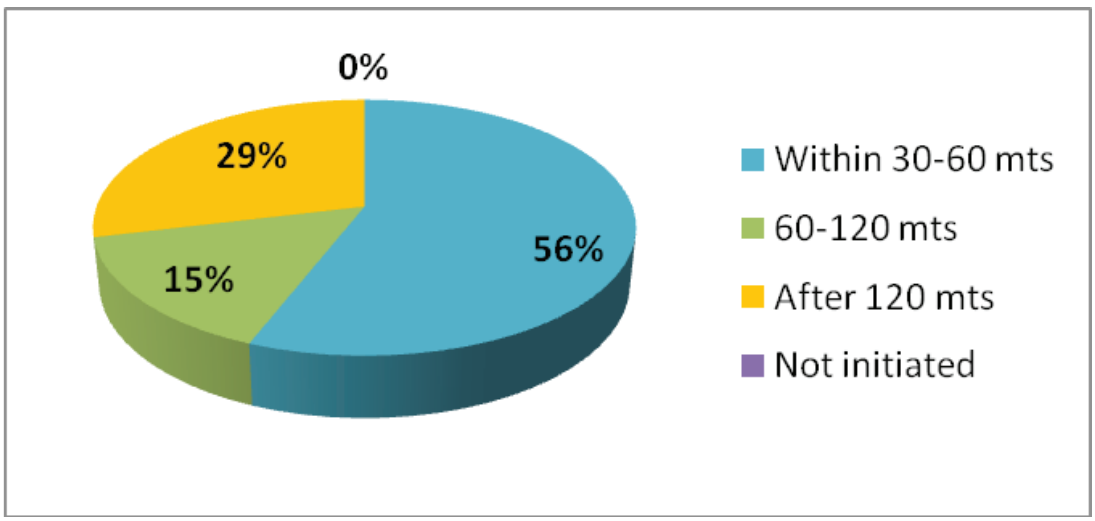

Fig. 2. Percentage Distribution of Initiation of Breastfeeding after Delivery.

Figure 2 reveals that 56% of mothers initiated breastfeeding within 30 to 60 mts after child birth and 15% of them initiated within 60 to 120 minutes and 29% of them initiated after 120 minutes.

Table 2: Item Wise Analysis of Frequency and Percentage Distribution of Facilitators in Initiation of Breastfeeding within 30 to 60 mts of Delivery among Mothers (N = 33)

Item. No	Facilitators	f	%
1.	I was prepared during antenatal period	33	100
2.	I had consistent feedback and encouragement from health professionals	18	54.54
3.	My family members motivated me to feed	33	100
4.	I was interested to initiate early feeding as I know its benefits	28	84.84
5.	I wanted my baby to be healthy	33	100
6.	Breast feeding was the god gifted opportunity to bond with the baby	33	100
7.	I believe contribution of breast feeding to infant's growth and wellbeing	33	100
8.	I feel I am normal,if I feed my baby early	33	100
9.	I can understand the feeding cues of baby	22	66.66
10.	Did the staff encourage you to look for signs your baby was ready to feed and offer you help with breastfeeding.	33	100

This table shows that all of the mothers (100%) responded that they were prepared during antenatal period, their family members motivated them to feed, they want their babies to be healthy, and they felt that breastfeeding was God gifted opportunity to bond with the baby. The mothers also assured that the staffs encouraged to breastfeed early. More than half of the mothers (54.4%) had consistent feedback and encouragement from health professionals. Majority of the mothers were interested to initiate early feeding as they knew its benefits (84.4%) and understood the cues of the baby (66.66%).

Table 3: Item Wise Analysis of Frequency and Percentage Distribution of Barriers in Initiation of Breastfeeding within 60 to 120 mts or > 120 mts among Mothers (N = 27)

Item. No	Barriers	f	%
1.	I was having pain after labour process	26	96.29
2.	I had fear of distorted breast shape by breast feeding	2	7.40
3.	I had poor prenatal and postnatal support to initiate breast feeding within one hour of delivery	10	37.03
4.	I thought I would not have enough milk	15	55.55
5.	I was embarrassed to feed in front of health professionals/ family members	10	37.03
6.	I was upset on the sex of the baby	14	51.85
7.	I was tired or had to take medicine	4	14.81
8.	I believe that formula is as good as breastfeeding or formula is better	10	37.03
9.	I thought breast feeding is too in convenient	12	44.44
10.	I tried breast feeding before and didn't like it or it didn't work out	13	48.14
11.	I don't want to breastfeed since I am working	4	14.81
12.	Family members did not allow me to initiate breastfeeding within one hour after delivery.	10	37.03
13.	I thought disease could transfer to the kids through breast feeding,	4	14.81
14.	I was depressed because my child refused breast feeding	26	96.29
15.	I was not having enough knowledge on early initiation	15	55.55

It can be noted from Table 3 that majority of the mothers had pain during the labour process (96.29%). More than half of them thought that they wouldn't have enough milk (55.55%) and were depressed when the child refused to feed (96.29%). More than half of the mothers were not having enough knowledge on early initiation of breast feeding (55.55%). Half of them were upset upon the sex of the baby (51.85%).

Table 4: Association between Selected Demographic Variables and Initiation of Breastfeeding within 30 to 60 minutes among Mothers (N=60)

	Initiation of breastfeeding within 30 to 60 minutes		
Demographic Variables	**Yes**	**No**	**χ2 & p Value**
Age in years			
21- 30	38	12	5.1428*** P>0.50
31- 37	4	6	
Educational Status of the mother			
Illiterate	2	0	0.8865
Literate	40	18	
Awareness about early initiation of breast feeding			
Yes	42	16	4.826*** P>0.50
No	0	2	
If Yes, Source of Information is from			
Health Professionals	26	15	4.343*** P>0.50
Others	17	2	

Note: The categories were clubbed for the sake of chi- square analysis
*** (p>0.50): 98% confidence level
*(p>0.50): 80% confidence level

Table 4 Shows that there was significant association between the initiation of breastfeeding within 60 minutes and selected demographic variable such as age of the mother (χ2= 5.1428), knowledge about breastfeeding (χ2=4.826) and source of information from health professionals (χ2= 4.343, p>0.50). Hence Null Hypothesis Ho1 ''There will be no significant association between the selected demographic variables and initiation of breastfeeding within one hour of delivery among mothers'' with regard to age of the mother, awareness about breastfeeding and sources of initiation of breastfeeding was rejected.

Discussion

A significant number of mothers were between 22-30 years of age (63.33%) it could be interpreted that the public had adequate awareness about the opportune time for pregnancy. It was noted that none of them were above 30 years, and the findings suggest that they are less prone to develop a high risk pregnancy; this view was highlighted in a study that women older than 35 years have an increased incidence of sub fertility and inability to conceive[4].

Most of them live in nuclear family (48.33%), in the urban residence (46.6%) and nearly half of the mothers were graduates (48%) which can be recognized as a facilitating factor to understand the importance of breastfeeding initiation within 60mts of birth. This view was emphasized by the study finding that the educational level of the people was a determining factor towards the attitude and knowledge of the people on their own health[5].

The source of information on breastfeeding was from health care professionals (68.33%) on a large scale. It showed that though female literacy rate is high, the

mothers are not aware about initiation of breastfeeding within an hour of birth. So, the healthcare professionals need to have extensive knowledge about the same, to motivate the mothers through evidence based practice.

Majority of the mothers were Primi para (63.33%), their babies were 7 to 10 months of age (50%), more than half of them had delivered between 38-40 weeks (81.66%). The findings on gestational age can be interpreted that labour process in appropriate gestational age will promote positive labour outcome without any fetomaternal complications. This view was presented in a study stating that on an average, number of boy babies was higher than the number of girl babies in rural communities. The sex ratio at birth is the refined indicator of the extent of prenatal sex selection[6]. More than half of the mother underwent LSCS (58.3%).A significant number of mothers initiated breastfeeding within 30-60 mts of delivery and majority of the babies sucked well after delivery (76.66%) and felt peaceful and fell asleep (78.33%)

Majority of the mothers were prepared during antenatal period and their family members motivated them to feed. All mothers had desire to make their baby healthy and thought that breastfeeding was the God gifted opportunity to bond with the baby which also contributes for the wellbeing and growth of the infant. More than half of the mothers understood the cues of the baby. (78.33%) Most of them were interested to feed their babies early as they know its benefits (91.66%). A study supported this finding, with the conclusion that through the expression of new mother's experiences towards motherhood, healthcare providers can reach a better perception of the emotional and psychological changes as well as the various aspects of mother's acceptance of their maternal role and helps a better preparation of effective training programs for mothers and families[7].

A study stressed that New mother Breastfeeding Promotion Act, 2005, found that although breastfeeding has been recognized as a prerequisite for healthy child growth development in the modern urban setting, it was complicated by the increasing tendency of women to work in situations where they were separated from their infants and depend on the formulated feed[8].

Majority of the mothers had pain during the labour process (83.33%). More than half of them thought that they wouldn't have enough milk (48.33%) and was depressed when the child refused to feed (68.33%). Less than half of the mothers had a previous experience where breastfeeding didn't work out (28.33%) as it was too inconvenient (26.66) and were not having enough knowledge on early initiation of breast feeding (31.33). Few of them were upset upon the sex of the baby. (33.33%)

This shows that the barriers in initiation of breastfeeding within 30 to 60 mts was self-perception, this view was highlighted in a study quoting that most mothers felt unprepared, lack of control over their lives, incomplete maternal feelings and unstable relationships with their husbands after delivery. By identifying these factors as barriers, we can eliminate these factors to promote early initiation of breastfeeding[7].

There was significant association between initiation of breastfeeding within 60 minutes and the selected demographic variable such as age of the mother ($\chi 2$= 5.1428), knowledge about breastfeeding ($\chi 2$=4.826) and source of information from health professionals ($\chi 2$= 4.343, $p>0.50$). Hence Null Hypothesis Ho1 with regards to age of the mother, awareness about breastfeeding and sources of initiation of breastfeeding was rejected. Thus the initiation of breastfeeding within one hour of childbirth depends on the factors such as age of mother, awareness about breastfeeding and source of information.

Conclusion

This study shows antenatal preparation on benefits of breastfeeding and professional support as the facilitators and barriers such as self-perception that breastfeeding was inconvenient and will not be sufficient breast milk and pain during labour influence in the initiation of breastfeeding within half an hour of delivery. Nurses and nursing students should take initiative to empower mothers to promote early breastfeeding. Thus the mothers will be empowered to take the necessary steps to promote early breastfeeding

Conflict of Interest: Nil

Source of Funding: Self

References

1. Prasad Ravindranath. Institutional delivery high but only 42% are breastfed in first hour of birth in India. The Hindu. 2017. March 12. (cited 2019 August 6) Available from https://journosdiary.com/2017/03/12/breastfeeding-india/

2. Special Correspondent. India ranks 56th in early initiation of breastfeeding, say UNICEF, WHO. The Hindu. 2018. August 2. (cited 2019 August 6) Available from https://www.thehindu.com/news/cities/mumbai/india-ranks-56th-in-early-initiation-of-breastfeeding-say-unicef-who/article24576183.ece

3. Edmond. K, Baker, Sahoo. T, Sarket, Das. P: Delayed breast eeding initiation increases the risk of neonatal mortality pediatrics. Journal of Pediatrics and Neonates. 2010.338-386

4. Martin, J.A. B.E. Hamilton, M.J. Osterman, S.C. Curtin, and T.J. MAthewa. Births: Final data for 2013. National Vital Statistics Reports. 2015. 64(1): 1-65

5. Ortigosa, C.E, Karchmer, K.S .Factors Related To The Recognition Of Alarm Signals during Pregnancy. Ginecol Obstet Mex. 1996. 64,90-95

6. Basanta M Hota, Naimisha Movva. Newborn birth weight in normal pregnancy in rural Telangana. Journal of Dr. NTR University of health sciences. 2017. Volume 6:232-5.

7. Nahid Javadifar. Fereshteh Majlesi, Alireza Nikbakht, Sahamaz Nedjat. Ali Montazeri. Journal to Motherhood in the First Year after Childbirth. Journal Family Reproductive Health. 2016. Sep; 10(3): 146–153

8. Chang, Sharma, Bhalia, Kumar: Effectiveness of educational program on knowledge and attitude of breastfeeding, satisfaction and problems of breastfeeding and exclusive breastfeeding. Indian Journal of Breastfeeding. 2013.12-20

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Effectiveness of Hand and Foot Massage on Level of Pain Perception among Lower Segment Caesarean Section Mothers

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Abstract

The study was conducted to evaluate the effectiveness of Hand and Foot massage on level of pain perception among Lower Segment Caesarean Section mothers. Quasi experimental non randomized control group design was adopted for the study. The structured questionnaire was developed to collect the data. The samples were selected by purposive sampling technique. The study was conducted on 60 lower segment caesarean section mothers. The participants were divided into two groups 30 each in study group and control group. Pre test was done for both the groups by using Numerical Pain Rating Scale. Hand and foot massage was given for 30 minutes to the study group for 5 days (Morning). Post test was done for both the study group and control group. The estimated paired 't' value was 1.70 which was significant at $p < 0.05$. This shows that the hand and foot massage is effective in reducing the level of pain perception among Lower Segment Caesarean Section mothers.

Keywords: *Pain perception, Caesarean, Hand and foot Massage.*

Introduction

Women are the precious gifts that God has ever created and bestowed on earth. They occupy a significant position in the society, since they are capable of giving birth to children which thereby enriches the population increase. Motherhood is a gift for every woman. Pregnancy and child birth are unique experiences. Pregnancy and delivery bring happiness to the mother as well as her partner[10]. Once immediately after the childbirth while hearing the cry of her baby itself, she feels very happy[8]. Caesarean section is the birth of a fetus through a trans abdominal incision of the uterus. The purpose of caesarean birth is to preserve the well being of the mother and her fetus. Since the advent of modern surgical methods, care, use of antibiotics, maternal and fetal morbidity and mortality have decreased. Despite these advances caesarean birth still poses threats to the health of both mother and infant[6]. Complementary therapies are commonly used treatment modalities for pain relief in present days. Massage is a technique that applies pressure to parts of the body by stroking, stretching, pulling and kneading. Its aims to offer relaxation mentally and physically. Massage may concentrate on the muscles, the soft tissues, or on the acupuncture points. Massaging hands and foot stimulates the body to come back in balance. Massage can provide several benefits to the body such as increased blood flow, reduces muscle tension and so on[7].

Statement of the Problem: A Quasi Experimental Study to Evaluate the Effectiveness of Hand and Foot Massage on Level of Pain Perception among Lower Segment Caesarean Section Mothers in a selected Hospital, at Kanyakumari District.

Objectives of the Study:

1. To assess the pre test and the post test level of pain perception among Lower Segment Caesarean Section mothers in study group and control group.
2. To evaluate the effectiveness of Hand and Foot massage on level of pain perception among Lower Segment Cesarean Section mothers in study group and control group.
3. To associate the pre test level of pain perception

among Lower Segment Caesarean Section mothers with their selected demographic and clinical variables in study group and control group.

Hypotheses:

H_1: There is a significant difference between pre test and post test level of pain perception among Lower Segment Cesarean Section mothers in study group and control group.

H_2: There is a significant difference between post test level of pain perception among Lower Segment Cesarean Section mothers in study group and control group.

H_3: There is a significant association between pre test level of pain perception among Lower Segment Cesarean Section mothers with their selected demographic and clinical variables in study group and control group.

Research Methodology

Research approach: The researcher utilized Quantitative research approach.

Research design: Quasi experimental non randomized control group design was adopted for the study.

Research setting: The study was conducted at Hospital, Kanyakumari District.

Population: Mothers who underwent Lower Segment Caesarean Section.

Sample: The sample consisted of mothers who underwent Lower Segment Caesarean Section.

Sample size: 60 Mothers who underwent Lower Segment Caesarean Section.

Sample technique: Purposive sampling technique.

Description of Tool: The tool used in the study consisted of two parts.

Part I: Demographic data: The demographic variables consists of age, education, occupation, type of family, religion, support of mother, previous knowledge on Hand and Foot massage and the clinical variables consists of parity, type of pain, frequency of pain, time of experiencing pain.

Part II: Numerical Pain Rating Scale for measuring the level of pain.

The scale was categorized as follows,

'0' denotes	:	No Pain
'1-3' denotes	:	Mild Pain
'4-6' denotes	:	Moderate Pain
'7-10' denotes	:	Severe Pain

The maximum score is '10' and minimum score is '0'.

Method of Data Collection:

Phase I Selection of Lower Segment Caesarean Section mothers: After obtaining formal permission from the Principal of St. Xavier's Catholic College of Nursing and Administrator of Hospital, participants were selected based on the criteria of sample selection. The investigator obtainedoral consent from each Lower Segment Caesarean Section mothers separately and proceeded with the data collection.

Phase II Pretest of Lower Segment Caesarean Section mothers: The data was collected from the selected participants and the Numerical Pain Rating Scale was used to assess the level of pain perception .

Phase III Intervention: Explained the procedure to the mother, made the mother to lie down in supine position, Provided two pillows, one for hand and another for leg, and started with warming up the hand well. Massaging the hand and foot of Lower Segment Caesarean Section mothers by stroking and stretching for 15 minutes on hand and 15 minutes on foot. Total duration of massage is 30 minutes every morning for the following 5 days.

Phase IV Post test: The post test was done for both the study group and control group by using Numerical Pain Rating Scale.

Results

Table 1 Comparison of mean, standard deviation and paired 't' value on pre test and post test level of pain perception among Lower Segment Caesarean Section mothers in study group and control group N = 60

Variables	Group	Mean	SD	paired 't' test
Level of pain perception	Study group n=30			
	Pre test	8.6	1.88	
	Post test	4.9	1.44	1.70*
	Control group n=30			
	Pre test	7.96	2.47	
	Post test	7.16	2.86	2.92

* Significant at p <0.05.

Table 2 Comparison of mean, standard deviation and unpaired 't' value on post test level of pain perception among Lower Segment Caesarean Section mothers in study group and control group. N = 60

Variables	Group	Mean	SD	Unpaired 't' test
Level of pain perception	Study group n=30	4.9	1.44	2.13*
	Control group n=30	7.16	2.86	

*Significant at p <0.05.

Discussion

The study was done to determine the effectiveness of hand and foot massage on level of pain perception among Lower Segment Caesarean Section mothers. Based on the data collected the mean score on level of pain perception among Lower Segment Caesarean Section mothers in study group was 8.6 in the pre test and 4.9 in the post test. The paired 't' value of 1.70 which is significant at p <0.05 shows that Hand and Foot massage was effective in reducing the level of pain perception. In control group, the mean score on level of pain perception among Lower Segment Caesarean Section mothers was 7.96 in the pre test and 7.16 in the post test respectively. The estimated Paired 't' value for pain perception was 2.92 which was also significant at p <0.05. But comparing both the values the Hand and Foot massage was more effective.

The mean score on level of pain perception among Lower Segment Caesarean Section mothers in study group was 4.9 and in control group it was 7.16. The estimated unpaired 't' value of 2.13 which is significant at p<0.05 shows that Hand and Foot massage is effective and reducing the level of pain perception. In study group Education was associated with their level of pain perception and in control group Parity and Frequency of pain was associated with their level of pain perception.

Conclusion

The study concluded that providing Hand and Foot massage reduces the level of pain perception among Lower Segment Caesarean Section mothers. Therefore the investigator feels that Hand and Foot massage for Lower Segment Caesarean Section mothers is effective in reducing pain perception.

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Source of Funding: The study has no source of funding. It is self – funded.

Training: The primary researcher had taken the hand and foot massage training and got certified to perform the same from an experienced physiotherapist.

Ethical Clearance: The proposed study was conducted after the approval of the dissertation committee of St. Xavier's Catholic College of Nursing, Chunkankadai.

References

1. Basavanthappa BT. Textbook of Nursing Research: 1st ed. New Delhi : Jaypee; 2008.
2. Bincy R. Nursing Research: 1st ed. NewDelhi : Vinod Vasishtha; 2012.
3. Degirmen N. 'Effectiveness of foot and hand massage in post caesarean pain control.' Journal of Applied Nursing Research, 2012; 23 (126) : 153 – 158.
4. Elhaleem S, Ramadan A. 'Effect of foot massage on relieving mothers post caesarean section incisional pain.' Journal of International Academic Research for Multidisciplinary, 2013; 1 (7) : 202- 213.
5. Gupta SP. Statistical Method : 1st ed. NewDelhi: Sulvian and son; 2002.
6. Lowdermilk, perry, cashion, Alden. Maternity and womens Health Care: 8th ed. Philadelphia: Mosby; 1997.
7. Merriam. 'Massage therapy.'2002 Feb; 26.
8. Pandit N. Pregnancy: 6th ed. Calcutta : Rupa; 1995.
9. Pairman, Pincombe, Tracy. Midwifery preparation for practice: 2nd ed. Sydney : Elseiver; 2008.
10. Stoppard M. New Pregnancy and Birth Book: 1st ed. London: Dorling Kindersley; 1985.

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A Systematic Review of Patient and Family Violent Behaviour in Saudi Arabian Emergency Units

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Abstract

Background: Nurses working in emergency departments in Saudi Arabian hospitals have been affected by violence at workplace instigated by patient or family. This gradually had significant impact on nurses' job satisfaction and security at work or affected their performance. Often this behaviour has been found to be precipitated by certain factors.

Aim: Aim of this review is to assess the different factors causing violent behaviours among patients and their families towards nurses in Emergency units and to suggest possible management strategies in reducing such behaviours as well as assess its implications for Saudi Arabian nurses.

Methodology: This review considers selected studies related to violent behaviour of patients and their family's in emergency units of Saudi Arabia. It examines evidence of such factors identified by different studies including overcrowding, waiting times, communication, and inability to meet patient's needs and staff shortages among others.

Findings: Findings from review indicate that strong policies are required to ensure patient overcrowding in Saudi Arabian emergency units. Most patients consider ED as their first point of call whether it is an emergency or not, thereby causing overcrowding and posing threat of staff shortage in such areascompared to primary healthcare centres and hospitals.

Conclusions: Further studies recommend understanding reporting system for patients' violent behaviour in Saudi Arabia, and effectiveness of policies and actions taken to address such behaviours, which could protect nurses at their workplace. The study is limited to studies of nurse's perception of violent behaviour, without considering patient's data and their perception on such behaviour.

Keywords: *Communication, Violent behaviour, Overcrowding, Waiting time, Staff shortage.*

Introduction

Considering increasing risk to healthcare professionals, such as nurses and doctors among others, there seems to be increasing concern about violent behaviour of patients and their families in emergency units of hospitals[1,2].

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Patient and family related violence in hospitals is regarded as a serious problem affecting nurses' well-being and job satisfaction[3,4,5]. It is becoming an interesting research subject in Saudi Arabia where the cultural and ethical values may significantly differ from other locations[6]. There is an increasing effort by the Saudi Arabian government to provide a conducive working environment for healthcare professionals[7], and continue motivation for Saudi nationals to join the nursing practice by introducing "Saudization". The threat of such violent behaviour could risk diminishing the morale of the practising nurses, as well as subjecting potential nurses to fear of such threat. Patient's violent

behaviour is not only a threat in Saudi Arabia, but has been reported in other Gulf countries including Kuwait[3,6,4] and Jordan[4].

The current review attempts to generate adequate evidence by investigating causes and suitable approaches to violent behaviour of patients in emergency units, and different approaches tackling such incidences. The review questions are carefully selected, to acquire necessary evidence of patient and family violent behaviour using framework of SPICE (Setting, Perspective, Intervention/ Interest, Comparison, Evaluation) as stated by O'Brien et al. (2014), in order to identify the causes and solutions to patient and family violent behaviour in Saudi Arabian hospitals[8].

Objectives:

The following objectives were set to achieve: To establishrelevant research evidence related to such violent behaviour by patients and family members in emergency departments in USA, UK, Australia, and Gulf countries.

To evaluate benefits of managing patients and family violent behaviour in emergency units of Saudi Arabian hospitals.

To extend application of management procedures for such violent behaviours into Saudi Arabian hospitals.

Methodology

Systematic review was conducted using systematic search in databases including COCHRANE, OVID, and CINAHL. The search using COCHRANE found 323 articles forviolent behaviour, 242 for aggressive behaviour and 1,599 for emergency units. Using CINHAL,violent behaviour search provided 849 articles, while combining violent behaviour and patient's family gave rise to 12 articles.

Criteria for Inclusion and Exclusion[8]

Inclusion criteria

Articles published between 2001 and 2016

- Causes of patient violent behaviour, people involved, gender and type of incidence of patient's violent behaviour, impact of patient behaviour and remedies to patients violent behaviour
- Peer Reviewed, Pilot studies
- Descriptive, statistical research
- Nurses working conditions and practice protocols
- Guide to prevention of violent behaviour highlighted
- Articles written and published in English language only.

Exclusion criteria:

- Articles published prior to 2001
- Causes and concern on violence
- Insignificant incidence studies
- Outcomes of patient violent behaviour not reported
- Individual impact/biased observations
- Other languages

Patient and Family Violent Behaviour in Emergency Units of Hospitals Systematic Review Matrix: Pich et al., Violent behaviour from young adults and parents of paediatric patients in emergency department[2]. To describe experience of Australian ED Nurses who witnessed patient-related violence from young adults and their parents. Descriptive study using semi-structured interviews, Two main behaviours identified: "Performing" and attention seeking violent behaviours: verbal abuse and physical violence, Patient behaviour Family behaviour, Out of the 1150 distributed sample, 11 Registered Nurses volunteered, 44 years average and minimum of 15 years' experience. Patients violence is associated with their family behaviour[2].

El-Gilany, et al. Violence against primary health care workers in Al-Hassa, Saudi Arabia[9]. To highlight the extent and circumstances of workplace violence in PHC, Saudi Arabia, Descriptive quantitative studyusing questionnaire Causes of violent behaviour including overcrowding and reaction to injury have been reported. Extent and margin 1228 participants are staff of hospital with at least 1 year work experience[9].

Pich, J et al. Patient-related violence at triage: A qualitative descriptive study[10]. To describe the related experience of triage nurses on violence related cases, using semi-structured interviews. Violence related cases were precipitated by either long waiting time, alcohol misuse, or substance misuse. Effective policies for managing violence related behaviours are not properly enforced. 6 registered nurses were recruited in the study,2 males and four females, with 4-21 years' experience.[10].

Esmaeilpor et. al,Workplace violence against Iranian nurses working in emergency departments[4]. To determine nature and frequency of verbal and physical violence in Iran. Using descriptive methodology questionnaire. Reported Verbal violence is more than physical violence. 186 Nurses with Bachelor's degree and 1 years' experience were sampled[4].

Morken, et. al, Emergency primary care personnel's perception of professional-patient interaction in aggressive incidents[11]. To explore nurses professional interaction with patients during violent sessions. Using descriptive methodology,patients aggressive behaviour occurs where patient has been pushed to make such behaviour. Participants aged 25-69 years[11].

Dilek, et. al, Development and psychometric evaluation of workplace psychologically violent behaviours instrument[12]. To develop instrument for measuring nurses' perception of violent behaviour, Descriptive methodology using questionnaire involving 476 hospital nurses [12].

Pinar, et. al, Verbal and physical violence in emergency departments in Turkey[5]. To determine perceived causesof physical and verbal violence in emergency units. Quantitative survey reporting 91.4% cases of verbal violence while 74.9% cases of physical violence. 65% of nurses felt unsafe,involving255 nurses[5].

Adib, et al., Violence against nurses in healthcare facilities in Kuwait[2]. To determine prevalence and causes of violent behaviour against nurses in Kuwait. Quantitative study reported 48%verbal violence and 7% physical violence among 5,876 nurses, 85% females[2].

Albashtawy, et. Al,Workplace violence against nurses in emergency departments in Jordan[13]. Frequency and nature of WPV against nurses in emergency units. Quantitative study, 19.7% of nurses faced physical violence, 91.6% experienced verbal violence. 196 nurses working in 11 Emergency Departments were sampled .89.1% female, with 63.2% having 1-5 years working experience were used[13].

Algwaiz, et. al, Violence exposure among health care professionals in Saudi public hospitals[6]. To identify causes, prevalence, types and sources of workplace violence in Saudi Arabian hospitals. Quantitative study reported 67.4% victims of violence within 12 months, staff shortage and inability to meet patients' demands were commonest causes. 898 nurses were involved in study[6].

Mohamed, A. G, Work-related assaults on nursing staff in Riyadh, Saudi Arabia[7]. To identify extent of violence against nurses in Saudi Arabia. Quantitative study reported 93.2% of 434 participants experienced harsh Language[7].

Krakowski, et. al, Gender differences in violent behaviours[14]. Violent behaviour of women psychiatric patients was more common than male, quantitative study reported gender differences play role in nature and causes of violence[14].

Lau, et. Al,Violence in emergency department[15]. To identify cultural aspect of violence in emergency units. Mixed method study suggested effective communication is vital for avoiding violent behaviour[15].

Kim et. al, Usefulness of Aggressive Behaviour Risk Assessment Tool for prospectively identifying violent patients in medical and surgical units[16]. To evaluate relevance of violent behaviour risk assessment tool,mixed method design found useful risk assessment approach for identifying and managing violent behaviours[16].

Ferns, T, Violence in accident and emergency department[17]. Violence related studies in emergency units,weapons used are reported as tool for violence in North America compared to United Kingdom[17].

Hodge, et. al, Violence and aggression in emergency department[1]. To identify precipitating factors of containing violence, review studies related to violence management. Environmental management, de-escalation of violence, pharmacological and physical restraints have been suggested[1].

Jones, et. al, Violence: Part of Job for Australian Nurses?[18]. To understand whether violence is regarded as part of nursing practice using related studies about violence to emergency unit nurses. Understanding concept of violence is not well thought out in emergency units and nurses need to identify different types and incidences of violence[18].

Discussion

Considering study performed in Saudi Arabian hospitals by AlGwaiz and AlGhanim[6], in which 383 nurses in hospitals in Saudi Arabia responded,

has indicated that two major factors causing violent patient and family behaviour are "Excessive waiting times"(more than 51.6%) and "Staff shortage" (39.1%). Similar outcomes of long and excessive waiting times have been reported in other studies such as in Iranian EDs[4]. Other studies with similar outcomes include studies in primary healthcare centres (PHC) in Saudi Arabia[9], United Kingdom[5]and Australia[1,18,2,10]. Analysis of typical waiting times in EDs in Saudi Arabia conducted by Bukhari,et. al[19] indicated an average3.02 hours waiting times among[6],604 patients surveyed, although this number varies depending on reason for hospital ED visit so time could be higher or lower. These results also indicated that 23% of patients in emergency departments wait for more than four hours for different reasons, including laboratory analysis and prolonged consultations. Prescribed waiting times in EDs in UKhas been set to maximum of four hours[10] from arrival to admission, discharge or transfer[19]. In order to reduce threat of violent patient behaviour in Saudi Arabian emergency units (EUs), a realistic time scale should therefore be set as a target to ensure all patients arriving at such departments are handled and discharged or transferred for further analysis.

Emerging evidence of waiting times in Saudi Arabian EUs has been linked to overcrowding[20]. In an attempt to match the growing population which has almost doubled from 16.05 million in 1990 to 28.5 million in 2010[21], several healthcare projects have increased facilities at all three levels-primary, secondary and tertiary. Majority of patients consider avoiding PHC centres and report directly to ED believing that high level of care and attention is usually given to emergency cases.

Violence has been precipitated by many factors, including insufficient staff to provide the required care to patients[6,7,4,1,10,5].

This factor is often closely related to unmet needs factor as well, which is shown in previous studies[6,9,11] where patients become violent due to perception that his/her demands were not met due to lack of adequate nurses available to cater for their needs,third factor of violence has been considered communication pattern between nurses and patients or family members[3,13,12,9,1,18].

This particular trend of communication difficulties occurs in Saudi Arabia due to annual Muslims' pilgrimage, largest religious congregation in world[22,23]. Incidences during such period enable majority of non-Arabic speakers to attend hospitals with different level of injuries.

The manner in which patients are acknowledged and interacted with, often determines level of violence or satisfaction[15,11]. Reducing violence is also linked to thanking of patients each time they provide any information or response to nurse[15].

One of the widely reported implications of overcrowding, which has been linked to violent behaviour among patients in EDs in Saudi Arabia, is job dissatisfaction of nurses[3,9,4,5].

Trend of violent behaviour in Saudi Arabian EUs has been linked to feelings of insecurity at work for many nurses[5, 6.] In order to increase security of nursesin their workplace, improvements to existing reporting process and various penalties for such violent attacks are required in Saudi Arabia.

This review study is limited to certain restrictions as follows:

- Only studies used provided evidence based on nurses as participants, and did not include patients' related studies in understanding the causes and nature of violent behaviours.
- The review is restricted to nurses onlyimplications to nurses were considered as part of this review.

Conclusions

Violent behaviours in Saudi Arabia, can be managed by:

- Reducing waiting times to a maximum of three hours in all cases.
- Developing an effective communication between nurses and patients.
- Responding to patient's demand and taking appropriate actions.
- Ensuring adequate staff is available to handle patient population.

Ethical Clearance: Not Required

Source of Funding: Self

Conflict of Interest: Nil

References

1. Hodge, A. N., & Marshall, A. P., Violence and aggression in the emergency department: A critical care perspective. Australian Critical Care, 2007,20:2, 61–67. http://doi.org/10.1016/j.aucc.2007.03.001
2. Pich, J., Hazelton, M., & Kable, AViolent behaviour from young adults and the parents of paediatric patients in the emergency department. International Emergency Nursing, 2013, 21:3,157–162. http://doi.org/10.1016/j.ienj.2012.08.007
3. Adib, S. M., Al-Shatti, A. K., Kamal, S., El-Gerges, N., & Al-Raqem, M. Violence against nurses in healthcare facilities in Kuwait. International Journal of Nursing Studies, 2002, 39:4, 469–478. http://doi.org/10.1016/S0020-7489(01)00050-5
4. Esmaeilpor, M., Salasali, M., & F. Ahmadi, Workplace violence against Iranian nurses working in emergency departments. International Nursing Review, 2010,60:4, 130–137. http://doi.org/10.1111/inr.12059
5. Pinar, R., & Ucmak, F., Verbal and physical violence in emergency departments: A survey of nurses in Istanbul, Turkey. Journal of Clinical Nursing, 2011, 20:3–4, 510–517. http://doi.org/10.1111/j.1365-2702.2010.03520.
6. Algwaiz, W. M., & Alghanim, S. A, Violence exposure among health care professionals in Saudi public hospitals: A preliminary investigation. Saudi Medical Journal, 2012, 331, 76–82.
7. Mohamed, A. G. Work-related assaults on nursing staff in riyadh, saudi arabia. Journal of Family & Community Medicine, 9(3), 2002,51–6. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3430167&tool=pmcentrez&rendertype=abstract
8. O'Brien, T. D., Noyes, J., Spencer, L. H., Kubis, H.-P., Hastings, R. P., Edwards, R. T., Whitaker, R. "Keep fit" exercise interventions to improve health, fitness and well-being of children and young people who use wheelchairs: mixed-method systematic review protocol. Journal of Advanced Nursing, 2014, 1–10. http://doi.org/10.1111/jan.12428
9. El-Gilany, A.-H., El-Wehady, A., & Amr, M, Violence against primary health care workers in Al-Hassa, Saudi Arabia. Journal of Interpersonal Violence, 2010,25:4, 716–34. http://doi.org/10.1177/0886260509334395
10. Pich, J., Hazelton, M., Sundin, D., & Kable, A, Patient-related violence at triage: A qualitative descriptive study. International Emergency Nursing, 2011,19:1, 12–19. http://doi.org/10.1016/j.ienj.2009.11.007
11. Morken, T., Alsaker, K., & Johansen, I. H., Emergency primary care personnel's perception of professional-patient interaction in aggressive incidents -- a qualitative study. BMC Family Practice, 2016,17:1, 54. http://doi.org/10.1186/s12875-016-0454-7.
12. Dilek, Y., & Aytolan, Y. Development and psychometric evaluation of workplace psychologically violent behaviours instrument. Journal of Clinical Nursing, 2008, 17:10, 1361–1370. http://doi.org/10.1111/j.1365-2702.2007.02262.
13. Albashtawy, M. Workplace violence against nurses in emergency departments in Jordan. International Nursing Review, 2013, 60:4, 550–555. http://doi.org/10.1111/inr.12059.
14. Krakowski, M., & Czobor, P. Gender differences in violent behaviours: relationship to clinical symptoms and psychosocial factors. American Journal of Psychiatry, 2004, 161:3, 459–465. http://doi.org/10.1176/appi.ajp.161.3.459
15. Lau, J. B. C., Magarey, J., & Wiechula, R, Violence in the emergency department: An ethnographic study (part II). International Emergency Nursing, 2012, 20:3, 126–132. http://doi.org/10.1016/j.ienj.2011.08.001
16. Kim, S. C., Ideker, K., & Todicheeney-Mannes, D, Usefulness of Aggressive Behaviour Risk Assessment Tool for prospectively identifying violent patients in medical and surgical units. Journal of Advanced Nursing, 2012,68:2, 349–357. http://doi.org/10.1111/j.1365-2648.2011.05744.
17. Ferns, T. ,Violence in the accident and emergency department - An international perspective. Accident and Emergency Nursing, 2005,13:3, 180–185. http://doi.org/10.1016/j.aaen.2005.03.005
18. Jones, J., & Care, G. A ,Violence : Part of the Job for Australian Nurses ?, 2001,18:2, 27–32.
19. Bukhari, H., Albazli, K., Almaslmani, S., Attiah, A., & Bukhary, E., Analysis of Waiting Time in Emergency Department of Al-Noor Specialist Hospital , Makkah , Saudi Arabia. Open Journal of Emergency Medicine, 2014, 67–73.

20. Pines, J. M., Hilton, J. A., Weber, E. J., Alkemade, A. J., Al Shabanah, H., Anderson, P. D., Schull, M. J.,International perspectives on emergency department crowding. Academic Emergency Medicine,2011, 18:12, 1358–1370. http://doi.org/10.1111/j.1553-2712.2011.01235.

21. Alkhamis, A., Health care system in Saudi Arabia: An overview. Eastern Mediterranean Health Journal, 2012, 18:10, 1078–1079. http://doi.org/10.1111/j.1466-7657.2011.00890.

22. Alrashidi, O., & Phan, H. ,Education Context and English Teaching and Learning in the Kingdom of Saudi Arabia: An Overview. English Language Teaching, 2015, 8:5, 33–44. http://doi.org/10.5539/elt.v8n5p33

23. Dhar, R. L.,Service quality and the training of employees: The mediating role of organizational commitment. Tourism Management, 2015, 46, 419–430. http://doi.org/10.1016/j.tourman.2014.08.001.

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Effectiveness of a Participatory–Learning Program of Pre-retirement on Personal Satisfaction with Older Adults: Urban and Rural Area, Thailand

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Abstract

This study is a quasi-intervention investigation to examine the result of the participatory learning program of pre-retirement on personal satisfaction with older adults'. The participants were 120 older adults living in cities and rural areas selected by purposive sampling technique. The sample group is divided into 2 groups: urban and rural groups, intervention and control group of thirty each group. The intervention was conducted for 12th weeks to improve readiness aging and personal satisfaction as measured by demography questionnaire, pre-retirement survey form, and personal satisfaction form assessment parameter. Data on pre-retirement and personal satisfaction were collected before and after a 12th-week participatory learning program of pre-retirement. Participants in the control group received the convention care. There were significant differences between the two groups on autonomous regulation. There was no significant difference found in the pretest mean value base on pre-retirement in both groups. The posttest mean values of the pre-retirement and personal satisfaction were significantly higher than those of the control group. There was a significant difference between groups ($p<.001$).

The results of the study have shown that a participatory-learning program is effective in pre-retirement and personal satisfaction. It would improve the successful aging and quality of life in a long later life.

Keywords: *Adult; aging; participatory program; personal satisfaction; quality of life; retirement.*

Introduction

Readiness pre-retirement is a managerial plan or an action plan taken for life survival after retirement. Therefore, it is actually important for everyone who is going to be at this stage. Those who have already well prepared before reaching the retirement point will have a good quality of life[1]. Nowadays, aging societies has become a global phenomenon. The proportion of aging people will double from 11% in 2006 to 22% in 2050[2]. Thailand's aging population represents the second-fastest-growing group of people over 60 years in Southeast Asia[3]. Thailand's population is aging very rapidly; its percentage of senior citizens increased from 5% in 1970 to 10% in 2006[4]. Thailand currently faces an aging society problem as the number and proportion of the aging population rapidly expand to 10% of the total population[5]. Estimation by the World Health Organization suggests that by 2025 there will be over 800 million people aging over 65 and two-third of such numbers shall be in developing countries[6].

Therefore, pre-retirement is considered a life planning activity. A good pre-retirement can prevent potential problems; improve adaptability and post-retirement personal satisfaction, and happiness as a retiree[7]. Moreover, Thailand must prepare defined

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as passive and active health care service especially for those who informal workers are known that faced with an unsuitable work environment and exposed to numerous hazards. As a result, Accessibility to appropriated health services is difficult. It is also found that 88% of the older adults have not prepared for aging or post-retirement life, and more urbanites are prepared compared to rural counterparts[8]. Accordingly, this study aims to investigate a participatory learning program of pre-retirement influences their personal satisfaction. The results were assessed to determine improvements in preparation and personal satisfaction. Our findings can be after the participatory learning program average readiness pre-retirement and personal satisfaction in the urban and rural groups have higher than previously.

Method

Study design: A quasi-intervention study using a pretest and posttest design with 12th weeks follow-up was employed.

Sample and setting: Study participants were selected by a convenient sampling method based on the participants' living area in four communities in Bangkok and its vicinity, two rural and two urban areas from January to May 2018. The inclusion criteria were as follows: 1) aged between 50 and 59 years; 2) having good consciousness; 3) being able to communicate in Thai; 4) willing to participate in the program. The sample size calculation by Polit & Beck[9] using power analysis was employed to reduce the risk of type II error. The minimum level of significance (α) to estimate the number of sample size was .05 with the power of .80 (1-ß), a medium effect size, which would yield a total sample size of n= 50 (n=25 per condition, for a total of two conditions)[10]. Anticipating potential bias due to dropouts and the desire to prevent possible low power to detect small differences, the principal investigator (PI) recruited 25% additional participants which added seven more participants in each group for a total sample size of n=60 (n=30 per condition), in total 120 participants' data were analyzed.

Ethical considerations: Ethical approval was obtained from the institutional review board of the author's institution (Approval no. COA.1-003/2018). After eligible clients were informed about the study by researcher, verbal consent was obtained from those who agreed to participate. Participants could withdraw from the study at any time without penalty.

Measurements

General Information Form: The collected data on age, gender, marital status, educational level, number of children, income, supplementary work, family type, chronic disease, hobby and eligible welfare.

Pre-retirement questionnaire: The patient information was obtained regarding (a) Physical (b) Environmental (c) Mental (d) Esteem and (e) self-actualization. The questionnaire contains 20 items with 5 point Likert scales. The score range from 1 (never) to 5 (almost always) in each subscale. Higher scores represent excellent preparation. In this study, the Cronbach's alpha was 0.87

Personal satisfaction questionnaire: Neugarten's personal satisfaction questionnaire[11] revised and translated in Thai by Kaeokangwan[12]. The questionnaire measures personal satisfaction using 18 items: (a) Liveliness and life appreciation (b) feeling of accomplishment and (c) mood. The questionnaire contains with Likert scale. The score range from 1 (never) to 5 (almost always) in each subscale. Higher scores represent the most personal satisfaction. In this study, Cronbach's alpha was 0.85.

Instruments for an intervention program: This intervention developed by a literature review[13] from the participatory learning concept framework. The content validity of the program was reviewed by 3 experts (two public health nurse instructors, one educational nurse instructor), using the content validity index (CVI) between 0.8 and 0.9. The internal consistency reliability was tested with 30 participants, who met the same inclusion criteria as the study participants and revised according to their recommendation. It was pilot tested for understanding and program practicality with thirty participants who met the inclusion criteria but did not participate in the main study. This program has five phases, it was composed of two sessions over the 12th week program period leading by the participants and consisted of various strategies such as group discussion, home visits, and telephone visits.

Data Collection: The data collection of this study was carried out from January 1, 2018 to May 31, 2018. After the participants were provided with explanation regarding goals and procedure of the study, the participants were asked to sign the consent form. Thereafter, the participants were asked to complete the demographic data form and personal satisfaction form.

The pre-retirement was measured at baseline in the beginning, weeks 12thafter completing the program by research assistance.

The first session began with 30 minutes of problem about readiness pre-retirement and motivation to change by encouraging the participants to express their own problem and share experience about readiness pre-retirement in the past including helping them to set a goal of change

The second session was a small group education focused on the participatory learning for 90 minutes. Activities comprised providing target of pre-retirement and action plan. Additionally, the participants learned how to readiness pre-retirement.

The third session began after completing education session for a week. This session was a 60 minutes for small group discussion. The activities composed sharing and discussion on preparation for aging experience including 5 items; (a) physical (b) environment (c) mental health (d) self-esteem and (e) self-actualization.

The fourth session was telephone visit used to monitor readiness pre-retirement of the participants for about 15-30 minutes at 3nd, 6th and 10th week. This session focused on preparation for aging at home including consultation, helping the participants to reduce barriers, and encouraging them perform readiness pre-retirement.

The fifth session was home visit which was strategy to monitor and discussed about readiness pre-retirement of the participants about 15-30 minutes at 4th, 8th week. This session focused on support to perform following the program.

Control group: The participants in control group received the convention care: advice for lifestyle modification including nutrition, exercise, and emotional management. The participants were measured outcomes variables at first week as baseline and at 12th week as the end of the study.

Data analysis: All data were analyzed using a SPSS 24.0 program was used to calculate all statistical analyses. The general characteristics and disease-related characteristics of the intervention group and the control group were analyzed for differences in frequency, percentage, mean, and standard deviation between the two groups. Analysis of these characteristics and study result homogeneity was performed by using the following methods: Chi-square test, t test, and paired t-test.

Results

Demographic characteristics: There were no significant differences between the intervention and control groups in any of the general characteristics, age, marital status, education level, occupation, and income indication that two groups of urban and rural were homogeneous. The demographic characteristics of the sample group in both group (a) rural and (b) urban indicated that 50% of the intervention group were 50 to 59 years. They were married (60%), it was determined that 50% of men and had a monthly income between 6,001 to 10,000 baht (50%). Approximately 30% of the subjects were high school graduates, and 45% were employed. The homogeneity test of the participants' that there were no significant differences between the two groups as well, suggesting that the two groups of the urban and rural areas were homogeneous.

Effectiveness of a participatory – learning program of pre-retirement and personal satisfaction in older adults: Urban and Rural Area.

The effectiveness of a participatory – learning program of pre-retirement and personal satisfaction in older adults of two groups (a) urban and (b) rural was shown the intragroup and intergroup comparison of the pretest and posttest total mean values of intervention group obtained from readiness pre-retirement. There was no significant difference between the two groups for the pretest total mean readiness pre-retirement in intragroup comparisons. The readiness pre-retirement posttest means of the intervention group applying a participatory – learning program to older adults' in a rural area (4.04±7.64) was statistically higher than the means value of the control groups were (2.4±0.72) and the difference between the group was found to be statistically (t=-1.42, p<.001). Furthermore, the intervention group applying a participatory – learning program to older adults' in an urban area (3.90±0.8) was statistically higher than the means value of the control groups were (2.27±0.58) and the difference between the group was found to be statistically (t=0.40, p<.001) (Table1).

Our founding that the average delta between pretest and posttest after intervention 12th week total mean value for the level of personal satisfaction with applying a participatory – learning program from intervention group of who live in a rural area was (4.5±5.7) higher than

that of the pretest (2.9±0.71). On the other hand, the level of personal satisfaction with applying a participatory – learning program from intervention group of who live in urban area was (4.23±0.86) higher than that of the control group (3.0±0.64) and the difference between the group was found to be statistically (t=-14.54, p<.001) (Table 2).

Table 1: Comparison of pretest and posttest of pre-retirement between Intervention and Control Groups of the rural and urban.

Variables	Group	Pretest	Posttest	t	p
		Mean±SD	Mean±SD		
Pre-retirement					
Rural	Intervention (n=30)	2.3±0.53	4.04±7.64	-1.42	<.001
	Control (n=30)	2.1±0.53	2.4±0.72		0.16
	Difference	-0.23±0	-1.74±6.92		
Urban	Intervention (n=30)	2.27±0.58	3.9±0.8	.40	<.001
	Control (n=30)	2.4±0.67	2.34±0.6		0.68
	Difference	0.07±0.09	-1.64±0.2		

Table 2: Comparison of pre-test and post-test a personal satisfaction level between rural and urban areas in Intervention group

Variables	Pretest	Posttest	df	t	p
Personal satisfaction					
Rural	2.9±0.71	4.5±5.7	29	-5.95	<.001
Urban	3.0±0.64	4.23±0.86	29	-14.54	

Discussion

This study attempted to identify effective strategies to improve success aging and quality of life in later life. The purpose of the present study was to determine the effectiveness of a participatory – learning program of pre-retirement on personal satisfaction in older adults. Results indicate that improvements a personal satisfaction in participants who received a participatory-learning program[14]. It was shown that the intervention of a participatory-learning program base on the personal satisfaction enhanced both groups of rural and urban areas and their personal satisfaction[15]. Our findings could explain that readiness pre-retirement of the participatory-learning program greatly helped with older adults. It is a great deal of learning goes on in groups of people sharing some common interest. Furthermore, the intervention groups were discussed, express their positive and negative feeling, exchanged their experiences and interact with each other[16].

Activities for pre-retirement start from the decision to participate upon invitation by the researcher, where the main operation group must collect community context information, summarize, synthesize and verify the information. Then the information is presented to the community to formulate the participatory process where the community is able to comment and select pre-retirement activities[18]. Moreover, the main intervention groups participate in result assessment and follow-up and thus perform the main duty along with the researcher. Missions are distributed based on expertise and willingness, and the group developed skills collectively in each step, it was shown that participatory development. Participation came in many forms such as participation as collaboration in development activities, which in this case mean the main operational group consisting of an older adult and their families, community and local organizations[16]. There is also the participation as specific targeting of project benefits which in this case means retiring older adults participating in

activities hosted by the researcher and main operational group[17]. Furthermore, retiring adults and the community commented on the activities, reflecting a personal satisfaction and desire to regularize the activities which mentioned participation as empowerment as a type of development[19].

Our study has some limitations that there were small sample sizes and not randomized the intervention and control groups. In addition, assessing only the short-term and finding be unclear, long-term follow-up should be considered. However, the finding of our study can be used as a base to help improve readiness pre-retirement, personal satisfaction, and quality of life in later life.

Conclusions

The result of the study revealed that pre-retirement to age with knowledge and healthy routines requires an early start -before retirement. Readiness pre-retirement is highly important and has a deciding effect on whether or not a person would have physical, mental, social and emotional readiness upon transition to old age. A group-based participatory learning program allowed the exchange of experience on self-care, eating, exercise and saving and revealed that the participants were highly eager in mutual conversation and motivation in order to improve their own health. Therefore, it is important for health teams to be aware of education through group-based participatory programs for those approaching retirement in order to have them move through their elder years with knowledge and improve quality of life.

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References

1. WHO, Global Age-Friendly Cities: A Guide, Geneva, 2007.
2. Fujioka R, Thangphet S. Decent work for older persons in Thailand. (ILO Asia- Pacific Working Paper Series). Bangkok: ILO Regional Office for Asia and the Pacific, 2009.
3. Srichuae S, Nitivattananon V, Perera R.Aging society in Bangkok and the factors afftecting mobility of aging in urban public spaces and transportation facities. Intr Assoc Traf Socie Scien J 2016; 40: 26 https://doi.org/10.1016/j.iatssr.2015.12.004.
4. Punyakaew A, Lersilp S, Putthinoi S. Active ageing level and time use of elderly persons in a Thai Suburban community. Occup Ther Int 2019; 1-8. https://doi.org/10.1155/2019/7092695.
5. Thanakwang K, Isaramalai S, Hatthakit U. "Thai cultural understandings of active Ageing from the perspectives of older adults: a qualitative study," Pacific Rim Inter J Nurs Rese 2004; 18(22): 152-65.
6. World Bank. Life expectancy at birth, total (years). Retrieved from http://data.worldbank.org/indicator/SP.DYN.LE00.IN, 2015.
7. Rattanamongkolgul D, Sritanyarat W, Manderson L. Preparing for aging among older villages in northeastern Thailand. Nurs Health Scien 2012; 14: 44651. http:doi.org/10.1111/j.1442-2018.2012.00698.x.
8. Wanless, D. Health differentials among agingwomen: a rural-urban analysis. Thesis submitted in partial fulfillment of the requirements for the Degree of Master of Arts in the Department of Gerontology, Simon Fraser University 2005.(in Thai).
9. Polit DF, Hungler BP. Essentials of Nursing Research: Method, Appraisals, and Utilization. (4th Edition). Philadelphia: Lippincott-Raven, 1997.
10. Sindecharak T, Netiparattanakul P. Self-employed workers' preparation for aging among Thailand's aging society. Bangkok: National Research Council of Thailand, Faculty of Sociology and Anthropology, Thammasat University 2011.(in Thai).
11. Newgarten, et al. The measurement of personal satisfaction. J Geron 1961; 134-43.
12. Kaeokangwan, S. Life experience test. Chaingmai Univerisity 1987. (in Thai).
13. Manasatchakum P, Chotiga P, Hochwalder J, Roxberg A, Sandborgh M, Asp M. Factors associated with health aging among older persons in northeastern Thailand. J Cross Cult Gerontol 2016;31: 369-84. http://doi.org/ 10.1007/s10823-

016-9296-y.

14. Rattanaampa N. Pre-retirement preparation of professional nurses, hospitals, regional medical centers under the jurisdiction of the Ministry of Public Health (Master Thesis in Education of Nursing). Bangkok: Chulalongkorn University;1997. (in Thai).
15. Bode C, Ridder DTD, Bensing JM. Preparing for aging: development, feasibility and preliminary results of an educational program for midlife and older based on proactive coping theory. Patient Edu Coun 2006; 61(2): 272-8.https://doi.org/10.1016/j.pec.2005.04.006.
16. Punngok A. Effectiveness of a participatory learning program for aging preparedness among adults aged 55-59 Years in bangpli district, samutprakan province. J Health Scien, 2015; 24(5),854-64. (in Thai).

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Rational Model-Based Training Retain the Health Cadres' Knowledge, Attitudes and Practices on Stroke Issue

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Abstract

Stroke is a medical emergency that the patients of it ideally should have received stroke management ≤3 hours since the attack. Emergency situations can occur at anytime, thus the health cadres participation in minimizing pre-hospital delay through FAST method is needed. In order to make the cadres have knowledge, positive attitudes, and good practices about FAST, the rational model-based training was conducted. The aim of this study was to analyze the effectiveness of rational model-based training on the health cadres' changes on knowledge, attitudes, and practices in the stroke symptoms detection using FAST. This study used quasi-experimental research design through pretest-posttest control group design. 50 respondents were divided into intervention and control groups. Data analysis used independent sample t-test and mann whitney test. The results show that there were differences in attitude and practices changes between the intervention and the control groups after training, with p values 0.009 and 0.000. There was no any difference in the retention of knowledge, attitudes, and practices in both groups, the p value was 0.849; 0.626;0.456.

Keywords: *Training, Rational Model, FAST, Stroke, Health cadres.*

Introduction

Strokeis the second leading cause of death and the third cause of disability in the world. The stroke prevalence in low and middle income countries generally reaches 70%[1]. The stroke prevalence in Indonesia at the age of ≤ 15 years was 7% in 2013, rising to 10.9% in 2018. The stroke patients prevalence in the age range of 15-54 years reached 80.7%[2]. This fact shows that many stroke cases strikeany of the productive age group. Dissability that occurs due to stroke at the productive age destroy one's career and future.

Research conducted in 28 Indonesian hospitals showed that most of stroke patients arrived at hospital >6 hours since the attack amounting to 67.3%[3]. Another study indicates that the higher institution staff had a low level of stroke symptoms recognation with the percentage of 63.4%[4].

Based on the previous study results in 2018,in Mojolangu Public Health Center in Malang City found stroke cases of 1.39%. Furthermore, another previous study which was conducted at one hospital in Mojolangu region shows that it was only 10% of stroke patients who came in emergency department within ± 3 hours from the attack. Furthermore, it was known that before coming to the hospital, the patients came to an independent physician since they felt that their body was limp and suddenly weak. This fact indicates that the stroke symptoms are not recognized as an emergency case which requires prompt treatment.

Stroke patients ideally should have received stroke management ≤3 hours since the attack[5]. About 95% of initial stroke symptoms are started from the outside of hospital. Thus, it is important to recognize the initial symptoms and emergency treatment of stroke, this

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recognition can be done through education[6,5]. FAST is an early detection method of stroke symptoms which combines three general warning signs of stroke and an action plan that should be done when those three warning signs appear[7].

The Department of Health has the concept of empowering the particular ordinary people who have a great chance of being exposed to emergency cases, through knowledge and skills they will be able to provide first aid and increase the awareness of response time so that disability or death due to medical emergencies can be minimized. In this case, those particular ordinary people include the health cadres [8].

The rational model can be used as a planning strategy to achieve the targeted results from training, thus, it is easier for the educators to plan, implement and evaluate interventions. Rational models are formed based on the premise that the increasing knowledge change attitudes, thus it also drives changes in practice[9].

In order to improve knowledge, attitudes, and practices better, the researcher provided motivation and simulation. The purpose of this study was to analyze the effectiveness of rational model-based health education on changes in the knowledge, attitudes and practices of health cadres in the early detection of early stroke symptoms using FAST.

Methods and Materials

The research design used was a quasi-experimental through the pretest-posttest control group design. Respondents were 50 health cadres, divided into intervention and control groups. The trainings were held in each village in the working area of PUSKESMAS Mojolangu-Malang.

Intervention group training was carried out by providing education using flip chart media and pictorial modules with interludes of motivation and simulations conducted in 2 sessions. Session 1 contained material explanations interspersed with any motivation regarding the importance of the cadres' role in detecting the early symptoms of FAST stroke. Session 2 was continued in the following day, in this session the facilitator conducted a FAST simulation and briefing using a simulation patient. The provision of education in the control group was done without providing motivation and simulations, it only contained the material explanations using flip chart media and pictorial modules which were carried out in one session.

The inclusion criteria were cadres who had never received any of health education about early detection of the stroke symptoms related to the FAST method. Measurement of knowledge, attitudes, and practices refers to the process of change in the cognitive, affective, and psychomotor domains of Bloom's theory tested for validity and reliability by the researcher. Bivariate analysis using independent sample t-test and Mann-Whitney test.

Findings:

Table 1. Distribution of Respondent Characteristics in Intervention and Control groups Based on Age, Length Time as Cadre and Total Training

Variable	N	Control		Intervention	
		Mean ± SD	95% CI	Mean ± SD	95% CI
Age	25	46.6 ± 8.362	43.15-50.05	50.92 ± 10.04	46.77-55.07
Length of time as the cadre	25	7.76 ± 5.585	5.45-10.07	10.28 ± 7.266	7.28-13.28
Total training	25	3.6 ± 4.637	1.69-5.51	3.76 ± 3.205	2.44-5.08

Table 1 shows the average respondent in the intervention group was 50 years old and the control group was 46 years old. The average respondent in the intervention group had been as a cadre for 10 years, while in the control group for 7 years. On average, the respondents in the intervention and control groups had attended the trainings for 3 times.

Table 2. Distribution of Respondent Characteristics by Gender and Education in Intervention and Control groups

Variable	Category	Control		Intervention	
		Frequency	%	Frequency	%
Gender	Male	-	0	1	4
	Female	25	100	24	96
Education	Elementary	1	4	6	24
	Middle	7	28	9	36
	High	13	52	9	36
	University	4	16	1	4

Table 2 shows the gender in the intervention and control groups were dominated by female, that were 24 respondents (96%) and 25 respondents (100%). The education of the respondents in intervention group dominantly were Middle and High schools graduate which were 9 people (36%) and the control group was dominated by high school graduate (13 people) (52%).

Table 3. Differences in Changes of Knowledge, Attitudes and Practices Related to FAST Stroke in Intervention and Control Groups after Training

Variable	N	Mean Delta ± SD		P value
		Control	Intervention	
Knowledge	25	1.72±2.052	2.32±1.406	0.234
Attitude	25	0.56±3.367	3±3.663	0.009
Practice	25	2.68±2.293	0.56±3.367	0.000

Table 3 the statistical test results on knowledge variable obtained p value 0.234 (p> 0.05), meaning there were no any significant differences in knowledge changes between the two groups after the training. P-value 0.009 (p <0.05) on the attitude variable and 0.000 (p <0.05) on the practice variable, meaning that there were significant differences in attitude and practice changes between the two groups after training.

Table 4: Differences of Knowledge, Attitude and Practice Retention Related to FAST Stroke in Intervention and Control Groups

Variable	N	Control			Intervention			P value
		Median Delta	Delta Min	Delta Max	Median Delta	Delta Min	Delta Max	
Knowledge	25	0	-2	2	0	-2	2	0.849
Attitude	25	0	-4	6	0	-4	5	0.626
Practice	25	0	-4	0	0	-5	0	0.456

Table 4 shows the retention tests results on the knowledge, attitudes and practices variables,with p value 0.849; 0.626; 0.456 (p> 0.05) there was no statistically significant difference in knowledge, attitudes and practices retention between the two groups.

Discussion

The differences in knowledge, attitudes and practices related to FAST strokes in intervention and control groups: The intervention and the control groups' knowledge after the training had both increased by an average of 2 points, both groups experienced similar changes in knowledge from the less to sufficient category. The respondents' knowledge changes in the intervention group was not higher than control group. Although the training provided was different, this could be influenced by the cadres' low educational level in intervention group, 60% of them were elementary to middle school graduates.

The level of education affectone's ability to receive information, the ease of receiving information has an important meaning for the entry of new knowledge[10]. This study indicates that the health cadres' ability in receiving information was influenced by their level of education. The higher level of cadre education, the easier it would be to receive information, thus them ore knowledge and insight would be obtained[13].

The respondents' attitude in intervention group after training increased 3 points, while the control group <1 point. Both groups initially had moderate attitude, after training the intervention group's attitude changed well, while the control group remained moderate. The difference in change could be influenced by the provision of education which was interspersed with motivation about the importance of cadres' role in early stroke symptoms detection using FAST.

Attitude is an assessment process carried out by individuals towards an object; things, people or information. The process of evaluating a person against an object can be in the form of positive and negative assessments[14].

The individual attitudes formation is obtained from the process of seeing, hearing, and feeling. The formation of attitudes is influenced by external factors (such as experiences, situations, obstacles, norms) and internal factors (such as psychological and encouragement in individuals). Providing education and motivation is an external factor that can change attitudes through a process of understanding and instilling awareness, thus making someone more aware of the importance of information[15].

The previous studies results showed that education by providing motivation could bring a positive influence on attitudes[15].

The respondents' practice in the intervention group after training increased 10 points, while the respondents' practice in the control group increased 3 points. Both groups initially had poor practice abilities, the intervention group's practice ability changed well after training, while the control group's practice was in the poor category. This can be influenced by simulations.

Knowledge is obtained from the results of knowing the object through sensing. Training with simulation provides an opportunity to involve the senses of a person through sight, hearing and touch, thus, it forms a more perfect knowledge and understanding. Then, it helps someone respond positively to an object that is realized in practice[16]. The results of this study are in line with the previous study results by providing interventions in the form of simulation to improve practice, thus simulation methodis effective in improving practice[17].

Differences in knowledge, attitude and practice retention related to FAST stroke in intervention and control groups

Statistical test results showed that the retention of intervention and control groups' knowledge was no different, after one week of training the change of knowledge in the two groups belong to sufficient category. Training is an act of delivering information through education. The process of storing information took place gradually, starting from the processing of information entering through sensing which is then recorded by sensory memory. The information that is not heeded will be immediately forgotten, yet the heed information was received. Each information received will leave traces that settle in the memory which will be temporarily stored in short-term memory to be stored for 30 seconds, which may be remembered or forgotten[18,19].

Information stored in short-term memory is transferred to long-term memory through a repetition and selection process, yet not all information stored in long-term memory is stored properly. Traces of long-term memory can also be lost since it is replaced by

the new information, thus the forgetfulness occurs. In this case, a post-test which was done a week after the training stimulated the process of searching and finding back the information stored in memory, therefore the results of this second post-test were the description of memory retention[18,19].

Statistical test results showed that the retention attitude of intervention and control groups was no different. After one week training, respondents' attitude in the two groups that had changed remained the same, the intervention group's attitude remained good and the control group's attitude remained moderate. The study results mentioned that motivation had an influence on interest. Motivation is a process of encouraging a person to carry out something that leads to certain goal achievement[20,21].

There are two types of motivation, intrinsic motivation and extrinsic motivation. Intrinsic motivation is the driving force that causes a person participate based on an inner urge. Extrinsic motivation is motivation that causes a person participate maximally due to external stimuli [22].

Statistical test results show that the retention of the intervention and control group practices in this study was no different. After one week of training, the intervention group's practices remained in good category and the control group's practices remained in bad category. The simulation method purpose was to form skills to be applied in real life, thus the simulation method could bring the effect on practice[14,21].

Cognitive, affective, and psycho motor of human activities involve memory. The occurrence of memory retention is influenced by the level of individuals in paying attention to information, motivation in learning, rationality and usefulness of the information presented, as well as the role of sources in making some interesting media by modifying new ideas and refinement of what is already known. Although short training could improve and retain knowledge, attitudes, and practices, as the time goes by, a lot of information is stored and competing with other information, thus there is a need for repetition with different methods for the same topic which is done periodically and not continuously[22,24].

Conclusion

It can be concluded that there was no any difference in the knowledge of the two groups after health education was given. However, there were differences in attitudes and practice changes between the two groups. The attitudes improvement changes and better practices in the intervention group were caused by the motivation and simulations provision. There was no any difference in the retention of knowledge, attitudes and practices between the two groups.

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References

1. Johnson W, Onuma O, Owolabi M, Sachdev S. Stroke: a global response is needed. Bull World Health Organ [Internet]. 2016;94(9):634-634A. Available from: http://www.who.int/entity/bulletin/volumes/94/9/16-181636.pdf
2. RISKESDAS. HASIL UTAMA RISKESDAS 2018. 2018.
3. Misbach J. Stroke di Indonesia : a fisrt large prospective hospital based study of acute stroke in 28 hospitals in Indonesia. J Clin Neurosci. 2000;8(3):245–9.
4. Wardhani NR, Martini S. Faktor yang berhubungan dengan pengetahuan tentang stroke pada pekerja institusi pendidikan tinggi. J Berk Epidemiol. 2014;2(1):13–23.
5. Yueniwati Y. Deteksi Dini Stroke Iskemia dengan Pemeriksaan Ultrasonografi Vaskular dan Variasi Genetika. Malang: UB Press; 2014.
6. PERDOSSI. Guideline Stroke 2011. Perhimpun Dr Spes Saraf Indones (PERDOSSI) Jakarta. 2011;49–50.
7. Kleindorfer DO, Miller R, Moomaw CJ, Alwell K, Broderick JP, Khoury J, et al. Designing a Message for Public Education Regarding Stroke Does FAST Capture Enough Stroke ? Stroke. 2007;38:2864–9.
8. Amiruddin K. PPGD untuk Kader Kesehatan dalam SPGDT. Subdit Gadar dan evakuasi Bina Yanmed Dasar. 2007;1–53.
9. WHO. Health Education: theoretical concepts, effective strategies and core competencies [Internet]. Health promotion practice. 2012. Available from:

http://www.ncbi.nlm.nih.gov/pubmed/24948598

10. Sedjati HW. Pengaruh tingkat pendidikan sekolah terhadap motivasi bekerja pada sektor pertanian di desa Karangnanas, kecamatan Sokaraja, Kabupaten Banyumas. J Ilm Pendidik. 2010;2(2):131–42.
11. Tristanti I, Khoirunnisa FN. Kinerja Kader Kesehatan dalam Pelaksanaan Posyandu Di Kabupaten Kudus. J Ilmu Keperawatan dan Kebidanan. 2018;9(2):192–9.
12. Sarwono S, Meinarno EA. Psikologi Sosial. Jakarta: Salemba Humanika; 2009.
13. Aini N, Fatmaningrum W, Yusuf A. Peningkatkan perilaku pasien dalam tatalaksana diabetes melitus menggunakan Model Behavioral System. J Ners. 2011;6((1)):1–10.
14. Astuti E, Badi'ah A. Studi komparasi promosi kesehatan antara simulasi dan penayangan video terhadap perilaku personal hygiene anak usia sekolah di sd N Kaliduren Moyudan Sleman Yogyakarta. Progr Stud Ilmu Keperawatan Sekol Tinggi Ilmu Kesehat Aisyiyah. 2012;
15. Nursana IM, Ghaznawie M, Budu. Pengaruh simulasi Kedaruratan Medik terhadap Kompetensi Petugas Penanggulangan Bencana Daerah Provinsi Sulawesi Barat. Soedirman J Nurs. 2013;8(3):155–62.
16. Bhinnety M. Struktur Dan Proses Memori. Bul Psikol. 2015;16(2):74–88.
17. Putri DM, Wahyudi F, Margawati A. Perbedaan Retensi Memori Pasca Penyuluhan Keluarga Berencana Dengan Media Ceramah Dan Video Pada Wanita Usia Subur. J Kedokt Diponegoro. 2016;5(4):682–93.
18. Aidha Z. Pengaruh motivasi terhadap minat berwirausaha mahasiswa Fakultas Kesehatan Masyarakat Universitas Islam Negeri Sumatra Utara. J Jumantik [Internet]. 2016;1(1):43–59. Available from: http://waset.org/publications/14223/soil-resistivity-data-computations-single-and-two-layer-soil-resistivity-structure-and-its-implication-on-earthing-design%0Ahttp://www.jo-mo.com/fadoohelp/data/DotNet/Ethical securty.pdf%0Ahttp://link.springer.com/10.10
19. Munandar AS. Psikologi Industri dan Organisasi : Edisi Pert. Jakarta: UIP; 2001.
20. Putra AK, Frianto A. Pengaruh motivasi intrinsik dan motivasi ekstrinsik terhadap kepuasan kerja. J Bisnis dan Manaj. 2013;6(1):59–66.
21. Handayani T. Penerapan metode simulasi pada materi pembelajaran Press Conference guna meningkatan soft skill dan pembelajaran di SMKN 3 Bandung tingkat 11 (AP4). J Penelit Pendidik. 2017;99–104.
22. Naeem N. Which Knowledge and Skills Do Participants Retain after Attending Medical Education Training Workshops? Creat Educ. 2016;07(06):870–7.
23. Bardosono S, Hildayani R, Chandra DN, Basrowi RW, Wibowo Y. The knowledge retention after continuing health education among midwives in Indonesia. Med J Indones. 2018;27(2):60–5.
24. Brasil RFG, Moreira MMC, Teles L mara R, Damasceno AK de C, Moura ERF. Level of knowledge, attitudes and practices of puerperal women on HIV infection and its prevention. Acta Paul enferm. 2014;27(2):133–7.

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Investigating Health Information Literacy Assessments and Efforts for Students Taking Health Care, Nursing and Medical Courses: An Abbreviated Review of the Extant Literature

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Abstract

Health information literacy is a skill set that is being formally evaluated and included in the curriculum of health care, nursing and medical students. While health information literacy is referenced in many different types of articles, the assessments and interventions related to it vary greatly when considering the academic or public landscape. The aim of this paper is to review and summarize the existing literature related to health information literacy measurement tools and efforts to valuate and or improve the skill sets of students in the institutional environment. The review will also consider how health information literacy is defined and evaluated in the academic environment in comparison to how it is defined and measured when considering the general public.

Keywords: *Information Literacy, Health Information Literacy, Health Care Training, Nursing Training, Medical Training.*

Introduction

Health information literacy is described by the Medical Library Association as: "the set of abilities needed to: recognize a health information need; identify likely information sources and use them to retrieve relevant information; assess the quality of the information and its applicability to a specific situation; analyze, understand and use the information to make good health decisions"[1]. Health information literacy is an important concept with ramifications for health providers, health educators and the general public, which should have certain skill sets that make them health information literate, particularly since many individuals (over 55%) use internet searching as their main source for health information[2]. Internet search results can lead to sources that are lacking in credibility which could put the information seeker at risk[2]. Health information literacy is at times used interchangeably with "health literacy". When considering the benefits of health information literacy the aims are not always entirely the same:

"[i]n concrete terms, health literacy [for the public] maybe involve, e.g., understanding reasons for medical examinations or surgery or grasping the meaning of information about consent, prevention, diagnosis and treatment. It also includes reading and understanding the text on medicine labels, appointment slips, medical instructions, insurance forms and other kinds of health related information"[3].

Whereas assessment tools in the institutional landscape generally evaluate the following: "t]hese competencies include evaluation of the quality of health information resources, obtaining health information documents on narrow topics by conducting advanced searches, judging the trustworthiness of health information sources, and understanding the advantages and disadvantages of different media"[2]. In the literature, the primary group, "the public", has a greater focus on literacy and computer skills, practical applications and internet searches, while the secondary group, "students", seems to have a greater emphasis on advanced literature searches using databases. It is worth mentioning that students may at times be part of the "general public" population as it is considered; however, we refer to these groups separately here. This article will primarily

consider health information literacy as it relates to the student population, though, it will reference the general public, since the goal for students extends further than their educational success and also relates to their ability to help the public as practitioners.

Methodology

The literature review section of this paper started with a Google Scholar search for the key word terms:"health information literacy" which returned 2,270 results, and a keyword search for "health information literacy" using the University of Wisconsin-Milwaukee (UWM) Library database which returned 673 results; these databases were chosen due to accessibility. The first search returned a large amount of materials and after briefly scanning, it was clear that not all of the materials related directly to the subject matter. A new search was completed in Google Scholar using: all in title: "*health information literacy*", to attempt to locate materials that were substantively related the subject matter; this returned 248 results. In the UWM library catalog, the advanced search feature was used to limit the results to: title>contains words> "health information literacy"; this returned 61 results. The author reviewed each article from the second-string attempts to determine if they met the inclusion criteria, in this case, if they were related to health information literacy assessments and modules in the institutional environment; for the Google Scholar articles n=44 met the inclusion criteria, and for the UWM libraries n=15, met the inclusion criteria, however, n=11 were duplications from Google Scholar. Also, articles that were not available in English n=2 were not be included in the review. Ultimately n=46 records were used for the analysis process. The author also read and included data from studies related to health information literacy assessment of the general public, though, not systematically, for the purpose of comparison and evaluating what future health care providers should be expected to understand to help patients. Additional materials might have been discovered and reviewed with greater access to different databases or might have been discovered using different search terms and inclusion/ exclusion criteria.

Results

In the literature, the majority of the articles included a statement that emphasized the importance of information literacy skills in today's information environment, noting a deluge of information, a diversity of formats, and different skill sets needed to navigate the information landscape[4]. The majority of the studies also defined "information literacy", "health information literacy", and or "health literacy". Many studies insisted that health information literacy skills were needed by health care professionals due to a phrase such as the following: "[h]ealth care professionals today must incorporate scientific evidence into clinical decision making and for good quality of care. Strong information literacy skills are essential to attain this best practice"[5]. Another article indicated that health care and medical professionals are encouraged to use research evidence, or evidence-based practice, when making clinical decisions and helping patients and their families, a skill set largely associated as an aim of health information literacy training[6]. Health care professionals help by providing information and materials that may lead to decision making regarding care and therapies by patients[6]. This support at times requires bridging the gap between medical materials not written for the general public, and also helping patients navigate the information environment to find reliable materials[6]. While there is a growing amount of health information literacy related literature and assessments demonstrating that these skill sets are being measured and integrated into the curriculum at many educational sites, many studies still report low levels of health information literacy among students[7,8,2]. These studies also indicate that students have inflated views of their knowledge and skill sets related to health information literacy[7,8,2]. Also, discussed is that the self-report data from students is not very useful, since students largely report their skills as very good, or excellent, which in several studies has not translated to their actual health information literacy assessment data[9,2,10,11]. An article that described atool for assessing health information literacy also noted that: "[g]enerally, subjective or "perception-based" assessments of abilities often do not corre-late with "objective" or "performance-based" indicators of the respective abilities, i.e. with the results of achievement or knowledge tests"[12]. Studies indicate that given the limited nature of the skill sets of many students, and the simultaneous importance of students understanding how to use reliable health information materials for coursework and in practice, the skillsets of the students should be characterized, and interventions made based on that data in an effort to improve the relevance of the health information literacy instruction[13]. An investigation using an assessment tool to measure scores among several groups of students showed student limitations in the ability to discriminate between reliable

and unreliable materials, limitations in the areas of understanding if websites were reputable, in narrowing searches by using multiple search categories,and lack of skill in knowing how to use Boolean operators[2]. While many studies included health information literacy assessments, few included a summative testing instrument, helping demonstrate the knowledge gained after health information literacy instruction and modules[5]. Ultimately, the literature suggests that the importance of health information literacy training has been demonstrated by multiple investigations, however, there is still a gap in the research related to what type of instruction is best for assessing and addressing health information literacy limitations[40]. Health information literacy is further considered an important area of investigation because health literacy is a factor impacting the general public's well-being[15], and since low health information literacy levels are associated with both poor health and increasing health care expenditures[16]. The literature suggested that health information literacy training should be integrated throughout the curriculum and called upon all stakeholders contributing to health-related information, to work together to make sure all (including students and future health care professionals and the public) have the ability to access and understand health related materials[17,18]. The literature showed a marked difference between the health information literacy assessments used among the "student" population and the general public. This work suggests that an area of additional investigation may be, how, and if, the institutional information literacy modules and training prepare students to work with the general public, or if they are more related to the academic landscape, while the general health information literacy assessments and potential support needed by persons with low health information literacy in particular, are more related to areas such as basic reading, literacy skills, and numeracy[19,12]. In short, more research is required to understand the big picture results that seem to be hinted at throughout the literature, which is qualified here as whether the health information literacy training of future health professionals translates into improving the health care results for patients, and also whether the skillsets are relevant to clinical practice[20]. This gap between health information literacy in the institutional environment, and among the public, is thus a crucial point to investigate because besides student achievement in courses, the general aim of these efforts is directly related to real world patient-care.

Discussion

While health information literacy is described in different ways in the general scientific literature, there are definite areas of intersectionality and similarity[3]. However, there are verystriking differences in the types of measurements used to evaluate health information literacy as a skillset amongst different populations, such as the "general public" and the "student". Having the skills needed for the identification, understanding and utilization of information to make health care decisions is a common part of the definition seen in the general literature related to health information literacy among different target audiences. However, going further when referring to the public: "[t]he skills mentioned provide the basis for identifying persons' health literacy, and persons and population groups with low health literacy are identified by assessing the computation and reading comprehension needed to understand health concepts or terms as they appear in patient information, medicine labels, and prescriptions, informed consent forms et cetera"[3]. In addition to this, studies focusing on functional skills, like reading, writing and numerical knowledge found that: "[o]n the grounds of this polarized approach and this form of assessment, it is claimed that immigrants, older people, prisoners or persons with few years of school are more likely to have low health literacy"[3]. Whereas in health information literacy assessments in the institutional environment: "[s]tudents demonstrate their navigation skills by setting up basic and advanced searches,"[2] and "[i]n addition, students evaluate the quality of research publications, make judgements about website trustworthiness, and detect plagiarism"[2]. The literature summary suggests that a gap exists between the two landscapes, as patients may require help that is not necessarily related to the advanced searching techniques, use of peer-reviewed materials for assignments and other coursework, largely emphasized and required in the institutional environment as described and documented in the research. The nexus between these two spheres may need to be further considered in relationship to training that will give students in these fields the proficiencies needed to deal with materials from the perspective of the health care professional using evidence-based care and the patient.

Conclusion

Health information literacy can at times be a relative term in the scientific literature, with assessments evaluating slightly or largely different competencies

depending on the target population. While health care, nursing and medical students may be required to have greater knowledge of how to query databases for assignments, and demonstrate information literacy with regard to source materials, it seems largely assumed that basic literacy (reading and comprehension) skills and basic computer skills are already mastered. It also seems largely assumed that students taking these assessments will have the ability to guide the general public in the areas relevant to them: including information, prescriptions, diagnosis, and care related to medical visits and conditions. It is important that distinctions are made regarding the types of assessments used to evaluate the skill sets, and to note that in many cases the measured skills are somewhat different depending on the target audience. Further investigations are encouraged to determine whether the information literacy skills of the institutional environment correlate to the skills needed in the clinical environment where the types of information provided to patients and the supports needed may shed light on an intermediary space between the two.

Ethical Clearance: Hereby, I, Kimberly N. Howard consciously verify that for this manuscript "Investigating the Health Information Literacy Knowledge of Health Care Students as an Essential Next Step in Medical and Health Professional Training" the following is fulfilled: 1) This material is the authors' own original work; it has not been previously published elsewhere. 2) The paper is not currently being considered for publication elsewhere. 3) The paper reflects the authors' own research and analysis in a truthful and complete manner. 4) The paper properly credits the meaningful contributions of co-authors and co-researchers. 5) The results are appropriately placed in the context of prior and existing research. 6) All sources used are properly disclosed (correct citation). Literally copying of text must be indicated as such by using quotation marks and giving proper reference. 7) All authors have been personally and actively involved in substantial work leading to the paper, and will take public responsibility for its content.

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References

1. Schardt C. Health information literacy meets evidence-based practice. Journal of the Medical Library Association: JMLA [Internet]. 2011Jan [cited 2020Jan9];99(1):1–2. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3016648/
2. Ivanitskaya L, O'Boyle I, Casey AM. Health Information Literacy and Competencies of Information Age Students: Results From the Interactive Online Research Readiness Self-Assessment (RRSA). Journal of Medical Internet Research [Internet]. 2006Apr21 [cited 2020Jan9];8(2). Available from: https://www.ncbi.nlm.nih.gov/pubmed/16867969
3. Mårtensson L, Hensing G. Health literacy - a heterogeneous phenomenon: a literature review. Scandinavian Journal of Caring Sciences [Internet]. 2011Mar1 [cited 2020Jan9];26(1):151–60. Available from: https://www.ncbi.nlm.nih.gov/pubmed/21627673
4. Reetseng MP. 2016. p. 1–134.
5. Schubert CO, Baller SO, Walter KO, Sapp LO, Jacovidis JO. Developing a Health Sciences Information Literacy Assessment for Undergraduates. Portland;
6. Ragains P, Wood MS. The new information literacy instruction: Best practices. Estados Unidos: Rowman & Littlefield; 2016. Sumpter J. Master's Paper. Chapel Hill;
7. Ivanitskaya LV, Hanisko KA, Garrison JA, Janson SJ, Vibbert D. Developing health information literacy: a needs analysis from the perspective of preprofessional health students. Journal of the Medical Library Association : JMLA [Internet]. 2012 [cited 2020Jan9];100(4):277–83. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3484940/
8. Ford PJ, Foxlee N, Green W. Developing information literacy with first year oral health students. European Journal of Dental Education [Internet]. 2009Jan16 [cited 2020Jan9];13(1):46–51. Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1600-0579.2008.00536.x
9. Putnam J, Kitts R, Pulcher KL. Research Brief: Designing a Student Centered Approach to Developing Competent Health Information Literacy Skills. American Journal of Health Studies [Internet]. [cited 2020Jan9];25(4):231–6. Available from: https://eds.b.ebscohost.com/abstract?site=eds&scope=site&jrnl=10900500&AN=67311171&h=ILbttY

2xCSmBLshp5M9xKoZzfzHTO2voGPHM7RC/PqqRFSlS6HJTLvHbQJWjVxKvR/BXdZaR0lg/4k2BSsPOTg==&crl=f&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10900500&AN=67311171

10. Ullah M, Ameen K. Teaching information literacy skills to medical students: perceptions of health sciences librarians. Health Information & Libraries Journal [Internet]. 2019Oct11 [cited 2020Jan9];36(4):357–66. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/hir.12279
11. Mayer A-K. Subjective and Objective Measures of Health Information Literacy: Do They Provide Complementary or Redundant Information? Communications in Computer and Information Science Information Literacy in the Workplace [Internet]. 2018Jan19 [cited 2020Jan9];:481–90. Available from: https://link.springer.com/chapter/10.1007/978-3-319-74334-9_50
12. Goodman X, Watts J, Arenas R, Weigel R, Terrell T. Applying an information literacy rubric to first-year health sciences student research posters. Journal of the Medical Library Association [Internet]. 2018Dec [cited 2020Jan9];106(1). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5764575/
13. Kloda LA. Health Information Literacy in Canadian Medical Curricula: An Opportunity for Librarians? Journal of Hospital Librarianship [Internet]. 2008Nov [cited 2020Jan9];8(3):314–22. Available from: https://www.tandfonline.com/doi/abs/10.1080/15323260802209450
14. Nengomasha CT, Abankwah RM, Uutoni W, Pazvakawambwa L. Health Information Literacy of the University of Namibia's Students. Journal for Studies in Humanities and Social Sciences [Internet]. 2015 [cited 2020Jan9];4. Available from: http://repository.unam.edu.na/handle/11070/1563
15. Kaur N. Health Information Literacy Skills of Medical College Students in Punjab and Chandigarh. International Journal of Information Studies & Libraries [Internet]. 2020Jan9 [cited 2020Jan9];3(2):9–19. Available from: https://s3.amazonaws.com/academia.edu.documents/60699138/459-0220190925-31938-1guoo5b.pdf?response-content-disposition=inline;filename=Health_Information_Literacy_Skills_of_Me.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A/20200109/us-east-1/s3/aws4_request&X-Amz-Date=20200109T204123Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=a0d4e524ddb517c9ecd322f349c0b0ad17893a300877ca91514909a462161768
16. Leasure AR, Delise D, Clifton S, Pascucci MA. Health Information Literacy: Hardwiring Behavior Through Multilevels of Instruction and Application. Dimensions of Critical Care Nursing [Internet]. 2009 [cited 2020Jan9];28(6):276–82. Available from: https://journals.lww.com/dccnjournal/fulltext/2009/11000/Health_Information_Literacy__Hardwiring_Behavior.8.aspx
17. Promoting Health Literacy. Journal of the American Medical Informatics Association [Internet]. 2005Mar1 [cited 2020Jan9];12(2):152–63. Available from: https://academic.oup.com/jamia/article/12/2/152/770022
18. Mayer A-K, Holzhauser J. The Health Information Literacy Knowledge Test (HILK): Construction and Results of a Pilot Study.
19. Haines M, Horrocks G. Health information literacy and higher education: The Kings College London approach. Library Review [Internet]. 2006Jan1 [cited 2020Jan9];55(1):8–19. Available from: https://www.emerald.com/insight/content/doi/10.1108/00242530610641754/full/html

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Mental Health: Breakdowns in Health Care Service Throughout the Continuum of Patient Care and Recommendations for the Future

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Abstract

This phenomonelogical work integrates the relevant literature along with a lived experience of mental healthcare. The article considers the role of consumers as participants in healthcare services and as contributors to the knowledge base. The article highlights the potential for phenomonelogical studies to be beneficial to the literature, since they can be analyzed to distinguish what, if any,similar areas exist, and as a result, what areas might be improved.

Keywords: *Mental Health Care, Health Care, Nursing, Nursing Training, Medical Ethics, Evidence-Based Practice.*

Introduction

According to the American Psychiatric Association, mental illnesses can be described in the following way: "Mental illnesses are health conditions involving changes in emotion, thinking or behavior (or a combination of these). Mental illnesses are associated with distress and/or problems functioning in social, work or family activities"[1]. In addition to providing a definition of mental illness, qualifying statistics are also shared to characterize and provide further insight regarding the prevalence of mental illness in the US: "Nearly one in five (19 percent) U.S. adults experience some form of mental illness. One in 21 (4.1) percent has a serious mental illness. One in 12 percent (8.5) percent has a diagnosable substance use disorder"[1]. Still, mental illness is described as treatable, and the majority of people impacted by it, as able to function in daily activities; however, a percentage of people experiencing a mental health crisis may need to be hospitalized[1]. This paper will consider a lived experience of mental health care provided in a public hospital setting to hopefully add to the understanding of mental health care treatment and to progress the quality of care. This result can be qualified through the reading of the comparative literature. This article will take a phenomonelogical approach: "Because phenomonelogical studies are concerned with the life world of actual people who have undergone a specific experience, they are able to illuminate our understanding of that experience as it occurs in the real world"[2]. Lastly, mental health care should definitely be analyzed as mental health can impact more than the person experiencing a mental illness, but the community as whole, including public safety, andalso have multifold impact on public funding[3,4]. Ultimately, successful and effective treatment of the mentally ill, is an investment that could be considered beneficial to the entire society, and conversely, the failure or breakdown of such interventions can also be considered a vital matter of collective concern as well[3,4].

The Lived Experience: Before discussing the lived experience it could be helpful to provide additional details regarding how and why such articles are written. While reasoning can be diverse, the following information will provide a rather general context assuming that every reader may not be familiar with this variety of article. In another article, the author asserts that: "[s]ome literature

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about illness, or about practice, while concerned with particular times, places, and circumstances, offers a truth that transcends those particulars and can be read on several levels"[2], and that: "[r]eading such works often requires self-evaluation and reflection on the part of practitioner"[2]. While this article is not directed towards practitioners specifically, it is written with the goal that it might contribute something of use. For example, a comparative review could illuminate a thread that could be predictable, and perhaps preventable[5]. It should also be noted that an experience may be more or less a fluke. Also, the literature could contain bias due to submissions or entries that were provoked by incredibly favorable or incredibly unsatisfactory experiences. Still, people who receive treatment should arguably have a chance to evaluate the service that was provided and contribute to knowledge regarding the subject matter. Unfortunately, at times, the particularities of mental illnesses and the discrimination against this population has served as an excuse why people with this ailment should not be heard[2]. It is helpful to understand the merits, and perhaps limitations, of such a methodology as described by another author: "[t]he phenomonelogical approach cannot stand alone, but excellent practice cannot do without it"[2].

According to researchers, mental illness could be described as a relatively short experience or it could refer to a chronic illness that requires specialty services[2]. The author was diagnosed with a disabling brain disorder that is characterized by disordered thinking. Due to this ailment, the author was hospitalized a total of five times in an inpatient facility; four hospitalizations were with a private non-for-profit provider of mental health care services, and one hospitalization was in a public psychiatric hospital. The last two hospitalizations were due to what the author would assert were misunderstandings between herself and her family regarding her wellbeing and psychological state. This is necessary to disclose and explore because although,"[s]evere mental illness creates a situation in which it is difficult to trust oneself, one's perceptions and the assessment of one's abilities"[5], persons with ailments, at times,can comprehend if they are well or unwell, and compliant with medication; in addition, "[t]here is a fine line to be drawn here. While participants can and do look forward to the future, they can never completely forget the experiences they have had while ill. Indeed, they must not; their efforts to maintain their health actually rest on the knowledge of their illness"[2]. While having a family and support system is important and potentially very helpful to a person struggling with an illness, there can also be complexities in these relationships; in another article: "[p]eople also described their difficulties with being in a dependent role and often controlled by others"[5] and elsewhere, "[s]everal people spoke to the loss of this sense of independence when they became ill. One respondent described getting ill as an infantilization"[5]. Ultimately, this article will more specifically explore the last admission into inpatient treatment at the public institution, which presented the most problems, during a time when the author considered herself to have been fully aware due to not experiencing any symptoms at the time.

I was involuntarily admitted to a public psychiatric facility after family member's expressed concern, although I eventually agreed to go, even though I asserted that I was not experiencing symptoms. At intake, I was advised that I needed to take a medication under my tongue, which, I stated I did not want to take because I had already taken my prescribed medication and was not sure how it would interact with that medication. After refusing the medication, I was grappled by their staff members and forced into a holding room. I advised them when they grappled me that I would simply take the additional medication; their response was it was "too late" and in the holding room I was held down by several people and administered injections into the arm. I was then taken from the holding room to a unit and into a sterile room with another patient that resembled a jail. I did not feel safe because the person appeared entirely unstable. I was advised that my medication was being changed to something different, though I advised the staff that I had taken multiple medications since being diagnosed and had had the best success with my currently prescribed medication, which I requested be administered in a higher dosage if deemed necessary. I was ignored and told the court would not allow me to leave unless I agreed to have my medication changed and administered by injection at a medical site. I felt this was unnecessary, but eventually agreed because I felt it was directly related to my ability to be discharged. When I received the initial injection while still there, I had a highly negative reaction to the medication causing uncontrollable movements, which I reported to the nurse. I was told that I was making up the uncontrollable movements, and could in fact keep still if I wanted. Eventually, I was provided with a medication that was supposed to counteract the uncontrollable movements.

After a week passed, having been administered the shot, and in spite of the reaction, I was administered an additional dose that was suppose to last for a month this time instead of a week. I was not prescribed anything to help control the uncontrollable movements after discharge. I was given a court case during which time the doctor that was prescribing my medications was supposed to give a statement; the hospital had a person I had never seen before report on his work with me which was incredible because the doctor that had been working with me was of an entirely different race. I stayed in this hospital for four weeks, compared to having stayed approximately one week when admitted to the private hospital, during which time my greatest complaints were perhaps not benefitting from the "coloring" therapy, but always feeling much better after a week and able to return to daily activities and employment. I had never been administered shots or held down at the private institution, and certainly not multiple times. I frequently wondered if the revenue was not a reason for the continued hospitalization 4x the length whilst I was sane and aware,though admittedly withering away in depression caused by my presence there. I continued to have uncontrollable movements after leaving the hospital that increased in severity and resulted in me being admitted four times into the emergency room at an area hospital. Although the severity of the movements decreased with the temporary medication I was provided at the emergency room, during which time I had the appearance of a full seizure, I continued to have uncontrollable movements that never went away, and which were a cause for concern by the general psychiatric nurse whose patient I was after discharge. She did not understand why I was having the movements even a year plus later after my hospitalization. I discovered the following side effect listed for the medication I was injected with during research for this paper: "Risperidone may rarely cause a condition known as tardive dyskinesia. In some cases, this condition may be permanent. Tell your doctor right away if you develop any unusual/uncontrolled movements (especially of the face, lips, mouth, tongue, arms or legs)"[6]. My uncontrollable movements are currently few and far between, but still visibly happen at times, which I immediately try to cover-up, at home and a work,due to self-consciousness and concern that I appear as normal as I can, to avoid being placed back under hospitalization. However, my case seems rather mild in comparison to cases that were in the media regarding the same institution. I read additional reports including negligence and death in custody at the same public facility I was admitted to: "[A patient died after] his third day at the institution — from a blood clot that moved to his lungs, triggered by a broken neck, according to a medical examiner's report. The patient's roommate told investigators that [the patient] repeatedly asked for help the night before he died and complained of being unable to move his legs. Staff didn't believe him and thought he was feigning paralysis, according to testimony during a John Doe investigation in 2013. [The patient's] death at the mental health complex was one of six deaths in the institution that year examined by an independent doctor retained by Disability Rights Wisconsin. The doctor concluded that significant failures in medical care contributed to the deaths of [the patient] and three other patients"[7].

This excerpt from another article captures the experience: "[f]rom the psychosocial perspective, people with mental illness are recovering from many traumatic experiences, in addition to the illness itself. The way the individual is treated in the mental health system causes multiple traumas, as he or she faces negative professional attitudes; insufficient help, programs and professionals that disempower and devaluate the individual; and side effects from psychopharmaceutical treatment"[8].

Discussion

Mental health care is a very complex field driven by research, scholarship, clinical trials and various types of investigations and clinical practice that elucidate areas for growth and improvement – much like many different fields. It should be noted that: "[t]hroughout the history of psychiatry there have always been consumer-survivors who have spoken out against their experiences, who have advocated for their rights and for humane treatment for those diagnosed with mental illness"[8]. I would contend that this population is at risk for maltreatment due to the very nature of their illness. In the provision of services there can be experiences that are laden with purposeful or accidental mistakes. Investigations could elucidate predictable issues that participants face in receiving services. I would argue that this article alone cannot do that, but when considered along with the comparative literature,it may provide an avenue for such conclusions[5]. I summarize the major points discussed in this article here: a.) lack of information provided about the medication to be administered during intake, b. lack of personal safety in the unit, c. illegitimate reporting via a medical professional the consumer never interacted with, and d.) poor medication assessment and punitive

medication. Another author referencing lived experience mental health care concluded that: "[t]he data of their experiences creates a map of critical issues and tasks for consumers and case managers that can be used in training and to improve case management services"[5]. The body of literature could revealcertain themes, such as: a gap in the literature, a problem with translation from evidence-based to clinical practice, a problem with particular facilities(public vs. private, or certain locations), reflect the need for consideration regarding how long mental health care professionals have been working in certain units, and how that impacts biases and the level of care – all areas I have seen discussed in extant articles, though not an exhaustive list in terms of the types of considerations that might be provoked. Ultimately, in the literature there is currently a word being used that qualifies the types of people contributing such articles, "prosumers"[8]: "[p]rosumers model a vision of participatory treatment and recovery that includes people with mental illness as full partners and collaborators in their individual treatment and rehabilitation and in the design, delivery, and evaluation of mental health services"[8].

Conclusion

This article provided information on a particular lived experience of mental health care seeking to provide data that could be compared to additional literature with the goal of facilitating improvement to mental health care services; additionally,"[i]n provoking thoughtfulness in practitioners, a phenomenological approach also has the potential to have a significant impact on the experience of those who come to us for help"[2]. Ultimately, phenomenological studies alone are not enough to drive research and interventions[2]; however: "[c]ollaborative efforts between consumers and providers are needed to improve services for critical issues such as relapse preventions (Davidson, 1997)"[5]. In a field as sensitive and important as mental health care, both for the individual and the greater community, it would very unfortunate not to request or utilize such feedback. It would also represent a missed opportunity not to carefully review and clarify the commonalities present in these different report mechanisms, particularly if, matters are elucidated that can be avoided. This kind of additional review including available data and materials from the literature, questionnaires, and various related materials, would be nothing less than worthwhile for all stakeholders involved.

Ethical Clearance: Hereby, I, Kimberly N. Howard consciously verify that for this manuscript "Mental Health: Breakdowns in Health Care Service throughout the Continuum of Patient Care and Recommendations for the Future" the following is fulfilled: 1) This material is the authors' own original work; it has not been previously published elsewhere. 2) The paper is not currently being considered for publication elsewhere. 3) The paper reflects the authors' own research and analysis in a truthful and complete manner. 4) The paper properly credits the meaningful contributions of co-authors and co-researchers. 5) The results are appropriately placed in the context of prior and existing research. 6) All sources used are properly disclosed (correct citation). Literally copying of text must be indicated as such by using quotation marks and giving proper reference. 7) All authors have been personally and actively involved in substantial work leading to the paper, and will take public responsibility for its content.

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References

1. Parekh R. What Is Mental Illness? [Internet]. Patients and Families. American Psychiatric Association; 2018 [cited 2019Dec18]. Available from: https://www.psychiatry.org/patients-families/what-is-mental-illness
2. Walton JA. The Lived Experience of Mental Illness. Handbook of Phenomenology and Medicine [Internet]. 2001 [cited 2019Dec18];68:279–93. Available from: https://link.springer.com/chapter/10.1007/978-94-010-0536-4_15#citeas
3. Smith-Merry J. Public Mental Health, Discourse and Safety: Articulating an Ethical Framework. Public Health Ethics [Internet]. 2017Dec13 [cited 2019Dec18];11(2):165–78. Available from: https://academic.oup.com/phe/article/11/2/165/4735179
4. Levit KR, Kassed CA, Coffey RM, Mark TL, Stranges EM, Buck JA, et al. Future Funding for Mental Health and Substance Abuse: Increasing Burdens For The Public Sector. Health Affairs [Internet]. 2008 [cited 2019Dec18];27(Suppl1). Available from: https://www.healthaffairs.org/doi/full/10.1377/hlthaff.27.6.w513
5. Bradshaw W, Roseborough D, Peterson M. Recovery from Severe Mental Illness: The Lived Experience

of Initial Phase Treatment. International Journal of Psychosocial Rehabilitation [Internet]. 2005Jul [cited 2019Dec18];10(1):120–7. Available from: https://eds.b.ebscohost.com/abstract?site=eds & scope=site & jrnl=14757192 & asa=Y & AN=24265270 & h=JfttkvusA4VKlRutkMWRHc5/6tbd79M51Kll/S2n7g0nzrTEgajex+LL/SIBe5BUyci/JP1xrB9YXcJhYr6gLQ== & crl=c & resultLocal=ErrCrlNoResults & resultNs=Ehost & crlhashurl=login.aspx?direct=true & profile=ehost & scope=site & authtype=crawler & jrnl=14757192 & asa=Y & AN=24265270

6. Risperidone Oral: Uses, Side Effects, Interactions, Pictures, Warnings & Dosing [Internet]. WebMD. WebMD; [cited 2019Dec18]. Available from: https://www.webmd.com/drugs/2/drug-6283-2034/risperidone-oral/risperidone-oral/details
7. Behm D. County to pay family in death of mental patient. Milwaukee Journal Sentinel [Internet]. USA Today Network; 2018Jan18 [cited 2019Dec18]; Available from: https://www.jsonline.com/story/news/local/milwaukee/2018/01/18/milwaukee-county-offers-1-4-million-settle-civil-rights-lawsuit-family-man-who-died-mental-health-co/1044177001/
8. Schiff AC. Recovery and mental illness: Analysis and personal reflections. Psychiatric Rehabilitation Journal [Internet]. 2004 [cited 2019Dec18];27(3):212–8. Available from: https://psycnet.apa.org/record/2004-10876-004
9. Frese FJ, Davis WW. The consumer-survivor movement, recovery, and consumer professionals. Professional Psychology: Research and Practice [Internet]. 1997 [cited 2019 Dec 18];28(3):243–5. Available from: https://psycnet.apa.org/record/1997-06153-006

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Scoring Trauma with Revised Trauma Score in Scoring Patient Motility with Traumatic Head Injury

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Abstract

Background: Head traumatic is a condition where the head structure getting bump outside and having some potential to get brain function disruption. The patients assessment with head traumatic can use traumatic score, by using traumatic score will give quantitative assessment so it will be shown the traumatic degree and assessing the mortality patient.

Purpose: Revised traumatic score is the assessment physiologist by doing data summarized that include systole blood pressure, respiration, and Glasgow Coma Scale for knowing the patient mortality in head traumatic.

Method: This systematic review is begin by making question, determining the objectives then finding the appropriate key words to identify searching data that is need with the methods and the objectives "AND" and "OR". After getting the data searching in 2005 up to 2019 by using database international request, pubmed, science direct and continue with PRISMA *flow* diagram and *JBI* critique tool up to get 6 articles that relevant to be analyzed be systematic review.

Result and Discussion: Traumatic Scoring with revised traumatic score is a physiologist scoring system that is used as medical instrument hospital that can help to determine the traumatic patients whether caring in primer hospital ormain traumatic.

Conclusion: Revised traumatic score is one of the traumatic assessment that able to know the patients mortality with head traumatic by using assessment indicator that is systole blood pressure, respirasi and *Glasgow Coma Scale*.

Keywords: *Scoring Traumatic,Revised Trauma Score, Head Traumatic.*

Introduction

Traumatic is define as physical injury or wound in the alive tissue that is caused by extrinsic agents, where in the Industrial and transportation in develop area donate the highest traumatic number(1). Head traumatic is a process where the traumatic happen directly or decelerations to the head that cause the damage to the skull and brain(2). Head traumatic is a trauma in the head skin, skull and brain that happened directly or indirectly in the head that caused the decrease of awareness even death(3) head traumatic become the biggest three caused of death in the world after cardiovascular and neoplasma.

Head traumatic prevalency is enough high in the world, head traumatic around 5,1 million become 8,4 million and 150- 170 Millian per 100 hthousand per person in a year. It around 50-60 million of new cases of traumatic in whole the world, The death of traumatic is 30-40% and 10% and the mortality has 5 Million in a year that caused million of people is disability because of the traumatic(4).

Based on the result research in Kesehatan Dasar (Riskesdas), the head traumatic in Indonsia in 2013 is 1,24 incident of death because of traumatic and getting increase every year(5).

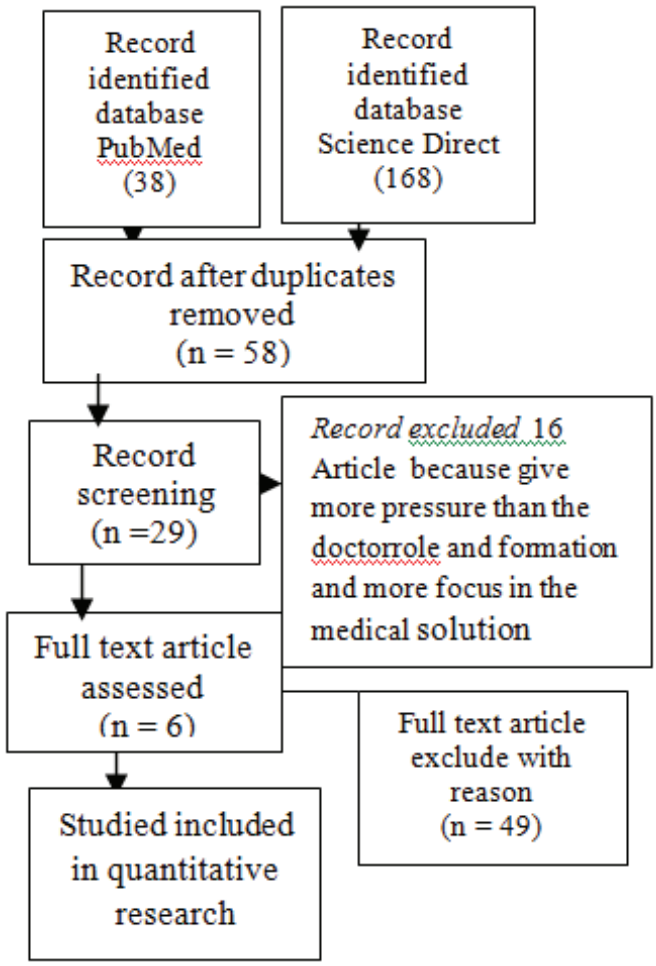
Most of the traumatic centre the fast examination is the must to prevent the disability up to death to the patient it need the client assessment by using traumatic scoring to translate the injury become the number that help to assess quantitatively. The client score with traumatic can be used traumatic score by using traumatic score that will give quantitative assessment so it will appear tha traumatic degree and scoring the possibility to live[6].

In the trauma score there is a trauma assessment that is revised trauma score (RTS). Scoring RTS is a physiological scoring system that is used as a prehospital health workforce instrument to help decide which trauma patients are taken to a primary care facility or to a trauma center. For hospital health workers, RTS helps decide which response rates are activated. RTS ≤11 is associated with 30% mortality and must be bring to the hospital directly and having some fisiologys data include systole blood pressure, respiration and *Glasgow Coma Scale* (GCS)[1]. In the reliability and prognosis RTS shows the results that as same good as TS score, but RTS has several weaknesses there are counting code impractically. The problem with awareness degree in intubation, the influence of drugs and alcohol. RR change the physiology parameter by resustasion from the chaos of physiology un countable[6]` .

Method

This research consist of several stages there are determining the questions by PICOS methods. The next stages is earning the data to be reviewed this literature by using searching methods "AND and OR" for each key, then using diagram that cosisit of identification, scrinning, appropriateness selection, and determining inclusive criteria and eksklusi criteria, In the last stage, The review writing by synthesize literature to get a systematic review[9].

Selection and document choosing by PRISMA diagram, in picture 1.



Picture 1. PRISMA diagram for identifying the literature

Result and Discussion

The definition head traumatic *as we know today is a head* injury that caused structural disruption or functional disruption whether whilst or permanent. *Center for Disease Control and Prevention* (CDC) said that 1,4 million of people in America suffer head traumatic. From that amount it is about 1,1 miliion of people are helped and excuse to going home from the emergency room, 235.000 is hospitalized and 50.000 is death[7].

Several scoring system can be used as the main of neurology status to the head traumatic patient. There are *Glasgow Coma Scale* (GCS), *Trauma Score*, *TraumaScore Revised*, dan *Abbreviated Injury Scale* (AIS)[8].

Head traumatic triggers several selullar and molecular so it appear *histochemical responses*, *molecular responses,* dan *genetic response* that cause secondary insult, in ischemic and weighted the primary brain damage[4].

Revised Trauma Score (*RTS*) physiologically where RTS is counted when the first time patient come. The scored parameter is *GCS* (*Glasgow ComaScale*), respiration frequency. RTS is more intensive that use as the pre hospital staff to define whether the patient is caring in primary hospital or trauma center. To the hospital staff RTS helps to decide the response stage that deactivated RTS ≤ 11 that correlate mortality 30% that must be bring to the trauma center[6].

According to[9] trauma scoring system has been helped the way of doctor decision and it is possible to get more objective. Trauma scoring system change the worst of injury or prognosis to the next patient, bcome single numeric score and simplify the communication among the doctors. Scoring trauma system is divided become anatomy, physiology or the combination between anatomy and physiology.

Injury Abbreviations Scale (SIA) and Injury Rate Score based on SIA (SIS) is two examples of anatomy assessment that is most use Revised Trauma Score (RTS) and Kampala Trauma Score (KTS)is a physiology score. This research is gained the result in trauma scoring using and get the death number 6% (n = 20). TRISS and KTS has the high are in the bottom of ROC (AUC), 0,90 (95% CI 0,83-0,96), and 0,86 (95% CI 0,79-0,94), each KTS has sensitivity (90%, 95% CI 68-99 %)while TEWS and RTS has the highest specify (each 91%, 95% CI 87-94%)[7].

According to kim et., al (2017)in this research explaine that Trauma Score Revise (RTS) is used in whole the world in pre hospital practice and in the Emergenct Department (ED) the setting of patient triase among the patient in derivation group, the mean age is 59 [43-73] years old, and 66,7 % is men. Bottom area of characteristic curve operation receiver from RTS (0,948; 95% CI: 0,939-0,955) higher than AUC from TRISS-A (0,960; 95% CI: 0,952-0,967) significantly higher than origin TRISS (0,949; 95% CI: 0,941-0,957).

According to the research of [6] head injury is traumatic disruption from the brain function that caused deformities as shape memory or skull line and without intarsia bleeding in brain sub without the c;ose of brain continuity The Mann-Whitney Test resultresearch show that the correlation or mortality patent is 7 days of caring with GCS score SBP, RR and SpO2 with *p value* from all independent < 0.05. Regresy logistic axamination result shows that the similarity of RTS (GCS, SBP, RR) gas p value *Uji Hosmer and Lamesho* = 0.849, the number of sensitivity 0.93 *specificity* 0.863, *Positive Predictive Value* (PPV) 0.95, Negative *PredictiveValue* (NPV) 0.79, with AUC 0.942 (CI95% 0.88-0.99). So the similarity RTS (GCS, SBP, RR) has discrimination quality, celibacy and the accurate is good, so the similarity of RTS (GCS, SBP, RR) can be use as mortality predictor in head injury patient. The use of RTS (GCS, SBP, RR)is appropriate as the helping tools in triage of head injury patient.

According to [4] research trauma is the biggest cause in teenager and younger. The scoring system that change the quality of trauma in the needed score in her research is *Revised Trauma Score* (RTS), *Injury Severity Score* (ISS), dan *Trauma Related Injury SeverityScore* (TRISS). The research result shows that RTS is the easiest one to be applied when triage and pre hospital, it also recommended to be a part of multi trauma cases handling.

Conclusion

Head trauma is the condition where the head structure get bump from the outside and having a potential to appear the disruption in brain function, The early scoring of the trauma patient is using trauma scoring. Trauma scoring is one of the early step to assess the trauma by the number, One of the trauma scoring

can be use is revised Trauma Score. RTS is trauma assessment physiologically by using systole bood pressure, respiration and GCS. revised trauma score is able to assess the patient mortality with head trauma with the enough high of spesifity and efectivity so the effective use in assess patient with head trauma.

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Reference

1. Kim SC, Kim DH, Kim TY, Kang C, Lee SH, Jeong JH, et al. The Revised Trauma Score plus serum albumin level improves the prediction of mortality in trauma patients. The American Journal of Emergency Medicine. 2017 2017/12/01/;35(12):1882-6.
2. Costa RT, Nassar AP, Caruso P. Accuracy of SOFA, qSOFA, and SIRS scores for mortality in cancer patients admitted to an intensive care unit with suspected infection. Journal of Critical Care. 2018 2018/06/01/;45:52-7.\
3. Liu Z-h, Hu H. The RTS plus measurement of the RDW improves the prediction of 28-day mortality in trauma patients. The American Journal of Emergency Medicine. 2018 2018/06/01/;36(6):1112-3.
4. Ranti JS, Sapan HB, Kalesaran LT. Aplikasi revised trauma score, injury severity score, dan trauma and injury severity score dalam memrediksi mortalitas pada pasien multitrauma di IRDB BLU RSUP Prof. Dr. RD Kandou Manado. JURNAL BIOMEDIK. 2016;8(2).
5. Hao D, Hu H, Peng L, Zeng M, Yao P, Zhao J, et al. RTS and RTS-A have equal value in mortality prediction of patients with severely trauma. The American Journal of Emergency Medicine. 2018 2018/02/01/;36(2):332-3.
6. Ristanto R, Indra MR, Poeranto S, Rini IS. Akurasi revised trauma score sebagai prediktor mortality pasien cedera kepala. Jurnal Kesehatan Hesti Wira Sakti. 2017;4(2):76-90.
7. Wong TH, Krishnaswamy G, Nadkarni NV, Nguyen HV, Lim GH, Bautista DCT, et al. Combining the new injury severity score with an anatomical polytrauma injury variable predicts mortality better than the new injury severity score and the injury severity score: a retrospective cohort study. Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine. 2016 2016/03/08;24(1):25.
8. Salim C. Sistem penilaian trauma. Cermin Dunia Kedokteran. 2015;42(8).
9. Aspelund AL, Patel MQ, Kurland L, McCaul M, Van Hoving DJ. Evaluating trauma scoring systems for patients presenting with gunshot injuries to a district-level urban public hospital in Cape Town, South Africa. African journal of emergency medicine. 2019 Dec 1;9(4):193-6.

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Levels of Depressive Disorder among Displaced Citizens in Displacement Camps in Baghdad City

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Abstract

Introduction: Internally displaced people are those who are compelled to escape but they either cannot or do not desire to cross an international border. In addition, internal displacement can affect persons in particular or an entire groups(1). The most common psychological reactions found in internally displaced people in addition to PTSD are depression, somatization, and existential problems(2). It was found that the prevalence of depression symptoms range among displaced individuals was 38%-41%(3).

Objective: The study aims to find out levels of depressive symptoms among displaced citizen in Baghdad city and to find out whether there is any relationship between those levels and some socio-demographic characteristics of displaced citizens.

Methodology: A descriptive analytic design study was conducted from November 10th, 2017 to the April 10th, 2018 with the purpose of assessing the levels of depressive disorder among displaced citizens who temporarily live in displaced camps in Baghdad city. A non-probability (purposive) sample of 110 of those displaced citizens was recruited to join in present study. To meet the goals of the study a questionnaire was made. The questionnaire has two functions: primarily, four socio-demographic characteristics of displaced people: gender, age, level of education, and marital status; and furthermore, fifteen items represent Geriatric Depression Scale (GDS-15) for Almeida (1999)(4)which expected to determine the levels of depressive disorder among the displaced people. Collected data were examined by means of: a descriptive statistical analysis: frequencies and percentages and tables of distribution; and inferential analysis which was Chi^2.

Results: The results indicate that about three quarters of the participants are male; half of them are of twenties decade of age; about half of those displaced are unmarried; and three quarters of them have primary and secondary levels of education. And the results reveals too that more than half of displaced citizens have moderate level (64.5%); and only 11.8% are within normal level of depressive disorder; and nearly quarter of them have severe level (23.6%).

Recommendations: The study recommends for the necessity to provide mental health services for displaced citizens in displacement camps. And an escalation in the extent of mental health and psychosocial support services for those displaced citizens. The necessity is needed to sufficiently support and offer broad healthcare for them.

Keyword: *Prevalence, levels, depression, displaced, citizens, Baghdad, camps.*

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Introduction

The present fight in Iraq has caused in a great displaced Iraqi people. The United Nations High Commissioner for Refugees (UNHCR) appraisals that more than 4.7 million Iraqis, nearly 20% of the general population, have left their homes as a result of the fight(5). According

to UNHCR (2004)[1], internally displaced persons are those who are forced to run away but they either cannot or do not wish to cross an international border. Internal displacement can affect persons in particular or an entire group. There is a possibility of being expelled by force or frightened to leave by threat, obligation. The most essential feature of internal displacement is that it is involuntary. It consist of movements of people running away from an instant threat and can also take the form of more prepared and organized leavings in expectation of dangers[6]. Despite this large number of displaced people, little is known about their mental health needs or access to mental health services. However, the information obtained from other displaced populations suggests that their needs may be substantial while their access to services is inadequate[7]. It was found that the prevalence of depression symptomatology range was 38% to 41%[3], anxiety symptoms from 27.7% to 54.4%, and PTSD had prevalence ranging between 32% and 52%[8]; and depressive disorder ranged between 3 and 80%)[9]. Mental disorders related to compulsory internal displacement are wide-ranging[10], and furthermost researches have focused on a restricted amounts of disorders, such as PTSD, anxiety and depression[12]. Current epidemiological research focusing on the wider common mental disorders related to forced displacement is limited[11,12]. Within the inadequate existing global evidence, common mental disorders prevalence is seen to fluctuate considerably: 27.2% in Colombia, 27.8% in Ethiopia, 40.3% in Palestine, 57.7% in Cambodia, and 62.3% in Algeria[12,13]. So the current study presents a good opportunity to explore and find out levels of depressive disorder within displaced citizens who are forced to leave their own homes and live in displacement camps in Baghdad city.

Objectives: The study aims to find out levels of depressive symptoms among displaced citizen in Baghdad city and to find out whether there is any relationship between those levels and some socio-demographic characteristics of displaced citizens.

Material and Method

A descriptive study was conducted between the 10th of November 2017 and the 10th of April 2018. A purposive non-probability sample of 110 displaced citizens who live in displacement camps in Baghdad city was recruited to partake in the current study. To measure the levels of depressive disorder among displaced citizens an instrument was prepared. This instrument represents a questionnaire which supposed to assess these levels. The questionnaire consists of two parts: four socio-demographic characteristic such as age, gender, marital status, and level of education, and furthermore, fifteen items represent Geriatric Depression Scale (GDS-15) for Almeida (1999)[4]which expected to assess the levels of depressive disorder among the displaced people. Each item scored from zero as "there is not"; one as "there is". The total score ranged from zero to 15 for the total Geriatric Depression Scale (GDS-15). The total items scores was measured scored and finally rated on 3-level rating scale. Three levels were determined by applying quartile descriptive analysis; as "normal level" of depressive disorder with cut-off point ranged between 0 and four, as "mild level" of depressive disorder with cut-off point ranged between five and nine, and as "more severe" level of depressive disorder with cut-off point ranged between ten and fifteen. Final data of the present study were analysed by different statistical analysis: descriptive analysis such as distribution, cross-tabulation, frequency, percentages, and quartiles; and an inferential data analysis: Chi-square.

Findings:

Table 1. Distribution of the sample according to the Severity of Depression

	Severity of Depression							
	Within Normal		Moderate		Severe		Total	
Displaced Citizens	f	%	f	%	f	%	f	%
	13	11.8%	71	64.5%	26	23.6%	110	100.0%

Regarding levels of depressive disorder table two reveals that more than half of displaced citizens have moderate level (64.5%); and only 11.8% are within normal level of depressive disorder; and nearly quarter of them are severe level (23.6%).

Table 2: Distribution in the severity of Depression according the Gender of displaced citizens

			Severity of Depression			Total
			Within Normal	Moderate	Severe	
Gender	Male	f	12	44	16	72
		%	10.9%	40.0%	14.5%	65.5%
	Female	f	1	27	10	38
		%	0.9%	24.5%	9.1%	34.5%
Total		f	13	71	26	110
		%	11.8%	64.5%	23.6%	100.0%

Table three presents the percentages of severity of depression among gender of displaced citizens: more than half of male have moderate and severe levels (54.5%) and quarter of the female have moderate level of depression (24.5%).

Table 3: Distribution in the severity of Depression according the Age of displaced citizens

			Severity of Depression			Total
			Within Normal	Moderate	Severe	
Age	≤19	f	1	13	8	22
		%	0.9%	11.8%	7.3%	20.0%
	20-29	f	6	38	8	52
		%	5.5%	34.5%	7.3%	47.3%
	30-39	f	1	9	3	13
		%	0.9%	8.2%	2.7%	11.8%
	40-49	f	0	7	4	11
		%	0.0%	6.4%	3.6%	10.0%
	≥50	f	5	4	3	12
		%	4.5%	3.6%	2.7%	10.9%
Total		f	13	71	26	110
		%	11.8%	64.5%	23.6%	100.0%

Table four indicates that the twenties decade of age have the highest frequency (34.5%) but the thirties decade have the lowest percentage (0.9%).

Table 4: Distribution in the severity of Depression according the Levels of Education of displaced citizens

			Severity of Depression			Total
			Within Normal	Moderate	Severe	
Level of Education	Illiterate	**f**	**1**	**2**	**4**	**7**
		%	0.9%	1.8%	3.6%	6.4%
	Read and primary	f	5	22	10	37
		%	4.5%	20.0%	9.1%	33.6%
	Secondary	f	5	24	7	36
		%	4.5%	21.8%	6.4%	32.7%
	Institute and more	f	2	23	5	30
		%	1.8%	20.9%	4.5%	27.3%
Total		f	13	71	26	110
		%	11.8%	64.5%	23.6%	100.0%

In regard of levels of education table five shows that 42.7% of displaced citizens having secondary and institute and more have moderate level of depression and only 0.9% of illiterate are within normal level of depression.

Table 5. Distribution in the levels of Depression recording to Marital Status of displaced Citizens

			Severity of Depression			Total
			Within Normal	Moderate	Severe	
Marital Status	Unmarried	f	3	40	11	54
		%	2.7%	36.4%	10.0%	49.1%
	Married	f	10	27	13	50
		%	9.1%	24.5%	11.8%	45.5%
	Divorced	f	0	2	0	2
		%	0.0%	1.8%	0.0%	1.8%
	Widowed	f	0	2	2	4
		%	0.0%	1.8%	1.8%	3.6%
Total		f	13	71	26	110
		%	11.8%	64.5%	23.6%	100.0%

Table six indicates that most of unmarried have moderate and severe levels of depression (46.4%) and only 2.7% of unmarried are within normal level of depression.

Table 6. Association between Demographic characteristics of the displaced people and levels of depressive disorder

Demographic Characteristics	X^2	df	p-value	No.
Gender	5.795	1	0.054	110
Age	17.837	4	0.022	
Marital status	9.486	3	0.148	
Level of Education	7.579	3	0.271	

Table seven reveals that there is a significant relationship between gender and age and levels of depression (χ^2 = 5.795, p-value = 0.054) (χ^2 = 17.837, p-value= 0.022) respectively.

Discussion

The high percentage of the male displaced citizens participated in present study (65.5%) does not represent a real indicator to the normal percentages of gender differences within the Iraqi general population. This result is not supported by other different studies such as Sheikh and his colleagues (2015) who indicate that 51.9% of the displaced are female[14], Tekin (2016) 55.9%[15] and Feyera (2015)[16] 53.9% are female . This wide difference might be that many female refuse to participate. About half of displaced citizens are within the age of twenties and with mean= 28.3 years, this result is different from other studies[14,16]. About half of the sample of the displaced is unmarried, many studies do not agree with this result such as the study of Sheikh (2015) 13.6%are male[14]; and 15.9% in study of Feyera (2015)[16]. 33.6% have primary school level of education; this percentage is not supported by various studies; 18.4% study of Bader (2009)[17]; 26.5% study of Sheikh (2015)[14]; and 28.3% study of Alpak (2015) [18]. The study indicates that the displaced citizens are inflicted with different levels of depressive disorder; 64.5% inflicted with moderate level and 23.6% inflicted

with severe level of depressive disorder. Given that the prevalence of depressive disorders among general population is approximately 7%[19], Regarding the gender differences the study reveals that from total of displaced citizens inflicted with depressive disorder 61.8% are male and 38.2% are female. Females experience 1.5- to 3-fold higher rates than males beginning in early adolescence[19]. Differences by age group the study shows that 18- to 29-year-old displaced citizens represents 46.3% of the total displaced inflicted with depressive disorders. This percentage represents about tenfold higher than the prevalence in individuals age 60 years or older. Given that the normal prevalence of age is threefold of the 18- to 29-year-old of the age 60 years and older[19]. The prevalence of depressive disorders in regard to the marital status the results indicate that about 92.3% of the unmarried displaced citizens have moderate and severe levels of depressive disorders; 72.0% and 20.2% respectively. This high prevalence of depressive disorders might be due to big number of unmarried displaced citizens participated in the present study.

Recommendations: The study recommends for the necessity to provide mental health services for displaced citizens in displacement camps. And an escalation in the extent of mental health and psychosocial support services for those displaced citizens. The necessity is needed to sufficiently support and offer broad healthcare for them. Development of mental health and psychosocial programmes and interventions aiming the most vulnerable groups should be prioritised.

Conflict of Interest: The researchers declare that there is no any conflict of interest.

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Ethical Clearance: The researchers obtained the oral informed consent from the study participants.

References

1. United Nations Higher Commission for Refugees (UNHCR). Internally displaced persons. 2004 Retrieved from http//www.unhcr.ch/issues/idp/idp.html.
2. Carolyn A. Stress, coping, and development (2nd ed.). New York: The Guilford Press; 2007.
3. Mujeeb A, Zubair A. Resilience, stress, anxiety and depression among internally displaced persons affected by armed conflict, Pak. J Soc Clin Psych. 2015 10(2): 20-26.
4. Almeida OP, Almeida SA. Short versions of the geriatric depression scale: A study of their validity for the diagnosis of a major depressive episode according to ICD-10 and DSM-IV. Int J Geriatr Psychiatry; 1999; 14(10): 858-865.
5. United Nations High Commissioner for Refugees (UNHCR): Iraq. 2007 Available at http://www.unhcr.org/iraq.html.
6. Mooney E. The concept of internal displacement and the case of internally displaced persons as a category of concern. RefugSurv Quart 2005; 24(3): 9-26.
7. de Jong J,Komproe I, Van Ommeren M, Mustafa M, Araya M, Khaled N, Van de put W, Somasundaram D. Lifetime events and posttraumatic stress disorder in 4 post-conflict settings. JAMA 2001; 286: 555-562.
8. Herrara W, Mari J, Ferraz M. Mental disorders and the internal armed conflict in Guatemala. ActasEspPsiquiatr, 2005; 33, 238-243.
9. Steel Z, Chey T, Silove D, Marnane C, Bryant RA, Van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis; Journal of the American Medical Association, 2009; 302(5): 537-549.
10. Porter M, Haslam N. Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: A meta-analysis. JAMA: Journal of the American Medical Association [Internet]. 2005 Aug [cited 2019 Dec 31];294(5):602–12. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=psyh & AN=2005-08808-006 & site=ehost-live
11. Mels C, Derluyn I, Broekaert E, Rosseel Y. The psychological impact of forced displacement and related risk factors on Eastern Congolese adolescents affected by war. Journal of Child Psychology & Psychiatry [Internet]. 2010 Oct [cited 2019 Dec 31];51(10):1096–104. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=pbh & AN=53568278 & site=ehost-live
12. de Jong JT, Komproe IH, Van Ommeren M (2003)

Common mental disorders in post-conflict settings. Lancet [Internet]. 2003361(9375): 2128–2130.

13. Puertas G, Ríos C, del Valle H. [The prevalence of common mental disorders in urban slums with displaced persons in Colombia]. RevistaPanamericana De Salud Publica = Pan American Journal of Public Health [Internet]. 2006 Nov [cited 2019 Dec 31];20(5):324–30. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=mnh & AN=17316490 & site=ehost-live
14. Sheikh TL, Abdulaziz M, Agunbiade S, Joseph I, Ebiti B, Adekeye O. Correlates of depression among internally displaced persons after post-election violence in Kaduna, North Western Nigeria. Journal of Affective Disorders [Internet]. 2015 Jan 1 [cited 2019 Dec 31];170:46–51. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=psyh & AN=2014-45677-009 & site=ehost-live
15. Tekin A, Karadağ H, Süleymanoğlu M, Tekin M, Kayran Y, Alpak G, et al. Prevalence and gender differences in symptomatology of posttraumatic stress disorder and depression among Iraqi Yazidis displaced into Turkey. European Journal of Psychotraumatology [Internet]. 2016 Feb 12 [cited 2019 Dec 31];7. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=psyh & AN=2016-20355-001 & site=ehost-live
16. Feyera F, Mihretie G, Bedaso A, Gedle D, Kumera G. Prevalence of depression and associated factors among Somali refugee at Melkadida camp, Southeast Ethiopia: A cross-sectional study. BMC Psychiatry [Internet]. 2015 Jul 24 [cited 2019 Dec 31];15:171. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=mnh & AN=26204950 & site=ehost-live
17. Bader F, Sinha R, Leigh J, Goyal N, Andrews A, Valeeva N, et al. Psychosocial health in displaced Iraqi care-seekers in non-governmental organization clinics in Amman, Jordan: An unmet need. Prehospital & Disaster Medicine [Internet]. 2009 Jul [cited 2019 Dec 31];24(4):312–20. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=ccm & AN=105328107 & site=ehost-live
18. Alpak G, Unal A, Bulbul F, Sagaltici E, Bez Y, Altindag A, et al. Post-traumatic stress disorder among Syrian refugees in Turkey: A cross-sectional study. International Journal of Psychiatry in Clinical Practice [Internet]. 2015 Mar [cited 2019 Dec 31];19(1):45–50. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=pbh & AN=101191063 & site=ehost-live
19. Cooper R. Diagnosing the diagnostic and statistical manual of mental disorders : Fifth Edition [Internet]. London: Routledge; 2014 [cited 2019 Dec 31]. Available from: https://search-ebscohost-com.ezproxy.okcu.edu/login.aspx?direct=true & db=nlebk & AN=772562 & site=ehost-live

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Ethical Work Climate, Moral Courage, Moral Distress and Organizational Citizenship Behavioramong Nurses

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Abstract

Ethical work climate and moral courage are important elements influencing the actions of nurses and their organizational citizenship. This study aimed to investigate the relationship between ethical work climate, moral courage, moral distress, and organizational citizenship behavior among nurses at Zagazig university hospitals, Egypt. A descriptive correlational design was used for this research. A stratified random sample of 384 nurses was chosen from the above mentioned settings. Four tools were utilized for data collection: Hospital ethicalclimate scale, professional moral courage scale, moral distress scale and organizational citizenship behavior scale.

Results: Revealed that,89.1% of nurses had positive perceptions of ethical work climate. Likewise, 85.4% and 83.1% of nurses had high levels of moral courage and moral distress respectively, and 47.7% of them had moderate level of organizational citizenship behavior.

Conclusion: Ethical work climate was significantly and positively correlated to moral courage and organizational citizenship behavior, while it was negatively correlated to moral distress.

Recommendation: Developed continuing education, and discussions promote positive ethical climates within the organization.

Keywords: *Ethical work climate,Moral courage, Moral distress,Organizational citizenship behavior.*

Introduction

In recent years, the amount of unethical activity has increased and it has caused a major loss of organization integrity and competitive advantage. These cases emphasize the significance of an ethical work climate in explaining how and why unethical behavior occurs[(1)].

Ethical climate is one of the main issues in the integrity of inter-organizational interactions and the continuity of previous decisions with ethical principles. It represents nurses' perception regarding the policies, practices and procedures in relation to ethics[(2)]. The presence of an ethical climate influences on organization and nurses, that for organization, it improves the productivity and efficiency of the organization's performance[(3)]. While for nurses, it increases nurses' job satisfaction and organizational commitment,improves job performance and turnover intention[(3)].

The work unit's climate is associated with moral courage, because it is an important factor affecting the behavior and practice of nurses[(4)]. Moral courage is a continuous fact, protection of rights and commitment to moral principles in the defense of the rights of patients, even in the potential danger to their position at work[(4)]. Nurses with moral courage, prefer loyalty to organization and treatment of patients to their own interests in any situation, support others, obey the implications of correct moral performance to achieve the desired outcome,while nurses with low moral courage, lose their

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moral motivation and decrease their willingness to serve patients[4].

High quality of care is provided, while performing ethically and morally with proper healthcare systems, solving problems of nursing retention, job dissatisfaction and the their moral distress against organization [5]. Moral distress defined as an emotion that is expressed when the moral complexity of a situation is not leading to a resolution [6].

Increased levels of moral distress lead to medical errors, nursing burnout, depression, lack of conscience, feelings of impotence and patient avoidance[6].In contrast decreased levels of moral distress, increases job satisfaction, commitment and improves organizational citizenship behavior[1].

The conduct of organizational citizenship is a person aware and voluntary practice, and although it is not strictly and clearly acknowledged by the formally rewarding organizational structure, it generally enhances the functions of the organization and effectively influence the organizational efficiency[6].

Significance of the study: Nursing shortages and the desire to leave are two key issues impacting the healthcare services provided, and the institution must identify underlying factors and develop professional ethical and moral courage among its nurses to avoid them[7].Nurses are the cornerstone on which health care systems are constructed, and as ethical dilemmas continue to escalate, it is important to acknowledge nurses ' current views on the strategies used to overcome these obstacles. When a hospital has a good ethical climate, nurses would do their jobs professionally and morally, help them to turn challenge into opportunity and improve their performance, [8].So, the aim of this study was to investigate the relationship between ethical work climate, moral courage, moral distress and organizational citizenship behavior among nurses at Zagazig university hospitals, Egypt.

Aim: Investigate the relationship among ethical work climate, moral courage, moral distress and organizational citizenship behavior among nursesat Zagazig university hospitals.

Research Questions: What is the nurses' perception aboutethical work climate?

What are the levels of nurses' moral courage,moral distress and organizational citizenship behavior?

Are there relations among ethical work climate, moral courage, moral distress and organizational citizenship behavior?

Methodology

Design: A descriptive correlational design was used for this study.

Setting: This study was conducted at all Zagazig University Hospitals, Egypt, which include two sectors involving eight teaching hospitals providing free treatment.

Subjects: Staff nurses working in the aforementioned setting with at least one year of experience.

Sample Size: It was estimated at confidence interval 95%, margin of errors 5.0%,, by using this formula [n= N/ 1+ N (e)^2] [9]; the required sample size was 384 staff nurses. A stratified random sample was used.

Instruments: Four tools were utilized to gather data for this study.

Tool 1:**Hospital Ethical Climate Scale (HECS):**It was developed by **Olson** [10] to measurenurses' perceptions of ethical climatein hospital work environment.It consists of 26 items grouped under five domains.The response was along continuum of a five-point Likert scale, ranging from 1 (almost never true) to 5 (almost always true).A score was recognized a positive perception if it was ≥78, and a negative perception if it was <78[10]. Cronbach alpha coefficient ranged 0.81-0.92. .

Tool 2:**Professional Moral Courage Scale**: It was developed by **Sekerka et al.** [11]to assess and quantify the construct of moral courage among nurses. It consists of 15 items grouped under five dimensions. The responsewasa long continuum ofa five point Likert scale ranged from 1 (never) to 5 (always). Scores from 0 to≤39 indicated a low level and scores ≥ 40recognized a high level[11].Cronbach alpha coefficient was 0.85.

Tool 3: **Moral Distress Scale of Nurses:**It was developed by **Hamric et al.** [12]to assessmoral distress levelof nurses. It included 21 items divided into four dimensions. The responsewas alongcontinuum of five point Likert scale ranged from 0 (never) to 4 (always).A score was considered high in this research if it was ≥84 and low if it was <84[12].Cronbachalpha coefficient was 0.94.

Tool 4: **Organizational Citizenship Behavior (OCB)**: It was developed by **Organ** in **Podsakoff et al.** [13]. It consists of 24 items grouped under five domains. Nurse responses were measured on a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Scores ≥ 96 revealed a high level, a moderate level indicated from 72 to 95, and a low level indicated < 72[13]. Cronbach alpha coefficientwas 0.96.

Fieldwork: Data collection started in May till end of, July 2019.The researchers clarified the aim of the study to nurses either individually or through groups. The questionnaire took about 20-30 minutes to be completed.

Pilotstudy: It was carried out on 38 staff nurses (10% of the study sample), selected randomly and excluded from the main research sample.

Content validity: After translation of the tools into Arabic; face and content validity was done by a jury of experts (5 professors) from the academic nursing staff at Zagazig University. According to their opinions, all required modifications were done.

Ethical considerations: Before data collection, the content of this study was approved by Ethics Committee and Dean of the Faculty of Nursing, Zagazig University. Nurses who participated in the study were given an option to discontinue the study at any time without explanation.

Statistical Analysis: It was performed using the Statistical Package for Social Science (SPSS), version 21.0. Data were presented using descriptive statistics in form of frequencies and percentages for categorical variables. Pearson correlation used for assessment of the inter-relationships among variables.

Results

Table 1: Emphasizes that, less than half of nurses' age were between 30 to < 40 years (41.4%), with a mean age of 35.27 ± 8.38. Furthermore, the majority of nurses were female, married, worked for less than 10 years of experience, and had technical diploma in nursing (70.1%, 78.7 %, 67.5%, and 55.9% respectively).

Table 2: Indicates total mean scores of hospital ethical work climate, moral courage, moral distress and organizational citizenship behaviors as reported by nurses (77.33± 22.19,53.48± 15.04,69. 29± 10. 62& 85.08 ± 12.09 respectively).

Figure 1: Illustrates that 89.1% of nurses had a positive perception of ethical work climate.

Figure 2: Shows that more than three quarters of nurses had high levels of moral courage and moral distress (85.4% & 83.1% respectively).

Figure 3: Reveals that 47.7% of nurseshad a moderate level of organizational citizenship behaviors' domains.

Table 3: Displays that, hospital ethical work climate was significantly and positively correlated to moral courage, and organizational citizenship behaviors (r=0.651&r=0.493, at P=0.000, respectively),while it was negatively correlated to moral distress (r=-0.263, at P=0.000).Likewise moral distress was negatively correlated with moral courage andorganizational citizenship behaviors(r=-0.269&r=-0.631 at P=0.000).

Discussion

Ethical work climate of the organization is very important to increase organizational effectiveness and productivity and improve the quality of management and performance[12]. Therefore, this study aimed to investigate the relationship between ethical work climate, moral courage, moral distress and organizational citizenship behavior among nurses at Zagazig University Hospitals.

The results of this research showed that; the highest percentages of nurses had a positive perception of ethical work climate. This finding could be due to the clear and shared sense of the hospitals' mission, vision and value and unique responsibility, also supportive hospital management. The previous study finding is agreement with those of a study performed in Turkey by **Numminen et al.**[14], who found that the overall perception of the ethical climate by nurses was positive. Although, these results were incompatible with those of a study conducted by **Shafipour et al.**[15], in Iran and found that the nurses' perception of the ethical work climate was negative.

Concerning moral courage level; the majority of the nurses had a high level of the moral courage. This results might be due to that nurses have good relationships with their supervisors and motivation throughout allocating resources, training, developmental opportunities to nurses in a fair manner by their managers . These findings are in agreement with those of a study carried

out in Tehran by **Moosavi et al.** [16],who found that the nurses reported their moral courage at a high level. However, these findings were incongruent with a study conducted by **Day** [17], and found that nurses had low level of moral courage.

Regarding moral distress level; the majority of nurses had a high level of moral distress. This might be due to a rigid system between physicians and nurses, and are often considered subservient to physicians. These research results go in the same path as those of a study established in U.S.A by **Allen et al.** [18], and reported that the majority of nurses had a high level of moral distress. However, these findings are inconsistent with those of studies done by **Gonzalez**[19],in Island,and found that the majority of nurses had low level of moral distress.

In relation to organizational citizenship behavior; slightly less than half of nurses had a moderate level of OCB. This finding may be due to most of nurses seek to achieve their personal goals rather than the organizational ones.

These findings are congruent with those of a study conducted by **Bahrami et al.**[20], in Iran, and found that the mean score of the OCB was moderate. Conversely, the previous findings are in disagreement with that of **Altuntas and Baykal**[21], in Turkey, who found that the OCB level of nurses was high.

As regards correlations between the different study variables, the current study results revealed that ethical work climate was significantly and positively correlated to moral courage, and organizational citizenship behaviors, while it was negatively correlated to moral distress. These findings could be due to that ethical climatefacilitates the discussion on the patients' health problems and their solutions, provides a framework for ethical decision making in the clinical environment and enables employees to better cope with causes of dissatisfaction, and increases their level of commitment toward organization.

The current study results go in the same line with those of other previous studies as the one conducted by**Taraz et al.**[8], which clarified that there was a positive correlation between the ethical climate and moral courage among nurses.

Conclusion

Ethical work climate was significantly and positively correlated to moral courage and organizational citizenship behaviors, while it was negatively correlated to moral distress.

Recommendations:

- Managers should improve the ethical atmosphere in hospitals by establishing an acceptable professional performance environment.
- Maintaining ethical relationship with nurses that help them to improve their performance.
- Developing continuing education and discussions to promote positive ethical climate within the organization.
- Create a learning and informative environment for nurses where it makes them competent to accomplish organizational objectives.
- Further research should address issues of ethical leadership among nursing managers and creating better ethical workplace environment.

Table (1): Distribution of Personal Characteristics of Nurses (n=384).

Personal and job characteristics	No	%
Age in year:		
< 30	120	31.2
30 - < 40	159	41.4
≥ 40	105	27.3
Mean ± SD35.27 ±8.38		
Gender:		
Male	115	29.9
Female	269	70.1
Marital status:		
Single	82	21.3
Married	302	78.7
Widowed	6	1.6
Experience (in years):		
< 10	259	67.5
≥ 10	125	32.5
Mean ± SD 7.68 ±5.03		
Educational qualification:		
Nursing diploma	89	23.1
Technical diploma in nursing	215	55.9
Bachelor of nursing	80	20.8

Table (2): Distribution of Different Study Variables' Mean Scores as Reported by Nurses (n=384)

Study variables	Mean	±	SD
Hospital ethical climate domains			
Relationship with peers	14.40	±	4.34
Relationship with patients	12.78	±	3.17
Relationship with physicians	17.23	±	5.16
Relationship with hospitals	17.39	±	4.69
Relationship with managers	15.53	±	4.83
Total	**77.33**	**±**	**22.19**
Professional moral courage domains			
Moral agency	11.05	±	3.38
Multiple values	10.43	±	2.98
Endurance of threats	10.11	±	2.60
Going beyond compliance	11.03	±	3.17
Moral goals	10.86	±	3.00
Total	**53.48**	**±**	**15.04**
Moral distress domains:			
Moral distress related to physicians	19.84	±	2.90
Moral distress related to nursing practices	18.29	±	2.99
Moral distress related to hospital's policies	16.11	±	2.25
Moral distress related to futile care	15.05	±	2. 48
Total	**69. 29**	**±**	**10. 62**
Organizational citizenship behaviors' domains:			
Altruism	19.60	±	2.49
Courtesy	18.50	±	2.94
Sportsmanship	17.02	±	3.04
Civic virtue	14.57	±	2.49
Conscientiousness	14.97	±	3.30
Total	**85.08**	**±**	**12.09**

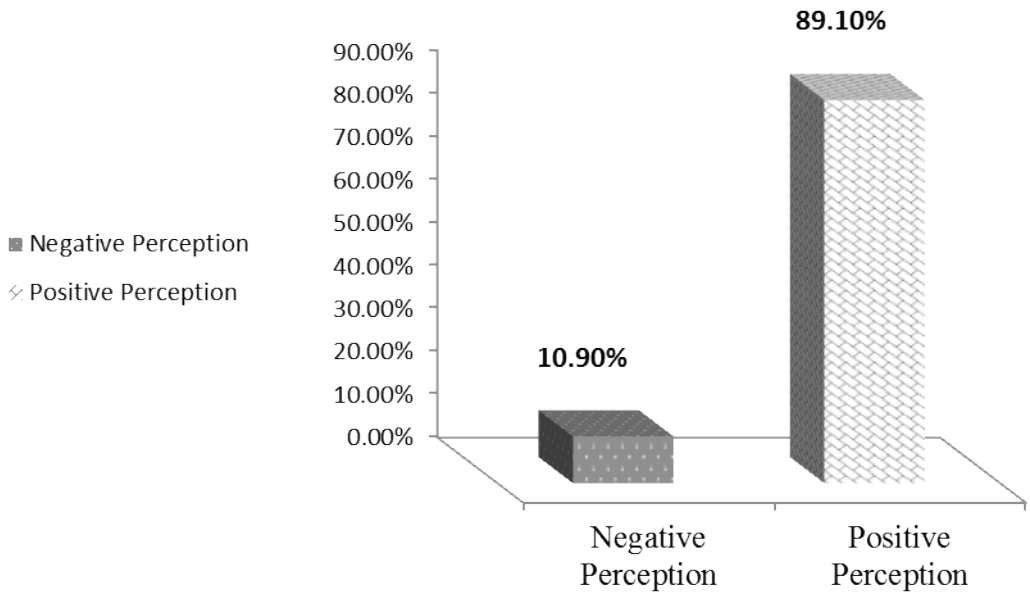

Figure 1: Nurses' Perception as Regards Ethical Work Climate(n=384).

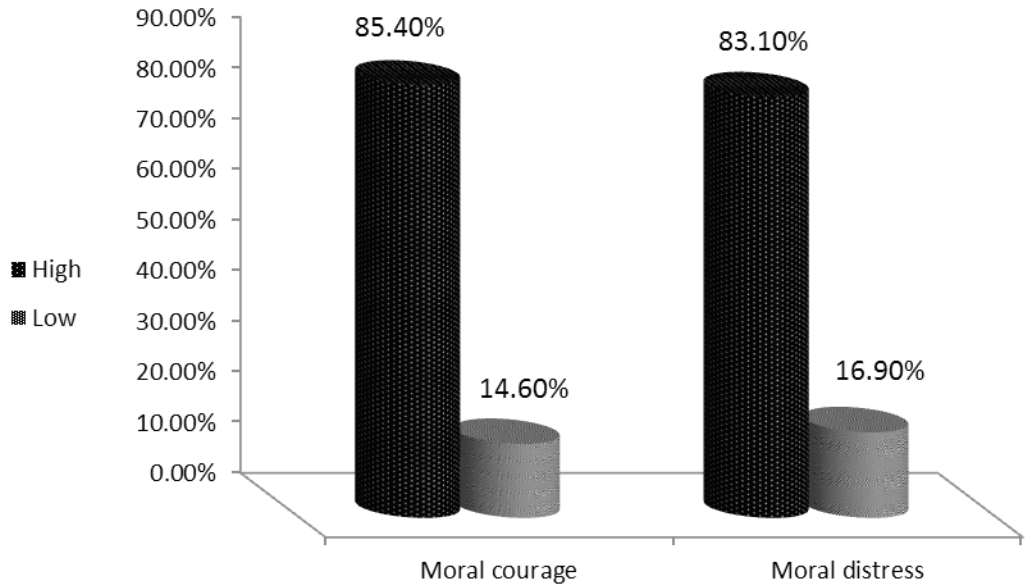

Figure 2: Levels of Moral Courage and Moral Distress among Nurses (n=384).

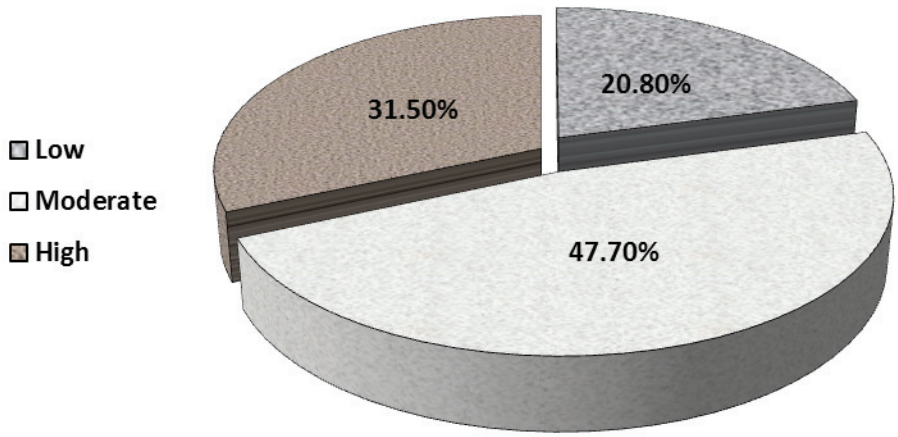

Figure 3: Levels of Organizational Citizenship Behaviors among Nurses(n=384).

Table (3): Correlations Between Study Variables as Reported by Nurses (n=384).

Study variables	Hospital ethical work climate		Moral courage		Moral distress	
	R	P	R	p	R	P
Moral courage	0.651**	0.000				
Moral distress	-0.263**	0.000	-0.269**	0.000		
Organizational citizenship behavior	0.493**	0.000	0.719**	0.000	-0.631**	0.000

**Highly statistically significant at p< 0.000

References

1. Acar, P., Yener, M. İ., Tayan, A. The effect of an ethical work climate on organizational identification an example of a logistics company. Research Journal of Business and Management (RJBM),(2018),5(1), p.13-21.
2. McGilles Hall L and Doran D. Nurse staffing, care delivery model, and patient care quality. J Care Qual, 2018; 19:2–33.
3. Bell S., . Ethical climate in managed care organizations. Nurs Admin Q, 2016; 27: 133–139.
4. Gallager A.Moral distress and moral courage in everyday Nursing practice. Online J Issues Nurse,(2018);16(2):8.
5. Glasberg, A.L., Eriksson, S., Dahlqvist, V., Lindahl, E., Joolaee S, Jalili H, Rafiee F, Haggani H. The relationship between nurses' perception of moral distress and ethical environment in Tehran University of Medical Sciences. J Med Ethics Hist Med. 2016; 4(4):56-66.
6. TabrsaGh., Esma'eeliGivi M., Esma'eeliGivi H.the factors effective on organizational commitment behavior in a military hospital". The journal of military medicine,(2016); 2(12):93-99.
7. Sharma,E. Professional moral courage to combat ethical challenges in the workplace. International Journal of Development and Conflict; (2018),8: 31–45.
8. Taraz, Z., Loghmani, L., Abbaszadeh, A., Ahmadi, F., Safavibiat, Z.& Borhani, F.The relationship between ethical climate of hospital and moral courage of nursing staff. Electron J Gen Med;(2019),16(2):em109 ISSN:2516-3507
9. Yamane, T. Statistics: an introductory analysis. 2nd edition, Harper and row, New York; (1967).
10. Olson, L.L. Hospital nurses' perceptions of the ethical climate of their work setting. Image J Nurs Sch.;(1998),30(4):345–9.
11. Sekerka, L.E., Bugozzi, R.P. & Charing, R. Facing Ethical challenges in the work place. Conceptualizing and good measuring professional moral courage. Journal of Business Ethics;(2009), 89(4):565-579.
12. Hamric, A.B., Borchers, C.T., & Epstein, E.G. Development and testing of an instrument to measure moral distress in healthcare professionals. AJOB Primary Research;(2012), 3(2): 1-9.
13. Organ, D.W.. Organizational citizenship behavior: The good soldier syndrome. Lexington MA: Lexington Books. In Podsakoff, P. M., MacKenzie, S.B., Moorman, R.H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. Leadership Quarterly Journal;(1988), 1(2): 107-142.
14. Numminen, O., Leino-Kilpi, H.,Isoaho,H.,&Meretoja,R. Ethical climate and nursecompetence – newly graduated nurses' perceptions. Nursing Ethics;(2015), 22(8) 845–859.
15. Shafipour, V., Yaghobian, M., Shafipour, L., & Heidari, M. Nurses' perception of the ethical climate in the Iranian hospital environment Journal of Nursing and Midwifery Sciences; (2016), 3(4): 37-43.
16. Moosavi, S.S., Borhani, F., & Abbaszadeh, A. The moral courage of nurses employed in hospitals affiliated to Shahid Beheshti University of Medical Sciences. HayatJournal of School of Nursing and Midwifery, Tehran University of Medical Sciences; (2016),22(4):339-349.
17. Day, L.(2007). Courage as a virtue necessary to good nursing practice. American Journal of Critical Care; (2007), 16(6):613 -616.
18. Allen, R., Cohn,T., Velasco, R., &Forges, E. Moral distress among health care professionals at health system.JONA'S Healthcare Law, Ethics, and Regulation;(2013), 15 (3) :111-118.
19. Gonzalez, J. Exploring the presence of moral distress in critical care nurses".Master's Thesis, Dissertations, Graduate Research and Major Papers Overview; (2016). 184.Available at: https://digitalcommons.ric.edu/etd/184.
20. Bahrami, M.A., Montazeralfaraj, R., Gazar, S.H., &Tafti, A.D. Relationship between Organizational Perceived Justice and Organizational Citizenship Behavior among an Iranian Hospital's Employees. Electronic Physician Journal;(2013), 6(2): 838-844.
21. Altuntaş, S., & Baykal, U. Organizational citizenship behavior levels of nurses and effective factors. organizational citizenship behavior in Nurses Journal; (2014), 2 (1): 89-98.

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Lived Experiences of Mothers with Leukemic Children Residing in Kathmandu

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Abstract

Childhood leukemia is one of the expanding non-communicable diseases in Asian countries including Nepal with significant mortality and morbidity. The main objective of study was to explore lived experiences of mothers with leukemic children residing in Kathmandu. This was a hermeneutic phenomenological study conducted in 2017. Ten participants were selected purposively from hospital record of Kanti Children's Hospital,Nepal. In-depth interview guideline, case study method, digital recording and field notes were used for data collection. Data was analyzed using Interpretative Phenomenological Analysis and ATLAS. ti 7 software 7.5.7 version. Five major themes emerged: Socioeconomic Burden, Alteration in Life, Crisis Situation, Coping Strategies and Optimistic Attitude. Initially, mothers experienced distress, disbelief, denial and gradually accepted the condition. It has created distressing adverse impact on life. Hence, an educational package and counseling should be provided focusing on disease, child care and coping strategies to make aware to mothers and prepare them physically and emotionally.

Keywords: *Leukemia, lived experience, qualitative research.*

Introduction

Childhood cancers are unnoticed in developing countries, 80 % of the childhood canceroccur in the low-income and middle-income countries.[1] In India, leukemia is the most common childhood cancer with 25% to 40% of relative proportion which contributes to mortality in children.[2]

In the Western Development Region of Nepal, 33 cases recognized as childhood cancer among 1217 total cancer cases.[3] In Nepal, among 755 children with cancer diagnosed at Kanti Children's Hospital, number of Acute Lymphoblastic Leukemia Children was 300 from March 1998 to March 2012.[4] Leukemia accounts for 36 cases among 77 new cases of cancer diagnosed in Kanti Children's Hospital between December 2015 to November 2016.[5]

Mother experience burden in emotional, mental and physical aspects which may affect quality of care provided to children and lead to imbalances in their own health.[6]

This study aims to explore lived experiences of mothers with leukemic children residing in Kathmandu.

Material and Method

Hermeneutic phenomenological, qualitative study was conducted in residence of participants who were selected from hospital record of Kanti Children's Hospital, Kathmandu. The total study period was eleven months (28/05/2017 to 13/04/2018). Ten mothers who had a Leukemia child having treatment in Kanti Children's Hospital were enrolled purposively in the

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study. After taking verbal and written consent, face to face interview was conducted in an actual, natural environment by using semi-structured In-depth interview guideline from 5th July to 28th July 2017. Among 10 participants, four were selected for case study that were distinct to each other and followed after 2 months. With permission, all interviews were digitally audio-taped and a field note was taken for unspecified behavior and critical information. Two to five interviews were taken from each study participant until data saturation.

The collected data were transcribed in Nepali language in reference to memos, field notes and tape recordings. Coding of transcripts was aided using ATLAS.ti 7 qualitative data analysis software of 7.5.7 version (1993-2017 Atlas.ti Gmbh, Berlin). Data was analyzed thematically by using Interpretative phenomenological analysis.

Findings: Majority of the participants were from upper caste groups and advantaged janajatis. Nine out of the 10 participants belonged to nuclear family and Hindu religion. Half (5/10) of the participants had completed secondary level education, worked as homemakers and their spouse worked as abroad worker before child's diagnosis. Eight participants mentioned that their income was sufficient for less than 6 months.

Leukemia children were from age group 2-13 years and mean age was 5.8 years. Most of the children (6/10) were female. Half (5/10) of them were first born child and under Maintenance Phase of treatment. The duration of diagnosis at the first interview was 2-27 months and 6.7 months in average.

Five themes were recognized from various levels of analysis and pseudonyms were used;

1. Socioeconomic Burden
2. Alteration in Life
3. Crisis situation
4. Coping strategies
5. Optimistic Attitude

Theme 1: Socioeconomic Burden: All participants faced financial problem. Almost all (9/10) of them were residing in rented houses in Kathmandu for the sake of treatment of their leukemia child. They said that earning also stopped but anyhow treatment should be continued and had taken a lot of loans.

"*If we had any asset, we would sell them but we have nothing to sell. If I could, I would sell my own body. But it is also not possible*". [Rita]

"Earning has stopped as both of us (parents) are engaged in treatment of our son. Because of this we are unable to continue business". [Rama]

In response to treatment process, majority of participants perceived leukemia treatment as a long and expensive treatment process.

"Treatment does not end after 1-2 months and *it takes 3 years to complete the treatment course".*[Sita] [Yamuna] [Gita]

One participant experienced distrust by friends and relatives as every time help is not possible and in case of leukemia, mothers were deemed as being unable to return back money so didn't get financial help every time. Three participants also expressed that financial support is not always possible from the hospital.

"*There is no free service in hospital except in oncology ward. We don't always get chance and are not always lucky to admit in that ward".* [Rama]

Participants expressed increased expenditure.

" *I need money not only for expense of medicine but also for transportation, school fee, food for sick baby like meat and fruits".* [Rama]

Participants could not attend any social functions as well as other's invitations as they can neither leave their child at home nor take them along. Almost all participants were isolated from relatives, friends, parents and neighbors. Four participants expressed that they could not contact their relatives as their homes were far. One participant used to avoid her parents to hide her problems and control herself.Two participants want to be on their own world.

"Feel sad when relatives come to visit. I am in my own world. Slowly, I will be maintaining to become fresh but when someone comes, I again remember the past days".[Rama]

Participants had restricted the relatives from smoking, wearing shoes in room, also limited visit of relatives who were not clean and the child was kept in distance with other sick children and who coughed a lot. They thought that others will infect their child.

Theme 2: Alteration in Life: Almost all of them experienced disturbance in work. Four of them had left their farming work and one can't continue business. Both of the parents can't do any work well as they are mostly devoted in caring for their leukemic child rather than in earning and other works. They are not able to complete any work as before.

"Daughters cook themselves and eat whatever they like. I am unable to care for them". "My elder son also has exam but I can't give him time during his study". [Sita]

All interviewed participants expressed that they have no leisure time.

"Learned Boutique works and used to design clothes before child's illness. Now, I cannot do anything and just take care of my babies".[Sita]

Participants experienced that care is unavoidable and must do work anyhow as majority of the participants were from nuclear family. Participants experienced increased work load.

"When I go to hospital my husband stay at home and vice versa, doing for the child without caring our own health". [Ishwori]

"*Work increased after child's illness. Require frequent hospitalization, investigations, blood transfusion and should maintain cleanliness in everything else".* [All participants]

Participants eating pattern and daily schedule were planned according to leukemia child's condition or days passed haphazardly without any plan.

"Our eating time is not fixed". [Manita]

"Only eat those things which are healthy for my child. Previous eating pattern has changed". [Prema]

Theme 3: Crisis Situation

Nature of Leukemia: Three of the participants expressed that there is no disease more difficult in Nepal than leukemia which brings many sorrows in life. One of the participants was surprised to learn that it also occurred in children as only seen in elderly people. They experienced fear from time to time that it was incurable.

Most of the participants experienced that children with leukemia had multiple symptoms of leukemia which were mild in appearance distressed participants when diagnosed as leukemia and symptoms were different in every child. Initial symptoms subsided itself or after giving minor cetamol/vitamins. Eight participants perceived diverse causes of initial symptoms occurred in children. Due to this, early diagnosis of disease was missed.

"Child had mild leg pain. He could go to school and come home regularly. I had once seen bluish patches at the side of his leg but thought that he had fallen somewhere and subsided itself without any treatment". [Rama]

Period of agony, Disbelief and Denial: Participants experienced that their life became nerve-racking due to unpredicted happening while receiving breaking bad news. Initially, participants experienced distress. Most of the participants had visited various hospitals, blood tested repeatedly and sent bone marrow biopsy investigation to India for confirmation but report comes only after 14-20 days.

"Felt sad wondering about the report but even after receiving report I felt very sad". [Rama]

"Felt that sky and earth joined each other". [Sita]

"I should have died first, instead, my child will die on my lap...how can I control myself". [Rita]

"Felt what to do, what not to do and where to go to die". [Lata]

"I felt uneasy and became blind surrounded by black cloud. I just remember carrying baby and not seeing anything in front of me". [Prema]

Two participants experienced anxiety towards God and their fate.

"*Used to say to God that you gave me child yourself then why you make my child suffer from such things. I wonder how much time I have left to stay with my child. I pray that God take her away soon if you have already planned to take her away from me. I cannot tolerate my child's pain anymore".* [Anita]

Uncertainty of Life Participants felt self-doubting and experienced difficulty living with uncertainty. Participants experienced that anything can happen at any time when their child suffered from side effects.

Multiple Problems of Mother: After child was

diagnosed with leukemia, participants experienced deterioration in their own physical health. Majority of them hide their own problems. They reported weight loss, severe headache, gastritis, increased uric acid, weakness, fatigue, leg pain. swelling,whole body ache, anorexia, bitter taste, heart burning and low pressure.

Emotional Disturbance: Six participants experienced tension and three of them started to forget things. One of them had sleep problem and experienced fear. Participants experienced being preoccupied in thoughts even during leisure period.

"Now-a-days, I used to forget things and when I go for one work, I end up doing something else". [Anita]

Participants experienced restlessness when they left their children at hospital with other family members. They experienced speechless or difficulty in answering queries of child and other people.

Theme 4: Coping Strategies: All participants used to ventilate their emotions by crying. They relieved stress and pain when they went to hospital and shared feelings with friends who had same problem. Also, participant and child used to support each other; participant, by taking good care of child emotionally, physically, mentally and child, by providing reassurance to participant when she felt tensed. Almost all participants strengthened their inner power to control self and accepted the unavoidable condition as well.

"Now I feel that there is no solution by crying". [Anita]

"I make my heart little bit strong. I feel that if I take good care of him, he will become healthy and recover soon". [Yamuna]

Participants hide their pain and spend time in rearing and caring child. When they involve with children, they forget their difficulties.

Nine participants expressed that they had no time to do any alternative therapy such as yoga, recreational activities and meditation. However, one of the participants who is from Newar community used to meditate occasionally. One of the participants used smoking as coping strategy to relieve stress.

Theme: 5 Optimistic Attitude: All participants had strong faith in God. They believe that child will get well as God may favor them positively.

"I keep praying to God to save my daughter. For her health, performed Pooja and also went to Phukne Manchhe. What is written in our fortune...Just hope to God". [Manita]

Nine participants expected for recovery from the disease.

"I have seen others being recovered so if there is no any obstacles, he eats well and if we also care properly in all things it will be recovered". [Rama]

Participants experienced untiring attempt for the sake of child's treatment as they had hope of recovery. They experienced sense of responsibility and determination as they said that they will do whatever they can for their child. All of them regularly maintained leukemic child's health.

"I will save her by doing anything and facing any difficulties. Our asset is our daughter. If she is with us, we have everything and if she is not with us, nothing in our life". [Anita]

Participants experienced sense of positivity due to harmonious relationship with Family. They trust doctors and nurses for recovery of their children. One participant being optimistic expressed that she will make her son doctor and another participant had planned to educate her child well in future.

Participants had positive attitude towards recovery as they got some help from others and hospital has managed free bed charge, free investigation and distributing available medicines in oncology ward.

Triangulation between In-Depth Interview and Case Study Findings: The case study findings were congruent with the verse of the participants. Somatic problems of participants continued as they undermine own health in front of their child's condition. Some contradictory findings as the duration of diagnosis and type of leukemia vary. Contradictory findings after 2.5 years of treatment as child's health was improving and hospital visit for child's treatment had decreased. Participants worried about relapse of disease. All participants had fear regarding side effects of the treatment and upcoming emergency situations. This fear was present constantly.

Discussion

Participants experienced many financial challenges

during treatment which is a long process. Similarly, another study mentioned that mothers face financial burden regarding treatment.[7]

Participants were isolated from relatives, friends, parents and neighbors. This finding is supported by another study which showed that the treatment process had restricted social interaction as they spent a lot of time in taking care of the sick child.[8]

Majority of parents had left their work and were not able to complete any work as before. This is in consistent with the Canadian study which revealed that 64% of mothers left their job after their child's diagnosis.[9]

Participants experienced that their life became scary because of unexpected happening. These findings were supported by other study which mentioned that mothers experienced sadness and grief.[7]

Participants felt insecure as leukemia child had various side effects and experienced that anything can happen at any time. Another study reported that basic feelings of security departed and family members underwent more vulnerable when confronted with facts about disease.[10]

It was found that uneducated participant felt difficulty in coping as child's treatment option was bone marrow replacement and more worried in comparison to other educated participant. This finding is supported by other study which mentioned that those having lowest level of education had more psychological distress than those with university education.[11]

Conclusion

Child's Leukemia affected mothers socially, physically and psychologically. Almost all participants faced financial challenges, alteration in their daily routines and crisis situation. Most of the participants coped effectively but one participant coped ineffectively. Participants need help to cope in such situation. Support group and self help group need to be formed in order to safeguard mothers having leukemia children.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: The ethical permission was obtained from Tribhuvan University, Institute of Medicine and Kanti Children's Hospital, Maharajgunj, Nepal before conducting the research.

References

1. Rodriguez-Galindo C, Friedrich P, Morrissey L, Frazier L. Global challenges in pediatric oncology. Curr Opin Pediatr. 2013; 25(1):3–15. DOI: 10.1097/MOP.0b013e32835c1cbe.[PubMed]
2. Girish Babu KL, Doddamani GM, Mathew J, Jagadeesh KN, Kumaraswamy Naik LR. Pediatric leukemia. J. Pediatr. Dent. 2015;3(1):8-16. DOI:10.4103/2321-6646.151841
3. Yadav PK, Sathian B, Sherchan R, Fatima H, Sharan K, Hussain SA, et al. Pattern of pediatric oncology cases in the western region of Nepal. Asian Pac J Cancer Prev. 2017;18 (12): 3213-3215. DOI:10.22034/APJCP.2017.18.12.3213
4. Sah KP, Arora RS, Sapkota S, Poudel Y, Pizer B. Pediatric oncology services in Nepal.South Asian Journal of Cancer. 2014; 3: 227–228. DOI:10.4103/2278-330X.142987
5. Pandit A, Tiwari PN, Shah K, Thapa S, Shah N. An insight on hemato-oncology department at tertiary center of Nepal. Souvenir 2017, Kanti Children ' s Hospital.
6. Rubira EA, Belasco AGS, Gaíva MAM, Espinosa MM, Marcon SR. Burden and quality of life of caregivers of children and adolescents with chemotherapy treatment for cancer. ACTA Paul. Enferm. 2012; 25:567–573. DOI:10.1590/s0103-21002012005000020
7. Cornelio SJ, Nayak BS, George A. Experiences of mothers on parenting children with leukemia. Indian J. Palliat. Care. 2016; 22:168–172. DOI:10.4103/0973-1075.179608
8. Okumu R, Muiva M, Wagoro M, Abdallah F, Oweya E. Association between socioeconomic and psychological experiences of parents with children on Leukemia treatment in Kenyatta National Hospital, Kenya. Asia-Pacific J. Oncol. Nurs. 2017;4:38. DOI:10.4103/2347-5625.199079
9. Limburg H, Shaw AK, McBride ML. Impact of childhood cancer on parental employment and sources of income: a Canadian pilot study. Pediatr Blood Cancer. 2008;51:93–98. DOI:10.1002/pbc.21448

10. Bjork M. Living with childhood cancer - family members' experiences and needs. Lund University. Faculty of Medicine. 2008; ISBN 978-91-86059-13-2 ISSN1652-8220. Doctoral Dissertation. Available from https://lup.lub.lu.se/search/ws/files/4069139/1148900.pdf

11. Okumu RA, Asessment of Psychosocial Experiences of Parents Whose Children Are Undergoing Leukemia Treatment at Kenyatta National Hospital. Published in University of Nairobi. November 2015. Master Degree Dissertation.

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Women's Views and Experience of Respectful Maternity Care While Delivering in Three Regional Referral Hospitals of Bhutan

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Abstract

Background: Labour and childbirth represent one of the most vulnerable periods in women's life and ensuring the quality of respectful maternity care during labour and childbirth still remains challenging. There are activities to promote respect for women's right, including respect for their autonomy, dignity; feelings, choices and preference. However, little has been known about the elements of respectful maternity care provided to women during labour and childbirth in health facilities.

Objectives: The purpose of the study is to explore the attitudes, views, behaviors and emotional experienced by women related to labour and childbirth and to describe women's satisfaction with RMC in three regional hospitals of Bhutan.

Method: Cross-sectional study with the sample size of 426 from JDWNRH in Thimphu, CRRH in Gelephu and ERRH in Mongar. All women who delivered in November - December 2018 were included in the study. The structured questionnaire was used, relevant literature sources were reviewed and finalized in our setting and was piloted in Bajo Hospital after approved by Research Ethics Board of Health (REBH). Descriptive analysis done and all the information gathered are presented in the form of frequencies, percentages and number for categorical variables. The scientific significance shows in foul language (0.033) and scolding (0.020).

Results: Satisfaction rate ranged from excellent to unsatisfactory concerning the services, women stated excellent (37.10%), very good (31.20%), Good (20.20%), mixed feeling (9.20%), rather unsatisfactory (1.90%) and unsatisfactory (0.50%). Concerning the whole process of labour and childbirth, dreadful experiences was (41.8%).

Conclusion: There is need to improve on communication for information, permission, policy for dignity and privacy for women. Need to include in the pre-service curriculum for nurses and health workers and to provide in-service education on RMC to all health personnel providing maternity services.

Keywords: *Bhutan, women, attitudes, views, behaviors, emotional, satisfaction, communication, dignity, privacy, hospitals and RMC.*

Introduction

Labour and childbirth represent one of the most vulnerable period in women's life and ensuring the quality of care with respectful during labour and childbirth still remains challenging. There are activities to promote respect for women's right, including respect for their autonomy, dignity, feelings, choices and preference however, little is known about the elements of respectful maternity care provided to women during labour and childbirth in health facilities. Respectful maternity care are been neither reflected in pre-service curriculum nor mentioned in any policy document.

The study intends to gain in-depth understanding of RMC from the perspective of women during labour and childbirth in referral hospitals. Generally, women were encouraged to choose to give birth in health

care facilities to ensure proper skilled health care professionals but disrespectful and undignified care is prevalent in many facility settings particularly for underprivileged, which will not guarantee good quality care and negative childbearing experiences remains with the woman throughout her life. This study aims to find out the experiences of women about all these aspects: attitudes, views, behaviors and emotional experiences, while availing the maternity services during the time of labour and childbirth in the three regional hospitals namely JDWNRH at Thimphu, ERRH in Monger and CRRH of Gelephu so that it can help in informing decision and policy makers to come up with appropriate strategies and program related to RMC for both the care provider and for the consumers. Therefore, this is a timely study to assess the RMC from the perspective of consumers' women and their family members as study had already been carried out on care providers especially among nurse midwives[8] as there was no study done on it, in Bhutan. This study intends to gain in-depth understanding on views and experience of women in receiving respectful maternity care based on seven rights charter of childbearing women developed by White Ribbon Alliance during labour and childbirth while delivering in health facilities of Bhutan, which unites citizens to demand the right to a safe birth for every woman. Although, Bhutan has made significant progress in bringing down Maternal Mortality Ratio from 560 deaths per 100,000 live births in 1990 to 86 in 2012, the proportion of births attended by skilled health personnel in Bhutan has been only 74.6% in the same year 2016.[1&8]

Method

Study design and setting: Cross-sectional study with the sample size of 426 from JDWNRH in Thimphu, CRRH in Gelephu and ERRH in Mongar from November to December 2018 was taken. Ethical consideration was approved by REBH, Ministry of Health (MoH), Thimphu and administrative clearance from JDWNRH, ERRH and CRRH to conduct the study was obtained. The study sites are chosen purposefully as there is high delivery volume taking place in these hospitals every year.[1]

Moreover, there is separate birthing unit in these hospitals where nurse midwives are assigned in birthing unit to provide maternity care to the pregnant women in labour and childbirth. Only those participants who had agreed to participate and signed the informed consent which was made available both in English and Dzongkha were included and interviewed for the study.

Data collection: Structured questionnaire was adapted and used from Survey Report[8 & 10] and relevant sources which was pilot tested for its reliability in Bajo Hospital, Bhutan. The tool was in depth interview questionnaire with both open and closed ended questions to allow the women to express freely of their opinions. Interview were done for women who had delivered after 6 hours of delivery and during postnatal period (42 days) which was expected to take not more than 30 minutes. Interviewing was considered an appropriate method in collecting data for this study due to women's differing literacy levels.

Statistical Analysis: Descriptive analysis were undertaken and the information from this are presented in the form of frequencies, percentages and number for categorical variables on demographic profile, experiences on labour on childbirth, experiences on vaginal examination, scolding, episiotomy, physical abuse, verbal abuse, affects of attitude, views, behaviors, emotional experiences, and the satisfaction rate of RMC. The most applicable regressions analyses is done to examine factors associated with delivery of respectful maternity care and a two sided p-value of <0.05 will be regarded as indicating statistical significance.

Findings:

Demographic profile: Minimum age was 18 years, maximum age was 44 years and mean age was 27.37. The finding of different age groups were in between 25-34 years (64.80%), 18-24 years (30.30%) and 35-44 years (4.90%) respectively.

The occupations of the women in the study were house-wives (74.60%), government service (12.10%), private sectors (7.30%) and business (4%).

According to the number of women receiving the services in these three hospitals, we obtain the sample to be collected from each regional hospital were, from JDWNRH (70.7%), from ERRH (10.6%) and from CRRH (18.8%).

Experiences of labour and childbirth: Dreadful experience (41.8%) was expressed by the women and only (4%) had wonderful experience. There are women who had unpleasant experience (18.10%), pleasant experience (10.10%) and even okey (26.80%) with the labour and childbirth.

Amongst the care providers, nurse midwives play significant role in shaping the maternal health experiences of a woman from the ways in which maternity services to mothers and their babies are provided that would either empower and comfort the woman or inflict lasting damage and emotional trauma.[8,11 & 12]

Women's Experience on Vaginal examination: 88.7% of women were asked for permission to perform vaginal examination but there women who were not even asked (0.6%) and some did not response to the question (0.7%).

One of the important components of maternal health care quality is the women's experience of childbirth and that their feelings, dignity and preferences must be respected.[4,5 & 9]

Women's Experience on Physical and verbal abuse: Through interview, women in the study experienced physical and verbal abuse during the time of their labour and childbirth, even though the number is not high, but women had experienced scolding (75.8%) which is higher than beat with hand or instrument (2.3%), Pinch on their thigh (1.6%), Use of Foul language (0.9%).

Regression analysis shows the scientific significance in use of foul language (0.033) and scolding (0.020).

The concept of RMC acknowledges that women's experiences of childbirth are vital components of health care quality and that their "autonomy, dignity, feelings, choices, and preferences must be respected.[2,5 & 8] While concerted efforts have been put in globally to remove barriers against accessing skilled birth attendance, studies have suggested that disrespect and abuse that woman often encountered in facility based maternity care are more potential deterrent to skilled birth care utilization than the usually recognized ones such as financial and geographical obstacles.[7,10 & 11]

Women's Experience on episiotomy: During the study, some women received explanation about the episiotomy procedure, but some women did not receive any explanation about the episiotomy procedure. This clearly shows that there is lack of communication, the right to information, right for consent for episiotomy procedures around the time of childbirth for women in labour and childbirth. It also indicates that the practice of episiotomy without woman's notification or consent is taking place.

Women's view to have nurse midwife to be present during labour: Preferable, it is better for the midwife nurses to be near the woman during the entire process of the childbirth because 37.1% prefer health professional present during entire process labour or as much as possible and 25.8% prefer health profession when necessary.

Women view on health professional to be present during the labour and childbirth; they preferred to have them during entire process or as much as possible, which indicates the value of presence of midwife during the entire process.[5,11 & 12]

Growing evidence from both low and high resource countries suggest that the care women receive during labour and childbirth is sometimes rude, disrespectful, abusive and not responsive to their needs. It also shows that quality of care received at the facility-based maternity services is not optimal and often lacking in the element of respectful maternity care. There are also seven categories of disrespect and abuse in childbirth identified: physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination based on specific patient attributes abandonment of care, and detention in facilities.[3,4 & 7]

Women's views on communication, discrimination, dignity: Generally during the labour and childbirth, the service is expected to be 100% excellent because women go into postpartum depression sometimes after the delivery with the traumatic experience of the labour and childbirth. There is different ways that nurse midwife can address this incident through proper communications with the women, no discrimination and by providing dignity for the women. Though the significant number is low, but we still have women who require for good communication, dignity of women and no discrimination while availing the services.

The sustainable goal 3 which is to ensure healthy lives and promote well-being for all woman at all ages brings attention towards improving the quality of maternity health services for the world's over 200 million childbearing women who want and deserve to be treated with respect and dignity during the time of labour and childbirth. It is also a time of an intense vulnerability apart from momentous events of their life. Women who receive mistreatment during childbirth are also less likely to return to health facilities for future birth.[1,4 & 6]

Discussion

Satisfaction rate that ranged from excellent to unsatisfactory concerning the services, we had women who stated excellent (37.10%), very good (31.20%), Good (20.20%), but there were even women who had mixed feeling (9.20%), rather unsatisfactory (1.90%) and unsatisfactory (0.50%). Concerning the whole process of labour and childbirth, there are women who had dreadful experiences (41.8%). There are finding on the services that still needs to improve on lack of communication, right for information and permission, providing dignity and privacy for the women because these all are essential for the services provider to deliver to the women who are in labour and childbirth with so much stress.

The seven rights of all woman while in labour and during the time of delivery are right to be free from ill-treatment and harm; right to information, informed consent, refusal and respect for choices and preferences including companionship during maternity care. It also includes the right to privacy and confidentiality; right to be treated with dignity and respect; right to equitable care; right to highest attainable level of healthcare and right to liberty and autonomy, self-determination and freedom from coercion.[2,4 & 5]

Conclusion

Communications skills are enormously advised to be improved by the health care provider in providing the information, asking permission, follow the policy of dignity and privacy for the women. Though the number is low and not significant, we still have women who refused to response during the interview, which we need them to open up their views to improve the services of RMC.

We still need to include RMC topic in the preservice curriculum for nurses and health workers and in addition require in-service education on RMC to create awareness among health care providers to enhance RMC for women receiving maternity care during labour and childbirth.

Conflict of Interest: None

Acknowledgement: We are very grateful with UNFPA for the fund to carry out this research and would like to thank with all the health care providers in assisting us for data collection, the women who participated in the study even after they went through rough labour and childbirth and all three hospitals (JDWNRH/CRRH/ERRH) for approving to conduct the study.

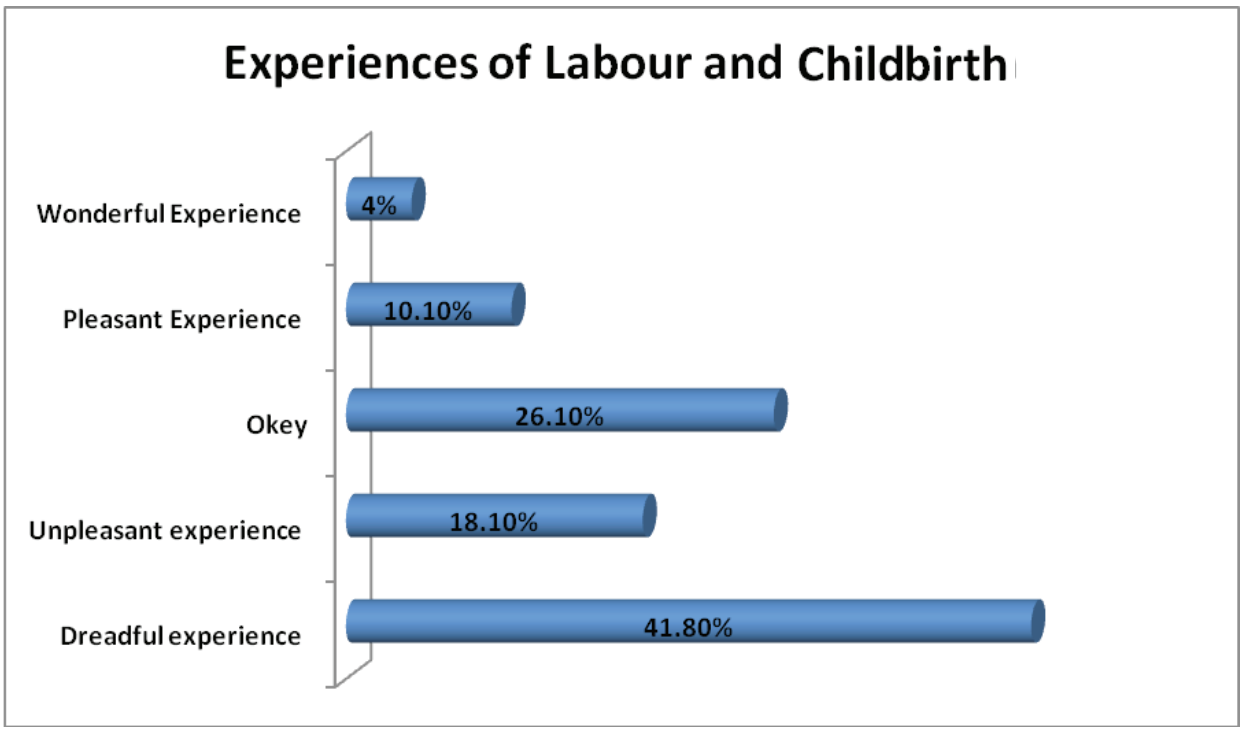

Figure 1: Overall experiences of labour and childbirth

Table 1: Women's Experience on Vaginal examination (n = 426)

Variables	Number	Percent	No Response
	Yes	No	
Seek Permission during vaginal examination	378 (88.7%)	45 (10.6%)	3 (0.7%)
Preferred not to have them	69	16.2%	
I did not mind	92	21.6%	
Found helpful (information about progress of labour)	264	62%	
No Response	1	(0.6%)	

Table 2: Women's Experience on scolding and episiotomy

Variables	Number	Percent	No Response	n
	Yes	No		
Scolded for making noise and shouting	22 (7.9%)	255 (92.1%)	-	277
Scolded for pushing before time	16 (9.6%)	150 (90.4%)	-	166
Explained about episiotomy	68 (63.6%)	36 (33.6%)	3 (2.8%)	107

Table 3: Affects of attitude, views, behaviors and emotional experiences of women related to labour and childbirth. (n=426)

Variables	Yes	No	No Response
Greet in respectful manner	368 (86%)	58 (13.6%)	-
Respect for beliefs, tradition and culture	372 (87.3%)	10 (2.3%)	44 (10.3%)
Encourage women to have support person during labour	410 (96.2%)	11 (2.6%)	5 (1.2%)
Provision of continuous support during labour	410 (96.2%)	12 (2.8%)	4 (0.9%)
Encourage women to have support person during delivery	420 (98.6%)	4 (0.9%)	2 (0.5%)
Explained procedure before proceeding	402 (94.4%)	21 (4.9%)	3 (0.7%)
Informed women the findings	422 (99.1%)	3 (0.7%)	1 (0.2%)
Encourage the women to ask questions about her labour and childbirth	313 (73.5%)	11 (26.1%)	2 (0.5%)
Privacy during labour and child birth	422 (99.1%)	1 (0.1%)	3 (0.7%)
Right to information about confidentiality and privacy	425 (99.8%)	1 (0.2%)	-
Explained about what will happen during labour	378 (88.7%)	45 (10.6%)	3 (0.7%)
Support women in friendly way during labour	419 (98.4%)	5 (1.2%)	2 (0.5%)
Provide drapes before delivery	414 (97.2%)	7 (1.6%)	5 (1.2%)
Institutional violence against women-Scolding	323 (75.8%)	102 (23.9%)	1 (0.2%)
Beat with hand or instrument	10 (2.3%)	413 (96.9%)	3 (0.7%)
Pinch on their thigh	7 (1.6%)	416 (97.7%)	3 (0.7%)
Use Foul language	4 (0.9%)	419 (98.4%)	903 (0.7%)
Encourage or advice to drink during labour	275 (64.6%)	151 (35.4%)	-
Encourage or advice to eat during labour	113 (26.5%)	313 (73.5%)	-

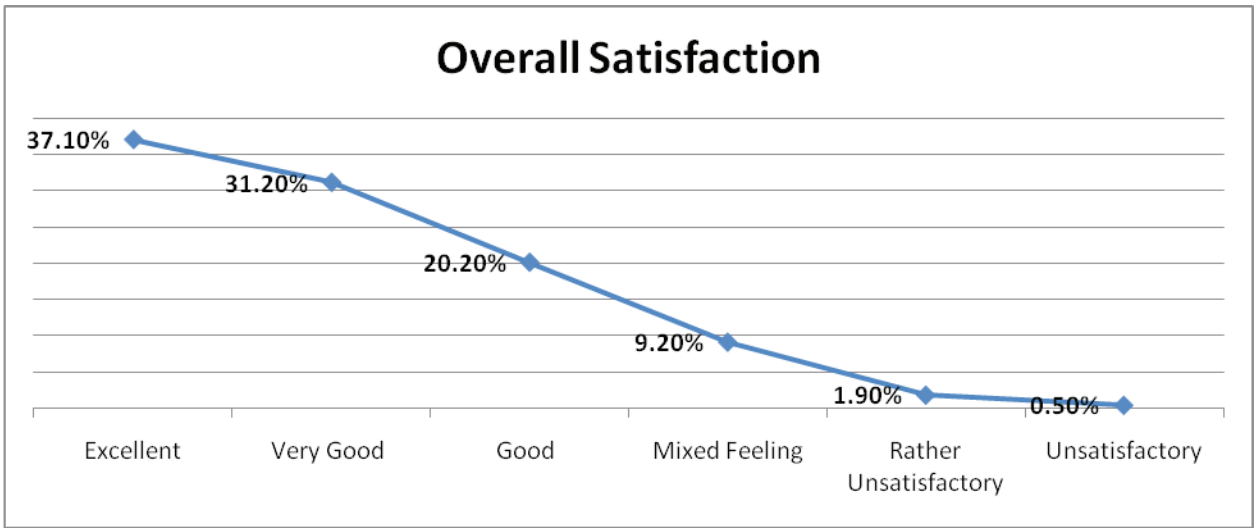

Figure 2: The Satisfaction rate of RMC during their labour and childbirth (n=426)

References

1. Annual Health Bulletin 2016: Health Management and Information System Policy and Planning Division, Ministry of Health; 2016.
2. McConville B. Respectful maternity care-How the UK is learning from the developing world. White Ribbon Alliance for Safe Motherhood UK 2014;30:154-157.
3. Moyer Cheryl A, Adongo Philip B, Aborigo Raymond A, et al. They treat you like you are not a human being: Maltreatment during labour and delivery in rural northern Ghana. Elsevier 2014; 30(2): 262-268.
4. Bowser D, Hill K. Exploring Evidence for Disrespect and Abuse in Facility-Based Childbirth report of a landscape analysis. United States Agency for International Development. 2010.
5. Windau-Melmer T. A guide for Advocating for Respectful Maternity CareWashington DC. Future Group, Health Policy Project 2013.
6. McMahon Shannon A, George Asha S, Chebet Joy J, et al. Experiences of and responses to disrespectful maternity care and abuse during childbirth; a qualitative study with women and men in Morogoro region, Tanzania. BMC Pregnancy Childbirth 2014;(14): 268.
7. Miller S, Abaalos E, Chamillard M, et al. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. The Lancet 2016; 388(10056): 2176-2192.
8. Deki S and Choden J. Assess Knowledge, Attitude and Practices of Respectful Maternity Care among nurse midwives in Referral Hospitals of Bhutan. Bhutan Health Journal 2018 May; 4(1).
9. World Health Organization. Prevention and elimination of disrespect and abuse during childbirth. Reproductive Health and Research 2014.
10. Reis V, Deller B, Carr C, et all. Respectful Maternity Care Country experiences survey report. United States Agency for International Development (USAID)2012.
11. Rosen H, Lynam P, Carr C, et al. Direct observation of respectful maternity care in five countriesa cross-sectional study of health facilities in East and Southern Africa. BMC Pregnancy & Childbirth 2015;(15):306.
12. Burrowes S, Holcombe S, Jara D, et all. Midwive's and patient's perspectives on disrespect and abuse during labor and delivery care in Ethiopia a qualitative study. BMC Pregnancy & Childbirth 2017;(17):263.

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Effect of Implementing Guidelines Regarding Administering Inotropic Medications for Critically Ill Patients on Nurses' Practice

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Abstract

Background: There is no teaching guidelines depicted for improving the practice of nurses towards inotropic medication administration, which emphasizes the importance of clinical guidelines in improving nurses' practice, Purpose: To assess the effect of implementing guidelines regarding administering inotropic medications for critically ill patients on nurses' practice, Methods: This single-hospital, Quasi-experimental research design was used in the study. The present study was carried out at Critical Care Units. A convenient sample of all staff nurses (60 nurses), the data were collected using one tool named nurses' observational checklist, Results: 93.3% of studied nurses had satisfactory level of practice regarding inotropic medications post implementing intervention guidelines. The post and follow up-intervention practice mean score was high 48.80, 48 respectively when compared with pre-intervention practice mean score 31.40 with P value<.001*, Conclusion: There was significant difference in the nurses' practice mean scores regarding inotropic medications in post and follow-up implementing guidelines when compared with pre-intervention mean practice score with P value<.001. .

Keywords: *Critically ill patients, Inotropic medications, Nurses' practice and Teaching guidelines.*

Introduction

Inotropes are medications which affect the contractile activity of the myocardium. These medications are frequently used in critical care units. Inotropic medications are short- to medium-acting medications which are used to increase tone of vessels and cardiac output in variable conditions that affect critically ill patients. They are temporary used as measure until adequate cardiovascular function returns on resolution of the pathological process. Inotropic medications are among the most widely used medications in Critical Care Units, since they help patients to correct hemodynamic instability[(1)].

A critical care nurse is a vital part of the health care profession, the process of medication administration is thought as one core nursing action and nursing practice daily component that spend about 40% of nurses time in the hospital to administer medications. Also, there are many causes why medication administration errors can be done by a nurse, which is inadequate training, lack of knowledge and practice regarding inotropic medications and high workload [(2)].

Inotropic medications infusion therapy is associated with many complications including myocardial ischemia and may induce hypotension in some cases. Apart from metabolic, cardiovascular and dermatologic side effects,

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these sympathomimetic medications may result in central nervous system stimulation including, tremors, restlessness, and even confusion and psychosis. Also, infiltration and extravasation which might occur when the intravenous solution leaks into the surrounding tissues. When a vesicant solution leaks from the vein into the surrounding tissue, extravasation occurs, whereas leakage of a no vesicant solution is called infiltration [3].

Furthermore, in Egypt and developing countries, it is hard to obtain accurate data and statistics regarding medication administration errors due to lack of proper archiving as well as the data registered system absence. Also, in Egypt there is a lack of clinical educational guidelines aimed at improving the nurses' knowledge toward medication administration in the critical care field, which affects negatively on the quality of nursing care [4].Observational studies likewise have revealed that the majority of nurses fail to follow the 'protocols' for the safe administration of medications [5]. Therefore, the core aim of this study is to evaluate the effect of implementing intervention guidelines regarding inotropic medications for critically ill patients on nurses' practice.

Purpose: To assess the effect of implementing guidelines regarding administering inotropic medications for critically ill patients on nurses' practice

Research hypothesis:

The following research hypothesis will be formulated to fulfill the aim of this study:

The nurses' practice about administering inotropic medications for critically ill patients is improved after implementing guidelines regarding administration of inotropic medications.

Methods and Procedures

Design: A single-hospital, Quasi-experimental research design was used in the study; pretest and posttest design was used for this study.

Participants: A convenient sample was used in this study. At time of data collection 1st of June 2018 to end of March 2019 participants comprised nurses (male and female) (60 nurses)

Procedures:

Instruments:

Data were collected using parts as the following:

Part (1):

Tool (1): It was concerned with demographic data of the studied nurses

Part (2):

Tool (I): Nurses' practice observational checklist

It was developed by the researcher based on the literature[6] to assess nurses' practice regarding the administration of inotropic medications

Scoring system: The total score of the nursing practices was ranged from 0 to 53 of the 53 items of steps. The possible choice for each item was done and not done. Each nurse was given one scores for step done and zero for that was not done. A total score of 75% and more was considered satisfactory, while a score below 75% was considered unsatisfactory [4].

Data collection:

Data collection of this study was carried out over eight month period that started from 1st of June 2018 to end of March 2019. Data collection was conducted through four phases (assessment, planning, implementation and evaluation phase).

A. **Assessment phase:** Assessment of critical care nurses' practices about inotropic medications was performed.

B. **Planning phase:** Based on the work completed in phase one ,the researcher designed the teaching guidelines based on the actual need assessment of studied nurses through reviewing the literature and based on recent evidence based teaching guidelines for administered inotropic medications.

C. **Implementation phase:** Data of current study were collected from June 2018 to March 2019. Each nurse's practice as regards the pre-determined procedure was evaluated before any information (pre-test) utilizing the formulated checklists. Then the subject was divided in small group (6 nurses),

demonstration and redemonstration were carried on 2 sessions for each nurse. Practical booklet was given to each nurse.

The number of nurses was (6 nurses) during the session. The content was repeated for each group by researcher. Demonstrations and redemonstration were used in practical teaching methods as regards to media used; they were booklet, posters, real object video and redemonstration.

The tools were administered to the study subject three times (1) before guidelines implementation (pre-test); (2) immediately after guidelines implementation; and (3) follow up after guidelines to assess the effect of designed guidelines.

D. Evaluation of designed teaching guidelines: Nurses' practice was evaluated three times pre/ post and two months later after implementation of teaching guidelines.

Statistical Analysis: Data collected through observation checklist were coded, entered and analyzed using Statistical Package for the Social Sciences (SPSS version 20).

The following statistical techniques were used:

Percentage.

Mean score degree $\overline{X}$.

Standard deviation SD.

Paired T test

Repeated measured ANOVA test

Proportion probability of error (P- value) and confidence interval.

Significance of results:

When P<0.05, there is a statistically significant difference.

When P<0.01, there is a highly statistically significant difference.

Results

Text (1): shows that 80.7% of studied nurses' age was from 20 to less than 30 with mean age 26.13±3.35. As regard the level of education, the technical institute was the highest percent with 63.9% followed by diploma 21.3%.Also, 38.3% of studied nurses had from 3 to less than 6 years of experience. The majority of studied nurses (90. %) didn't attend courses regarding inotropic medications ago.

Table (1): Total mean scores of nurses' practice (pre-post-follow up) guidelines regarding inotropic medications (n=60)

Practice item	Pre	Post	Follow up	F test	P value
	Mean±SD	Mean±SD	Mean ±SD		
Preparation phase (drugs via infusion Pump)					
Preparing phase	2.75±1.52	4.48±1.04	4.38±.95	43.439	<.001
Preparation phase (intravenous digoxin)					
Preparing phase	2.16±1.23	4.68±.77	4.61±.78	150.86	<.001
Administration Phase (infusion pump)					
General steps	6.36±2.20	7.75±.60	7.60±.69	23.331	<.001
Administration of Adrenaline	4.31±1.26	6.55±.94	6.50±.91	118.06	<.001
Administration of Noradrenaline	2.46±1.11	4.60±.90	4.58±.86	112.53	<.001
Administration of Dopamine	3.66±1.29	5.73±.70	5.56±.85	69.721	<.001
Administration of Dobutamine	1.91±.56	2.80±.51	2.75±.50	62.72	<.001
Total Score of administration skills of infused inotropes	18.73±4.19	27.43±3.27	27.00±3.34	168.99	<.001
Administration Phase (intravenous digoxin)					
Administration of Digoxin	2.75±.79	3.91±.27	3.81±.50	87.531	<.001

Practice item	Pre	Post	Follow up	F test	P value
	Mean±SD	Mean±SD	Mean ±SD		
Post Procedure Phase (infusion Pump)					
General Steps Post-procedure	1.46±1.44	3.61±.84	3.53±.91	95.44	<.001
Post Procedure Phase (intravenous digoxin)					
General Steps Post-procedure	2.94±1.45	4.66±.91	4.66±.83	185.03	<.001
Total Practice Score (54 items)	31.41±7.71	48.80±6.60	48.01±6.65	165.207	<.001

N: sample size; SD: standard deviation; F repeated measures anova P value is significant ≤.05

Table (2): clarifies that there was statistically significant difference between the pre-practice of studied nurses and post-nurses' practice regarding inotropic medication with P value = <.001 with significant increase in their mean scores with total mean 48.80 with SD 6.60 and 48.01 with SD 6.65 respectively compared with the pre implementation phase with mean 31.41 and SD 7.71. Furthermore, that there was an improvement in the total mean scores of administration skills of infused inotropes in the post phase and follow up phase with total mean 27.43 with SD 3.27 and 27 with SD 3.34 respectively compared with the pre implementation phase with mean 18.73 and SD 4.19. Also, there was an improvement in the total mean scores of administration skills of digoxin in the post phase and follow up phase with total mean 3.91 with SD .27 and 3.81 with SD .50 respectively compared with the pre implementation phase with mean 2.75 and SD .79.

Table (2): Relationship between nurses' practice (pre and post) guidelines regarding inotropic medications (N=60).

Item	Pre- guidelines Mean(SD)	Post guidelines Mean(SD)	Confidence interval (CI)		t test	P value
			Lower	Upper		
Value	31.41(7.71)	48.80(6.60)	14.80	19.96	13.47	<.001
Mean difference (Effectiveness)	17.38(9.99)					

t test is paired sample t test , P value is significant <.05

Table (3): reveals that there was statistically significant difference between the pre-nurses' practice score of studied nurses and post-nurses' practice regarding inotropic medication with t=13.47 and P value = <.001. Also, the mean difference between the pre-nurses' practice versus post- nurses' practice was 17.38 with SD 9.99 with significant increase in their mean scores.

Table (3): Relationship between nurses' practice (pre and follow up) guidelines regarding inotropic medications (n=60).

Item	Pre- guidelines mean	Follow up-guidelines mean	Confidence interval (CI)		t test	P value
			Lower	Upper		
Value	31.41± 7.71	48.01±6.65	13.96	19.23	12.61	<.001
Mean difference (Effectivness)	16.60±10.19					

t test is paired sample t test , P value is significant <.05

Table (3): reveals that there was statistically significant difference between the pre-practice of studied nurses and post-nurses practice regarding inotropic medication with t=12.61 and P value = <.001. Also, the mean difference between the pre- practice versus post- practice was 16.60 with SD 10.19 with significant increase in their mean scores.

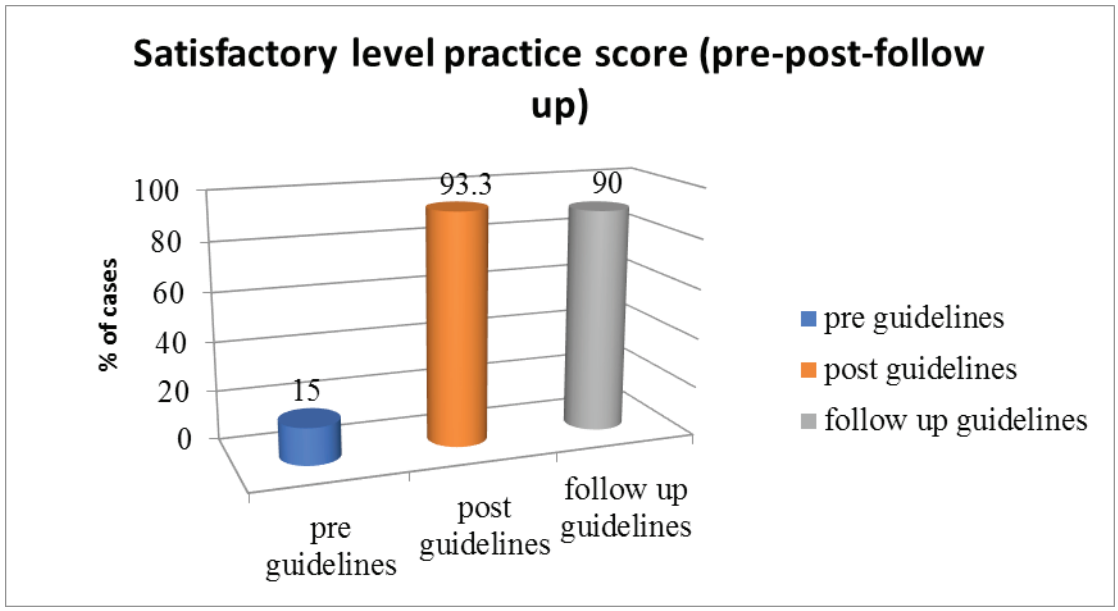

Figure (1): Percentage distribution of studied nurses according to (pre- post- follow up) guidelines satisfactory level of practice (N= 60).

As illustrated by **figure (1)**, the satisfactory level of practice before guidelines implementation was 15%.On the other hand the satisfactory level of knowledge post and follow up guidelines implementation was 93.3% and 90% respectively.

Discussion

As regards nurses' practice regarding administering inotropic medications, the current study results revealed that the great majority of studied nurses had unsatisfactory practices related to administration of inotropic These results could be due to lack of medication knowledge base of nurses, limitation of medication administration process on preparing and giving to the patients. Furthermore, lack of policies, rules and training controlling the medication administration process and work overload. This point of view is generally supported by a study done by [7] which confirmed that there is no training program for improving the nurses practical performance towards medications errors, that emphasizes intervention guidelines importance to improve the practical performance of nurses

On the same line, a study done by[8] that revealed that the nurses generally did not adhere to the preparation and administration good practices, especially in double-checking, the administration and syringe labeling. Also these results were in identical line with a study done by [9] that revealed that nurses had insufficient practice regarding the medication administered.

Furthermore, these results were consistent with [10] who demonstrated lack of nurses' medication practical skills In the same context , the current results were consistent with [11] a study conducted to evaluate possible risks associated with medication administration in critical care units which depicted that there were incorrect practices related medication checking and documentation process in the medication administration as regard to the prescription, medication dosage and the administration route, preparing medication and its labeling with the appropriate patient identifiers and hand washing before and after medication administration.

As regards the nurses' practice after and follow-up intervention guidelines, these study results revealed

that the great majority of studied nurses had satisfactory level of practice regarding administering inotropic medications. These results were in correspondence with[8] who showed that the majority of studied nurses had good practices following application of intervention program.

On the same line, results done by [12] that revealed increase in post intervention mean skill regarding medication administration. Also, this study results concur with[13] who revealed that there were high statistically significant differences between pre-test, post-test and three months post-test in total mean practices scores. Moreover, these results were in the same context with[14] who revealed that there was a statistically significant difference regarding nurses' practice pre and post guidelines implementation.

Conclusion

In the light of the current study, there was significant difference in the nurses' knowledge mean scores regarding inotropic medications pre and after implementing guidelines with P value<.001. There was significant difference in the nurses' knowledge mean scores regarding inotropic medications pre and follow up implementing guidelines intervention with P value<.001. Also, there was significant difference in the nurses' practice mean scores regarding inotropic medications pre and after implementing guidelines with P value<.001. There was significant difference in the nurses' practice mean scores regarding inotropic medications pre and follow up implementing guidelines intervention with P value<.001

Declaration of Conflicting Interest: There is no conflict of interest

Funding: The research was not funded

Ethical Clearance: Ethical approval was taken from the faculty ethical committee that adopt the ethics rules taken by university. Nurses were informed that they were able to participate or not in the study, they have the right to withdraw from the study at any time, confidentiality and anonymity will be assured and protection of the nurse from hazards. Oral and written consent was obtained from each nurse prior to participation in the study.

References

1. Bennett KA, Robertson LC, Al-Haddad M. Recognizing the critically ill patient. Anaesthesia & Intensive Care Medicine. 2016;17(1):1-4.
2. Abusaad EFES, Etawy EA. Medication administration errors at Children's University hospitals: nurses point of view. J Nur Health Sci. 2015;4(1):51-60.
3. Sisan Mm, Rayan A, Elmorsy S, Elyan H, Salahat M. Knowledge regarding noncytotoxic medication extravasation among registered nurses working in western Saudi Arabia. Journal of Vascular Nursing. 2018;36(1):12-22.
4. Soheir T. Effect of a clinical instructional intervention on nurses' perception and practice toward medication errors. IOSR Journal of Nursing and Health Science (IOSR-JNHS. 2017.
5. Alemu W, Belachew T, Yimam I. Medication administration errors and contributing factors: A cross sectional study in two public hospitals in Southern Ethiopia. International Journal of Africa Nursing Sciences. 2017 2017/01/01/;7(Supplement C):68-74.
6. Kizior RJ, Hodgson BB. Saunders Nursing Drug Handbook 2015-E-Book: Elsevier Health Sciences; 2014.
7. Latimer S, Hewitt J, Stanbrough R, McAndrew R. Reducing medication errors: Teaching strategies that increase nursing students' awareness of medication errors and their prevention. Nurse Education Today. 2017 2017/05/01/;52:7-9.
8. Tan SY, Said MM, Rahman RA, Taha NA. The effect of education intervention on parenteral medication preparation and administration among nurses in a general intensive care unit. Journal of Pharmacy Practice and Research. 2017;47(1):8-15.
9. Gorgich EAC, Barfroshan S, Ghoreishi G, Yaghoobi M. Investigating the causes of medication errors and strategies to prevention of them from nurses and nursing student viewpoint. Global journal of health science. 2016;8(8):220.
10. Sneck S, Saarnio R, Isola A, Boigu R. Medication competency of nurses according to theoretical and drug calculation online exams: A descriptive correlational study. Nurse Educ Today. 2016 Jan;36:195-201. PubMed PMID: 26521035. Epub 2015/11/02. eng.
11. Ghenadenik A, Rochais E, Atkinson S, Bussières J-F. Potential risks associated with medication administration, as identified by simple tools and

observations. Can J Hosp Pharm. 2012;65(4):300-7. PubMed PMID: 22919108. eng.

12. Bahar A, Arslan M, Ak H, Kaya H. Do Parenteral Medication Administration Skills of Nursing Students Increase with Educational Videos Materials? International Journal. 2017;10(3):1514.
13. Charalampopoulos D, Karlis G, Barouxis D, Syggelou A, Mikalli C, Kountouris D, et al. Theoretical knowledge and skill retention 4 months after a European Paediatric Life Support course. European Journal of Emergency Medicine. 2016;23(1):56-60.
14. Elbahnasawy H, Elnagar S, Atout M. Guideline Model for Nurses to Prevent the Medication Errors and Adverse Drug Events in Pediatric Inpatients Guideline Model for Nurses to Prevent the Medication Errors and Adverse Drug Events in Pediatric Inpatients. 2014

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