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A Descriptive Study to Assess the Knowledge and Attitude Regarding Higher Education among Nursing Students in Selected Nursing Colleges of Noida

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Abstract

Introduction: Education is an endless journey through knowledge and enlightenment. Higher Education among nurses has gained lot of interest over the past few decades. Obtaining higher education has long been an expectation for the ongoing professional development of the registered nurse. Aim of the study was to assess the knowledge and attitude regarding higher education among Nursing students in selected Nursing colleges of Noida. Objectives of the study were to assess knowledge of nursing students regarding higher education in nursing and to determine attitude of nursing students regarding higher education in nursing.

Method: A descriptive research design was used for the study. Sample size consist of 100 nursing students (B.Sc. nursing final year and GNM internship) by random sampling method. Data was collected by administering structured knowledge questionnaire and attitude scale. Data analysis was chalked out by employing descriptive and inferential statistics.

Result: Result regarding Knowledge revealed that 27% of students have good knowledge, 68% have moderate and 5% have poor knowledge regarding higher education and Attitude score represents that 50.59% had favourable attitude and 41% had unfavourable attitude towards higher education.

Conclusion: According to this study the maximum number of samples (68%) have moderate knowledge regarding higher education and maximum number of samples (59%) have favourable attitude towards higher education.

Keywords: *Knowledge, Attitude, Higher Education, Nursing students*

Introduction

Nursing is defined as "the unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge and to do this in such a way as to help him gain independence as rapidly as possible."**According to Virginia Avernal Henderson (1897-1996)[1]**

The ways in which nurses were educated during the 20th century is no longer adequate for dealing with the realities of health care in the 21st century. As patient needs and care environments have become more complex, nurses need to attain requisite competencies

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to deliver high-quality care.Nurses also are being called upon to fill expanding roles and to master technological tools and information management systems while collaborating and coordinating care across teams of health professionals. To respond to these increasing demands, the changing times call for nurses to achieve higher levels of education and suggest that they be educated in new ways that better prepare them to meet the needs of the population.[2]

Nursing education focuses on educating health care people about effective ways to deliver the health care to patients. It educates nurses about how to administer different medicines, to examine patient and to deliver best services to patients. The aim of nursing education is a development of the nursing profession.[3]

A descriptive study was conducted by Linda Ng, and Dr Anthony Tuckett, et.al. by exploring registered nurses' attitude towards Post graduate education in Australia, while conducting this study 100 samples were taken in which 25 % of the respondents were interested in pursuing post-graduation in nursing while 17 % were not at all interested. Rest of the samples gave reasons like lack of availability of funds, problems at home, etc. The study also stated that a better nursing education infrastructure and certain relaxation criteria might help in attracting more nurses towards the prospect of higher education in nursing.[4]

A study conducted by Aris Y Fantis, revealed when a structured questionnaire was given to the respondents, it represented that 82.6% of nurses were interested in pursuing further education and 17 % of them were not at all interested in any form of education.[5]

An explanatory study was conducted by Pan SM on Hospital nurses' attitudes towards continuing education in Kaohsiung city, Taiwan. In these 674 randomly selected hospital nurses participated in which majority (92.65%) hold positive attitudes towards continuing education. The study also says that to maintain nurses' positive attitude for those who hold negative attitudes, some strategies for continuing education should be considered by nursing administrators.[6]

A cross sectional descriptive study was conducted by Mei Chan Chong, Karen Francis, et.al. on current continuing Professional education Practice among Malaysian nurses. This research was carried out to explore the current practice and future general needs for CPE. Cluster sampling technique was used to recruit 1000 nurses from four states of Malaysia. Only 80% of the nurses had engaged in CPE activities during the past 12 months. The study concluded that mandatory continuing professional education is a key measure to ensure that nurses upgrade their knowledge and skills.[7]

A study conducted by Tanya K. Aitmann, on Nurses attitudes towards continuing formal education. The main finding of this study was that, although nurses held positive attitudes overall. The findings suggest that work need to be done to improve nurses' attitudes toward continuing formal education.[8]

By unyielding so many reviews of literature, it was found that many literatures were available on knowledge and attitude regarding higher education but hardly any content was available in Indian context. So, this study aimed to assess the Knowledge and Attitude regarding Higher Education among Nursing Students in selected Nursing colleges of Noida.

Methodology

A non-experimental quantitative research approach with descriptive survey design was conducted in selected colleges of Greater Noida, 100 students selected by random sampling technique. Data was collected by administering structured knowledge questionnaire and attitude scale. Also, a demographic performa was collected which consisted of 8 items. Data collection procedure was carried out from 27 March to 29 March 2014. Data was analysed using

descriptive and inferential statistics.

Result

TABLE - 1: Frequency and percentage distribution of nursing students as per their demographic variables

Sample characteristics	Category	Frequency	Percentage (%)
Age	Below 22 years	82	82%
	22-24 years	18	18%
Sex	Male	38	38%
	Female	62	62%
Religion	Hindu	68	68%
	Muslim	4	4%
	Christian	26	26%
	Others	2	2%
Education of Father	Primary	2	2%
	High school	19	19%
	Intermediate	29	29%
	Graduate	40	40%
	Post graduate	10	10%
Education of Mother	Illiterate	4	4%
	Primary	8	8%
	High school	31	31%
	Intermediate	22	22%
	Graduate	28	28%
	Post graduate	7	7%
Occupation of father	Government	34	34%
	Private	35	35%
	Business	27	27%
	Retired	4	4%
Occupation of Mother	Government	12	12%
	Private	12	12%
	Business	3	3%
	Housewife	73	73%
Family Income	Less than Rs 20,000 per month	26	26%
	Rs 21,000-40,000 per month	41	41%
	Rs 41,000-60,000 per month	21	21%
	More than Rs 60,000 per month	12	12%

Table 1 Explains the demographic data in the study. It shows that majority of the students 82 (82%) belong to the age group below 22 years and 18 (18%) were between 22-24 years of age group and there were no samples above 24 years of age group.

Data regarding sex reveals that majority samples were female 62 (62%) and males were 38 (38%). Data regarding religion shows that 68 (68%) were Hindus, 4 (4%) were Muslims, 26 (26%) were Christians, and 2 (2%) were others.

Data regarding education of father shows that 2 (2%) had completed primary education, 19 (19%) were high school pass outs, 29 (29%) gained only intermediate education, 40 (40%) were graduates, 10 (10%) of the population were post graduates and there were no illiterates. Data regarding mother's education shows that there were 4 (4%) illiterates, 8 (8%) had gained their primary education, 31 (31%) were high school pass outs, 22 (22%) gained intermediate education, 28 (28%) were graduates and 7 (7%) of the population were post graduates.

The data regarding the occupational status of the father reveals that 34 (34%) were government employees, 35 (35%) worked in private sector, 27 (27%) had their own business, and 4 (4%) were retired. Data pertaining to occupation of the mother shows that 12(12%) were government employees, 12 (12%) were working in private sector, 3 (3%) of the mothers were self-employed, maximum of the mothers 73 (73%) were housewife, and there were no retired mothers in the population sample.

The data regarding the family income shows that 26 (26%) were earning below Rs 20,000 per month, 41 (41%) were between Rs 21,000-40,000 per month, 21 (21%) income were between Rs 41,000-60,000 per month and 12 (12%) were earning more than Rs 60,000 per month.

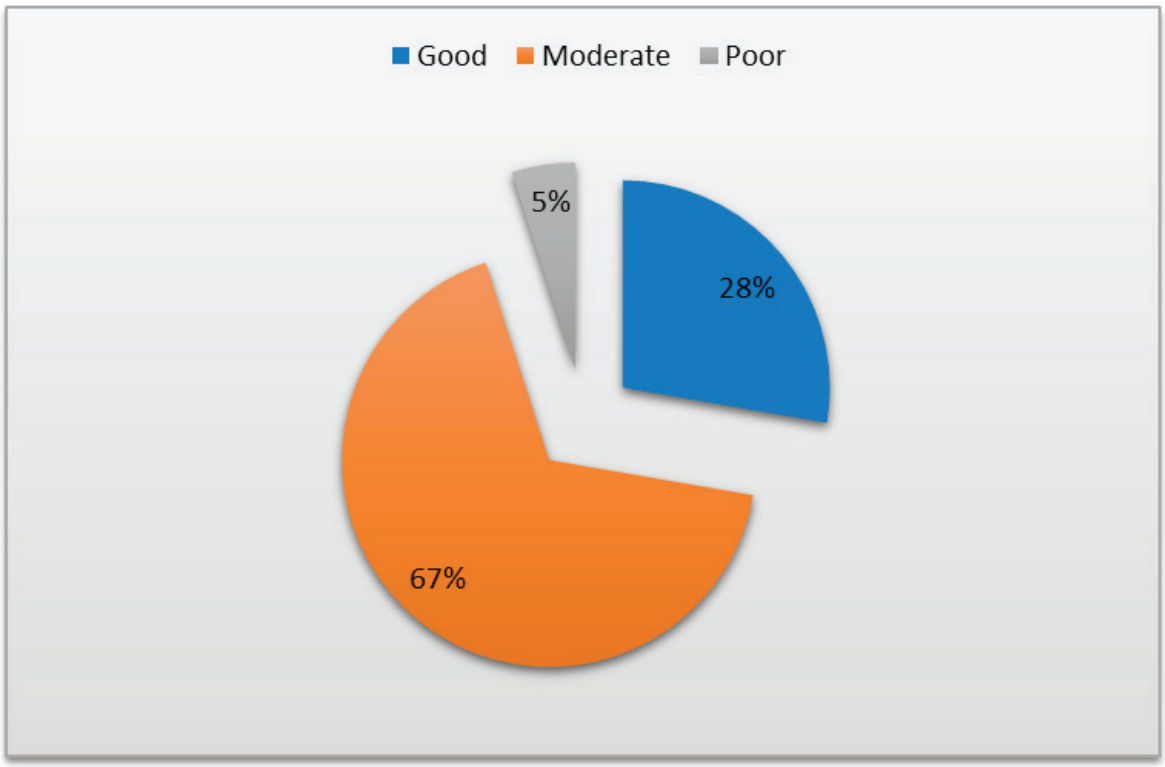
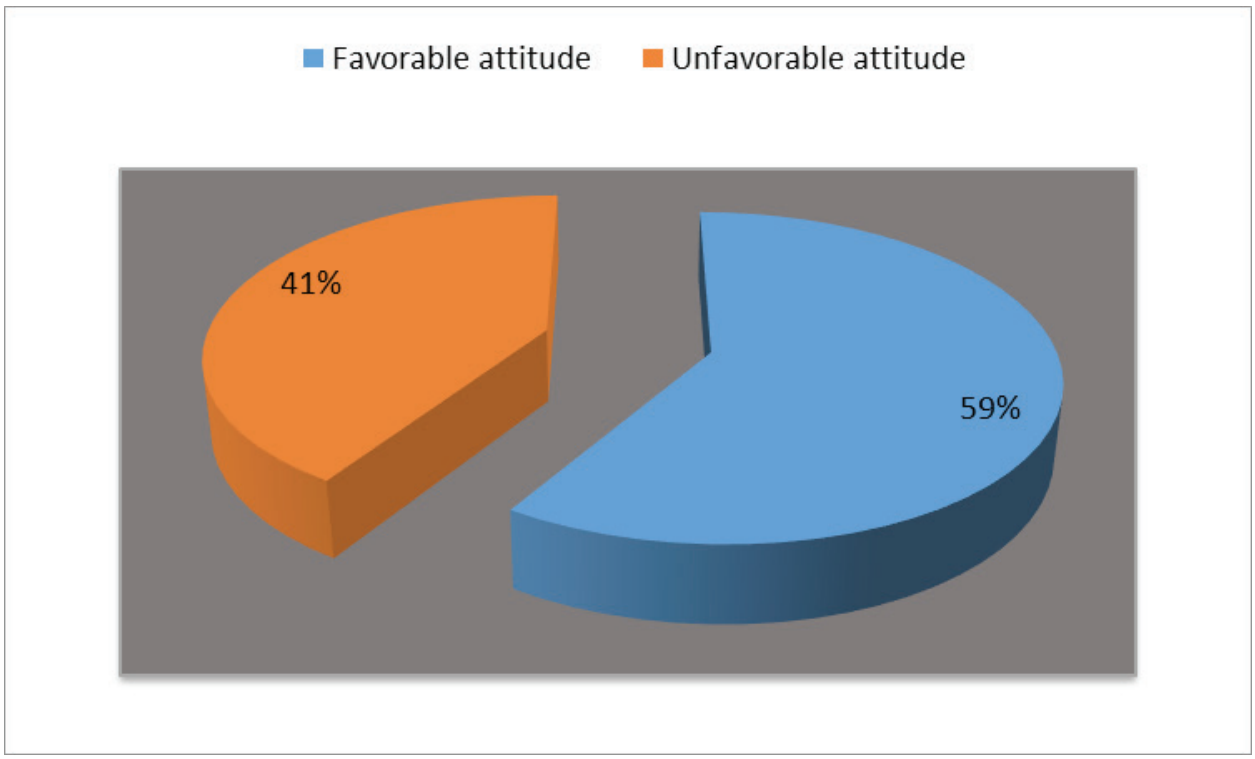


Figure 1: A pie diagram showing percentage distribution of knowledge scores of students.

Figure 1 shows the frequency and percentage of interpretation of knowledge scores which indicates that 27% students have good knowledge, 68% have moderate knowledge and 5% have poor knowledge regarding higher education.

Figure 2. A pie diagram which shows percentage distribution of attitude of nursing students regarding higher education.



Data in Figure 2 shows that 59% of nursing students have favourable attitude towards higher education and 41% have unfavourable attitude towards higher education.

Discussion

The researchers in the study tested the knowledge and attitude of B.Sc nursing final year and GNM Internship students regarding higher education in nursing. The findings of the study revealed that majority of the students had moderate knowledge and favorable attitude towards higher education in nursing.

Implications

The present study can be helpful for staff development it would be beneficial for the enhancement of career development, job satisfaction, and encouragement for pursuing refresher courses or diploma programmes to update knowledge and skills and also for advancement of nursing services. Nursing students must be encouraged and valued for their ability adapt to advancements in nursing education and also in health care delivery system.The nursing students should conduct more of research studies on the educational demands of nurses to update the various nursing educational opportunities on a regular basis. Even staff development programme for nursing personnel in clinical area is quite inadequate in the existing system. It is the administrator's responsibility to arrange in-service education programme and to provide equal opportunities to all nursing personnel for updating their knowledge and practice with current information and changing trends for providing quality

care.

Recommendations

More researches should be conducted on nursing students to validate and generalize the findings, study can also be conducted to determine the existing educational opportunities in various fields of nursing in India, comparative study can be done to ascertain knowledge and attitude of nurses regarding higher education in nursing. Even a similar study can be replicated using structured teaching programme regarding higher education in nursing.

Conclusion

On the basis of present study findings, the researcher found that 68% of nursing students were having moderate knowledge and 59% of nursing students have favourable attitude towards higher education, so more focus on in service programmes and continuing education should be given to increase the quality care to patients and standards of our profession.

Ethical Clearance- Taken from organization ethical committee

Source of Funding- Self

Conflict of Interest - Nil

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Healthcare Students' Views on Protecting Patients' Privacy and Confidentiality

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Abstract

In health care services, current technological advancements have made it easier to intervene with a person's private life; thus, the need to ensure patients' entitlement to privacy and confidentiality increases.The study explores nursing and midwifery students' perspectives on protecting patients' privacy and confidentiality through knowledge and insights gained from clinical experiences.The study was conducted using a qualitative approach through focus group discussions with 48 first-year nursing and midwifery students from two nursing institutions in Brunei Darussalam. Three themes were derived from the findings of the study: (1) Dignity of patients, (2) The values of privacy and confidentiality, and (3) Duty and everyone's responsibility.The findings have shown that the students understand and know the value of privacy and confidentiality and agreed that protecting patients' privacy and confidentiality are their moral duty and obligation.

Keywords: *Healthcare students, Patients, Privacy, Confidentiality, Dignity, Brunei*

Introduction

Protectingpatients'privacy and confidentialityare fundamental in the health care services to build and maintain a significant and respectful professional relationship (Demirsoy & Kirimlioglu, 2016).[1] Aqualitative study on healthcare providers' attitudes on patients'right to privacy and confidentiality suggested that nurses recognised confidentiality as necessarybut combined with the concept of limited access to information and only those who need specific information can access it (Anthony&Stablein, 2016).[2]

Maintaining confidentiality in a health care setting issignificant and acknowledged as a sign of respect for the patient's autonomy (Demirsoy & Kirimlioglu, 2016).[1]To respect patients'autonomy, health care providers shouldprotect their privacy, especially the nurses, as they are the closest to the patient and are responsible for providing information (Kim, Han & Kim, 2017)[3]. Protecting privacy is the foundation of a trusting relationship between nurse and patient,enabling effective nursing care (Kim, 2012).[4] Meanwhile respecting and maintaining confidentiality is significant and critical in building a trust relationship between physicians and patients (Noroozi et al., 2018).[5]The two principles ofpatientconfidentiality and autonomy couldconsiderablyaffect the patients, the carers or family, and healthcare organisations (Entwistle et al., 2010).[6] Therefore, maintaining patients' privacy and confidentiality is essential to respect and build a good relationship.

However, the duty of maintaining privacy and confidentiality also extends to nursing and midwifery students. This is because they would closely interact with the patients inthe health care settings during their practical clinical sessions in their nursing and midwifery education programme.

Student nurses are exposed to the clinical setting; therefore, ethical principles must guide them in their professional nursing education development.As soon as student nurses or student midwives graduated and enters the clinical environment, they must be ready to deliver quality patient care and to be able to build relationships with the patients, families, and colleagues (Matlakala&Mokoena, 2011).[7] In creating these relationships, the ethical issue would commonly occur, as the nursing practice is inseparably entangled with moral complexity (Hoskins, Grady & Ulrich, 2018).[8] One of these ethical issues is related to patients' privacy and confidentiality. This is becausepatients' information is sensitive and too personal; hence,more intricate measures are expected to ensure their privacy (Park, 2012).[9]

Materials and Methods

Design

A qualitative descriptive study design via focus group discussionswas employed to elicit responses from the students.

Participants

Forty-eight first-year nursing and midwifery students fromtwo higher nursing institutions in Brunei were recruited and interviewed in 10 focus group discussions. The students were from the diploma and undergraduate nursing and midwifery programme, and the students have had at least one clinical placement in a ward setting.

Data collection

The researchers conducted the focus group discussions with a mean duration of 60 minutes and wereconducted in English and Malay. The data collection was done in October 2020.The questions discussed during the session were comprised the following: what do you understand about patients' privacy and confidentiality?; why do you think that protecting patients' privacy and confidentiality is important?; in your experience of clinical attachment, can you explain how you ensure that the patients' privacy and confidentiality are maintained?; who do you think is primarily responsible for preserving the patients' privacy and confidentiality?.

Data Analysis

The audio data and field notes were transcribed verbatim and then translated fully into English for data analysis. The themes were derived from the data after analysed using the six-phase step ofthematic analysis (Braun &Clarke, 2021)[10]which includes familiarising data, generating initial codes, searching for the themes, reviewing the themes, defining the themes, and lastly, writing up.Each transcription was reviewed multiple times before data analysis to compare the common words and phrases. Manual mindmapping was also done to help researchers identify the themes.The themes were discussed constantly with the research team for relevance and any discrepancies.

Rigour

To ensure the study's findings are credible,a pilot study was conducted to pre-test the questions for the focus group discussions. Purposive sampling was used to recruit participants and generate a sample that could provide meaningful and information-rich data, ensuring that the study results were transferable. Only first-year nursing and midwifery groups participated in this study, but the findings may apply to other health care students,whether locally or globally. To achieve the dependability of the data findings, research bias was reduced by the discussion and engagement with the research team during data analysis to emerging the themes of the results. In this study, confirmability was ensured by transcribing all the interview audio verbatim.

Ethical considerations

The study's protocol was reviewed and approved by the Faculty Research Ethics Committee (UBD/PAPRSBIHSREC/2020/42). All the participants

involved were volunteers,provided a written consent form and were aware of the study's aim and objectives. They were given the right to withdraw from the research before the data analysis period. To ensure their privacy and confidentiality, their anonymity is also maintained.

Results

Findings revealed that the perspectives of the nursing and midwifery students on protecting patients'privacy and confidentiality haveresulted in three broad themes.

Theme 1: Dignity of patients

The students explained that the patients' privacy is inter-related with the patients' dignity. As student nurses or midwives, they intervene with the patient's private space and their confidential information. They also participate in giving invasive nursing care, such as bed-bath and changing a diaper.With the supervision ofa clinical mentor, the students could access the patients' sensitive information by reading their case notes through their files and online health information systems. Whereas patients' confidentiality, the students defined it as "secret" and "sensitive" to the patients, which is connected with the patients' privacy.They emphasised that the secrets are for students to keep to themselves and not share with outsiders. In contrast, crucial information is only for direct health care providers to use and would only be disclosed to people whom patients trust. The students also explained that it involves thepatients' dignity, which means it is embarrassing and personal.

Privacy is like a secret. If someone exposed to your privacy, you are not going to like it. Secrets must be confidential. Itdoes not need all people to know everything about you. If it is known, then people are going to mock them. They can go into depression or feel somewhat embarrassed, sad, and possibly suicide (Female midwifery student, P47).

Some students also consider the patients' religion predominantly Muslim patients who mostly care about their physical privacy, "awrah"(body parts that need to be covered according to Islamic views). The students expressed that they are obligated to protect the patients' "awrah" from other people's eyes and prevent any physical exposure unless necessary for necessary intervention in the ward.

From an Islamic perspective, if we exposed we can see their "awrah", other people also can see it, but if between nurse and patient it is okay because it is their job, but if other people like people in front of the bed can see their "awrah", it is a sin! (Female nursing student, P1).

For attachment students in clinical settings, most of them practice closing the curtains before doing any procedures to protect the patient's dignity. In the general ward, the patients have to share one cubicle with other patients; therefore, closing the curtains is one of the students' attempts to respect the patients' physical privacy and "awrah".

Because the ward is very "open", and the curtain is the only barrier even though it is not enough, and we can still hear through the curtain, but at least, it can cover how patients' looks like (Male nursing student, P12).

Controlling one's voice when discussing with health care teams or patientsis also deemed one of the interventions needed to respect their dignity. They felt that inappropriate tone and volume could jeopardize the patients' dignity and breach their privacy and confidentiality. For example, nurses or doctors with a loud voice when giving nursing care or discussing would cause other people from the same ward or cubicle to hear something embarrassing or too personal.

Because if our voice is too loud, people in the surrounding can also hear it. If we say "smelly!" the other beds will know whom we mean by smelly

(Female nursing student, P4).

They also practised asking permission and consent for every procedure. Female students expressed concerns about gender differences while caring for male patients. The students shared that some male patients are embarrassed and refused to be caredfor by female nurses, tarnishing their dignity. However, in the case of no male nurses present in the ward in a particular shift, the students would try to explain and convince the patients and gain their consent to proceed with the procedure they need to do:

My ward is all-male patients. Before I do a procedure, I asked permission whether it is okay to change their diaper, is it all right to bathe them, and some patients do not want it and request a male, so I asked for their consent first (Female nursing student, P07).

Theme 2: The values of privacy and confidentiality

The majority of the students know that protecting patients' privacy and confidentiality is essential and prioritised in daily nursing practice. They view that maintaining patients' privacy and confidentiality ensures they are comfortable while stayingin hospitals. Most students put themselves into patients' shoes to understand patients' feelings if privacy and confidentiality arebreached.

Put yourself in their shoes. For example,we also want to be comfortable with privacy, especially when you are sick, you do not want to be crowded, need some privacy, and need your place to rest. Give them space! (Male nursing student, P41).

Few of them also have stated that patients' privacy and confidentiality are among the patients' rights. They specified that patients have the right to keep their information and have the right to choose whether to share it or not with others, including their own family.

Because it is their right! We do not have the consent to share their information (Female nursing student, P12).

The students also believe that other people do not need to know when patients are sick and lying on the bed. The students assumed that most patients wanted to keep their conditions to themselves, especially since the illness is susceptible and taboo, such as HIV and breast cancer. The students shared that some patients may not even want their parents or spouses to know about their condition. Therefore, it is needed to respect their decision immensely.

Patients do not want to tell their business because they went to the hospital they triedto get treatment, not to be exposed, so we have to respect (Male nursing student, P41).

They also reported that they could gain patients' trust and build a good nurse-patient relationship by maintaining privacy and confidentiality. By having a good relationship, the studentsable to provide effective nursing care.

It is essential because we build a relationship with our patient as a nurse, trusting us to keep it as confidential as possible. If we break their trust, they will not believe us again. Theywill not say about their illness. They will not talk about their feelings (Female nursing student, P15).

The students also thought that patients' privacy and confidentiality could be easily breached due to technology nowadays, even though they may not know the patients in person. By preventing the misuse of information from non-authorised persons, the students believe it could protect both sides, patients and health care providers' image.

We are living in a world with social media. Everyone likes to take photos and videos.It is changing how the health care professionals and the public to be more aware of their actions, which can affect someone's career andpatients' image, especially now

that we like to viral stuff (Male nursing student, P22).

Theme 3: Duty and everyone's responsibility

As part of health care providers, the students state that it is already part of their duty and obligations in the health care field to follow the designated rules and regulations and the code of ethics.

For me, privacy is the number one priority when taking care of patients; this also included in the law and ethics code of ethics. (Male nursing student, P45).

Some of the students also considered the Islamic perspective to protect patient's privacy and confidentiality. Being Muslim, the students felt that they have to uphold patient's trust to cover the patients' imperfections when caring for all the patients.

It is essential that we still maintain the patient's confidence while caring for them. Not only is it our moral expectation, but it is also a fundamental requirement in Islam.(Female midwifery student, P48).

Most studentsindicated that it is everyone's responsibilityfor protecting patients' privacy and confidentiality, whether from health care providers or non-healthcare providers. These individuals may be directly or indirectly involved with the patients.

Everyone plays a role in maintaining privacy and confidentiality, either the nurses or the public (Male nursing student, P44).

The students also considered the patients themselves to be responsible for maintaining their privacy and confidentiality. The students thoughtthey need to abstain from breaching the privacy and information of other patients between the patients.

There are six beds in one cubicle, so the surrounding at that time, they have to respect their privacy and the other patients' privacy (Female nursing student, P15).

Discussion

The study revealed that first year nursing and midwifery students have a good understanding of the meaning of privacy and confidentiality. However, somestudents admittedthat they are confused with the two terms and regard privacy and confidentiality conceptsinterchangeably. Most of them also have regarded that protecting a patient's privacy and confidentiality is a must, closely connected with patient dignity.The view on the privacy-dignity relationship is consistent with one of the studies stating that maintaining privacy is mainly to safeguard a person's dignity, including their name, image, and reputation, avoiding embarrassment (Mendelson& Wolf, 2017).[11]Groups of nursing students from Cyprus University agree that maintaining privacy and confidentiality is an importantmeasure to protect patients' dignity (Papastavrou, Efstathiou&Andreou, 2016).[12]

Interestingly, most students have shared that closing the ward's curtains is one of the most critical steps in maintaining patients' dignity. They believe that patients are more comfortable and feel respected when curtains are drawn shut before doing any procedure. Previous studies also examined patients' dignity and considered it one of the fundamental human needs in nursing care (Zirak, Ghafourifard&AliafsariMamaghani, 2017; Martin-Ferreres et al., 2019; Bagheri, 2012;Kadivar, Mardani-Hamooleh&Kouhnavard, 2018) [13-16].By closing the curtains, the students expressed that they are able to hide the patients' physical appearance and avoid unwanted attention from the surroundings, thus preservingpatients' dignity. By doing this, the students also attempt to cover patients' ''awrah",as they assume that patients would not want their bodies to be exposed explicitly. A previous study on patients' dignity also found that body exposure is regarded as one factor that could threaten a person's dignity (Kadivar, Mardani-Hamooleh&Kouhnavard, 2018).[16]Moreover, the students also emphasise using an appropriate

tone of voice when communicating with patients and discussing patients' informationamong the health care team. They felt that inappropriate tone and volume could jeopardize the patients' dignity and breachtheir privacy and confidentiality. A previous study also touchedon the importance of auditory privacy when communicating aboutpatients' information (Kim K, Han Y & Kim, 2017).[3]

Besides protecting patients in physical and auditory aspects, most students agreed that it is vital to gain permission and verbal consent from all patients before attempting any nursing care and procedures. One of the intrusive care is bed-bathing, where the patient may feel mortified because they have to depend on others to obtain their hygiene needs (Downey & Lloyd, 2008).[17]They feel respecting the patients and maintaining their dignity by asking permission and consent,mainly if there was a gender difference in caring for them.

The findings also have shown that the first year nursing and midwifery students understand and know the value of protecting patients' privacy and confidentiality. One of the values is gaining patients' comfort. They felt that all patients deserve to be comfortable during their admission in the ward and consider ita part of nursing care.The patient's comfort has been regarded as a fundamental indicator of patient-centred care. It is found that patients experience comfort in an environment where patients' preference for privacy is accommodated (Wensley et al., 2017).[18] Most ofthe students also expressed that breaching privacy and confidentiality could jeopardize patients' feelings. The students shared that they need to put themselves in the patients' shoes to become empathetic and compassionate when caring for patients. By maintaining patients' privacy and confidentiality, the students believe that it could gain their trust and, in turn, build arobust nurse-patient relationship. Nurses should always honour patients' trust by respecting their confidentiality (Price, 2015).[19]

Conclusion

The study found that most of the students recognised that patients' dignity holds significant value. It is vital to respect it to provide a good quality of nursing care and maintain a therapeutic relationship with the patients. Moreover, everyone has to ensure that privacy protection and confidentiality are in place at all times.The findings in the study may benefit from the improvement of ethics education in Brunei, especially on the issue of patients' privacy and confidentiality. Further analysis using a quantitative study design may be conducted to give moreunderstanding for this study.

Conflict of Interest: None

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Supporting Cambodian Midwifery Education Through an International Collaborative Teaching Project

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Abstract

A course on nursing process for midwifery students was collaboratively designed and taught by a US Fulbright Scholar and a Cambodian nursing professor at a rural Cambodian nursing and midwifery program at the behest of the program director. The project was designed to coincide with a national initiative by the Cambodian Ministry of Health to launch the use of nursing process by nurses and midwives.

Using the ADDIE Model, the syllabus and lesson plans were created taking Cambodia's culture and resources into consideration. Lessons were delivered in English and Khmer. Upon conclusion of the course, a case study-based written exam with multiple choice and short answer questions in Khmer was administered. The sample was composed of 106 first year Khmer speaking midwifery students with 78.4% of the students scoring higher than 70% and 20.8% of them earning 90% or higher.

Nursing process is now integrated throughout the curriculum and midwifery students are modeling its use in clinical settings. Thus, providing initial evidence on the benefit of international partnerships in the classroom setting to effectively strengthen midwifery education and practice in Cambodia.

Keywords: *Cambodian midwives, international partnerships,midwifery education, nursing process*

Introduction

International nurses and midwives have supported theirCambodian counterparts through formal and informal collaborative partnerships to rebuild the health care system and to improve Cambodian health outcomes through education and professional development [1, 2, 3, 4]. The first author is a nursing faculty member who received a US Fulbright Core Scholar Award to Cambodia. During the 10 month in-country teaching experience, she taught nursing and midwifery students at the Kampot Regional Training Centerfor Health(KpRTC) in rural Cambodia and implemented a number of courses at the request of the KpRTC Program Director who served as her in-country supervisor during the award period.

The purpose of this article is to share the results of an international collaboration to teach nursing process to first year midwifery students at a regional training center, which are the public nursing and midwifery educational institutions in Cambodia. The goals of the project were to: 1. Collaborate with an in-countryfaculty member in creating a Nursing Process course including syllabus and lesson plans, 2: Support the knowledge base of Cambodian midwifery faculty

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members and clinical preceptors on the integration of the nursing process into theoretical and clinical learning activities, and 3. Evaluate the effectiveness of an English speaking faculty member and bi-lingual Cambodian faculty member co-teaching a cohort of Khmer speaking Cambodian midwifery students.

Review of Literature

US Fulbright Program

The US Fulbright Program is a widely recognized and prestigious international exchange program which grants support for graduate study and research in 140 countries. It also provides distinguished US university faculty the opportunity to teach internationally either as a US Fulbright Core Scholar or as a US Fulbright Specialist, which is a short-term, project-based program. The US Fulbright Program was created by Senator J. William Fulbright in 1945. The program was a post- World War II project designed to promote peace and understanding through educational exchange. The US Fulbright Program is administered by the Bureau of Educational and Cultural Affairs of the US Department of State[5].

History of Midwifery Education in Cambodia

The first school for nurses and midwives was established in 1950 as the 'Ecole d' Infirmieres et de Sages Femmes', in Phnom Penh as a two-year education program. The program later advanced to a three-year midwifery program but the school was closed 1975-1979 due to the ravages of the Khmer Rouge. The program was reopened in 1980 and later, it became the Technical School for Medical Care[6,1] .

It was during the 80's that four regional training centers were established to increase the number of health care workers. The post-basic midwifery program was introduced in 2002 with students studying midwifery for one year followed by three years of nursing education. In 2008, a revised national curriculum created a three-year direct entry associate degree midwifery program in addition to the 3+1 program to increase the number of educated midwives [6, 1].

Introduction of Nursing Process in Cambodia

It is a priority of the Cambodian government to develop human resource capacity to address health reform within the country. The Cambodian Ministry of Health (MoH) has mainly focused on strengthening the country's training system in order for the system to function effectively and ensure quality training nationwide for health care workers. The MoH prepared guidelines on training standards using nursing process and nursing diagnoses as foundational elements in the development of other nursing documents to meet the need for nursing quality and effectiveness. The Manual of Nursing Process: A Step by Step Guide for All Health Care Facilities was piloted in 2011 and published in May 2012 [3]. Once published, teams of professional nurse educators composed of Cambodian and international nurses conducted workshops for hospital nursing departments and Regional Training Centers (RTCs) during 2013-2014.

It was during one such training in Kampot, Cambodia that the visiting US Fulbright Scholarwas invited to participate in the workshop. The KpRTC ProgramDirector then requested the development and implementation of a Nursing Process course for nursing and midwifery students attending the schoolas part of theFulbright body of work for the remainder of her tenure. Additionally, there was travel throughout provinces ofsouthernCambodia to conduct workshops on nursing process at rural provincial health centers so the clinical sites used by the programwould possess the same information as the students. All workshops were taught in English with interpretation services provided by the co-author,a Cambodian nursing faculty member who received his BSN in Thailand.

ADDIE Model

The co-developers of the Nursing Process course utilized the ADDIE Model, an Instructional

Systems Design (ISD) Model, to develop the course. Created for the Department of Defense by Florida State University, this ISD provides a template for curricular or program design but does require local cultural considerations[7]. The five phases include Analysis, Design, Development, Implementation and Evaluation. The Analysis Phase requires collecting information about the population of learners. Instructional content must be learner-focused and culturally sensitive. The Design Phase is used to plan learning modules and identify appropriate strategies for the learning audience. The Development Phase is when the instructional media and supporting materials are created. The lessons are delivered during the Implementation Phase and learner understanding and program satisfaction are determined during the Evaluation Phase [8].

Methods

Methodology

A 15- class hour course in Nursing Process was co-designed by the authors. Students were assigned to take the Nursing Process course by the programdirector. However, students were not assigned a course grade as the course was not included in the mandated midwifery curriculum created by the Cambodian MoH. The program director believed it was important that the students have exposure to the material, and it was part of his vision for the schoolto become a national leader of Cambodian nursing and midwifery education.

As earlier noted, the ADDIE Model was used to design the course. Use of this ISD Model was helpful as it provided the Cambodian faculty member the opportunity to learn an evidenced based framework for curricular design which could be applied to future courses in which he was involved in developing. Once the syllabus was developed, it was presented to the programdirector for approval prior to course implementation.

The US faculty member taught the class in English while the Cambodian faculty partnerverbally interpreted material into Khmer, Cambodia's national language.Students were provided access to the Nursing Process Manual designed by the MoH with multiple copies placed on reserve in the school library. The document was available in both English and Khmer by the Cambodian MoH.

The lesson plans were co-designed,and this provided the US faculty member an opportunity to introduce her Cambodian co-teacher to Blooms Taxonomy. The classroom activities were designed to foster students remembering, understanding, and applyication of the nursing process. Learning activities included the use of flash cards, team games, case studies, and small group presentations. The activities were scaffolded in a manner that supported the development of student confidence and fostered practice in critical thinking techniques. The teaching methods used were unlike those typically used in Cambodian midwifery education; therefore, it required faculty encouragement to promote student engagement.

Bloom's Taxonomy was used to design the final examination blueprint with student knowledge assessed using remembering, understanding and application questions. The written final examination was based upon a case study and the questions evaluated the students' knowledge of the various steps in the nursing process using short answer and multiple-choice questions that reflected the three levels of Blooms taxonomy previously stated. Two exams,each with a different case study, weredeveloped using the same format. Two exams werenecessary to promote test security due to the proximity of the students to one another in the testing environment. The exams were developed in English, translated into Khmer, verified for accuracy by a second bi-lingual Cambodian faculty member, and students provided their answers in Khmer. The Cambodian co-teacher graded the exams with the US faculty member

providing the key. Together, they went over the scoring of answers for each test with the Cambodian co-teacher interpreting the students' answers. The graded exams were statistically analyzed once the US faculty member returned to her home institution.

Sample

The sample was composed of 106 Cambodian first year midwifery students attending the school. All of the students were female. No other demographic data was collected.

Ethical Considerations

An IRB-02 application for this behavioral/ non-medical research project was submitted to the US faculty member's university. As part of the application, a consent form was designed in Khmer. The form was developed in English, translated into Khmer by a bi-lingual Cambodian nurse educator (not the co-teacher) and in turn was translated back into English by a second bi-lingual Cambodian nurse in a different city in ensure the accuracy of the form. The KpRTC ProgramDirector approved the use of the data collected for educational purposes and dissemination in a professional nursing journal. The university IRB approved the project. Students were informed verbally in Khmer and within the consent form that they may participate in the course and take the exam without signing the consent form.

Results

A total of 106 students participated in the course and took one of two versions of the exam, which was presented to them in Khmer. A total of 78.4% of the students scored above 70% on the exams with 20.8% of them scoring 90% or higher. The score ranges were 30%-100% Exam Version 1 (N=51) and 25%-100% Exam Version 2 (N=55) with a mean of 74.6% and 74.45% respectively for the two versions of the exams. All students were successful in listing the steps of the nursing process and identifying some if not all the objective and subjective data contained within the case study. The questions which proved the most problematic were the creation of a relevant goal and measurable outcomes. However, in 24 years of teaching nursing process, it has been observed those areas are consistently the most problematic for novice users of the process.

Discussion

There were multiple constructs to consider in the design and implementation of this project. The first constructwas the *delivery of the material in the classroom*. Cambodian nursing education is delivered in a manner quite different than in many Western-style university settings. In Cambodian public nursing programs, students sit shoulder to shoulder. There are no textbooks in Khmer so faculty members translate material from English or French publicationsto develop their lecture content. Lecture is the primary teaching methodology and material is task focused.

The US faculty member had prior experience teaching in Cambodian nursing and midwifery programs and pacing the delivery of material so it could be accurately interpreted. The co-author was fairly new to the faculty role and this collaboration provided him with support in learning how to teach using a variety of interactive strategies.

Learning activities not typical of the Cambodian classroom were introduced to these students. This course was taught eight months into the Fulbright award period; therefore, the US faculty memberwas no longer an oddity with the students. A positive reputation and trust had been developed across the months during earlier delivered coursework. Learning activities included students working in small groups readingshort vignettes, then creating pieces of a nursing care plan followed by presenting their group's work to the class as a whole. Another learning activitywas role playing to practice interviewing patients to collect data. The students quickly moved past initial shyness and embraced this activity enthusiastically.

Another construct which required consideration was c*ulturally congruent care.* The author incorporated the local culture, work and living conditions and family structure into the vignettes and case studies used by the students to construct the nursing care plans. It was critical that the students were provided with culturally relevant situations through which they could learn nursing process. Additionally, the nursing interventions required consideration of Cambodia's perinatal and postpartum practices and beliefs for the material to be useful and student understanding achieved. The US faculty member had worked on multiple short- term teaching projects across a six- year period prior to receiving the US Fulbright Scholar Award. These collective experiences provided herwitha basic understanding of the culture related beliefs as well as the resources, structure and services associated with Cambodia's health care system.

A final construct was *faculty and clinical site professional development.* As noted earlier, it was important that the Cambodian midwifery faculty members and the clinical sites used by the KpRTC received the professional development necessary for there to be sustainability of the Nursing Process course and implementation in the clinical settings during midwifery student clinical rotations. Multiple workshops on nursing process and teaching strategies were presented by the co-authors throughout southern Cambodia.

Conclusion

The midwifery professionin Cambodia continues to evolve and develop the evidenced based practice standards of maternal care which are evident among the higher income countries of southeast Asia. It is a tribute to the country's efforts that in August 2019 Cambodia held its First National Symposium on Midwifery. The theme was "Maternal and Child Healthcare and Management During the Prenatal and Perinatal Period". It will require continued effort, both at local and national levels, for the standards of care to continue to evolve. The Nursing Process course is one example of how collaboration between educators in an international setting can advance knowledge and practice at the local level. The nursing process is now integrated throughout the curriculum at the KpRTC and as their graduates enter the workforce, those midwives are mentors and role models utilizing the nursing process to promote positive outcomes for the women and newborns in Cambodian communities.

Ethical Clearance: The University of Florida, Gainesville, Florida, USA, IRB-02 Approved UFIRB #2014-U-590. The Honorable Dr. Samnang Chhun, Director of the Regional Training Center for Health, Kampot, Cambodia, approved the study for local implementation.

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Conflict of Interest: The co-authors, whose names are listed,have no conflicts of interest to declare.

The co-authors have seen and agree with the contents of the manuscript andthere is no financial interest to report. We certify that the submission isoriginal work and is not under review at any other publication

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The Proposal of an Instructional Design Modelformaternity Nursing in Japan-Simulation-based Education for Improving Clinical Judgement

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Abstract

Clinical judgement is a prerequisite for nurses for extending efficient health care based on their education, knowledge, reasoning, intuitive thinking and experience. Nurses involved in maternity nursingprovide care toexpectant and new mothers before, during and after child birth.Therefore, effective nursing education plays a very important role in increasing the nurses'professional competencies and improving the quality of care provided by them. However, the spread of COVID-19 in Japan and the changing social conditions surrounding perinatal care have made it necessary to introduce simulation education to improve clinical judgement skills. In this paper, we propose an instructional design for effective simulation education for maternity nursing as an alternative to practical training in a clinical setting. The design was developed based onMerrill'sfive principles of instruction.The high-fidelity simulation task was constructed according tothecognitive load theory, controlling for three different loads.We referred to Tanner's clinical judgementmodel and discussed relevant references on 'intuition' or 'tacit knowledge' as a component of clinical reasoning patterns.We also discussed the importance of 'intuition' and debriefing on experiencesas per the Dreyfus model.Relevant papers were reviewed and scales developed to assess simulation-based education.

***Keywords**, Clinicaltraining, nursing education, COVID-19, clinical reasoning,perinatal care*

Introduction

In Japan, the nursing students are required to practice post-partumand neonatal nursing care as mandatory components ofbasic education for the national qualification.[1] The Ministry of Health, Labour and Welfare (MHLW)'s national-level nursingexamination includes questions related toperinatal nursing care. Thus, not only the midwifery students but also the nursing studentsin clinics or hospitalslearn how tocare for pregnant/post-partum women and newborns to provide proper care/ support. However, due to the coronavirus disease 2019(COVID-19) pandemic, the clinical trainingfor perinatal nursing in the hospital settingin 2020 has been cancelled due tothe riskofspreading COVID-19 infection from nursing students to pregnant/post-partumwomen, babies and health care providers in hospitals.Due to the prevailing social situation, as clinical supervisors, the nurses are struggling to cope

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with caring for the patients and it is difficult to provide the nursing studentswith sufficient instructionsin the medical setting now. Thishasinevitably led to the consideration of introducing simulation-based nursing educationinstead of clinic- or hospital-based training for imparting maternity nursing knowledge and skills. TheMinistry of Education, Culture, Sports, Science and Technology (MEXT) has requested for allocation of5 billionin the budget for 2021for the enrichment of simulation-based education in medical institutions[2], which would reduce theburden on theseinstitutions.In particular, high-fidelity simulations involving the use of sophisticated full-body mannequinsare expected to be incorporated in nursing education as they enable students to acquire practical skills without imposing any burden on thepatients.[3, 4, 5] Nonetheless, there is inherent difficulty in the implementation of and increasing the demand for simulation-based education in clinical practice for perinatal care in Japan.

Afterthe second baby boom in 1971–1974 in Japan, there was a steady decline in the birth ratedue to the economic turmoil caused by the first oil shock and the spread of the idea of a static population in response to the worldwide population growth trend.[6] Consequently, there was a drastic reduction in thenumber of mothers and babies to care for by the nursing students, which in turn decreased the opportunities to learn perinatal nursingin clinical practice. As a result, basic nursing education has not been able to equip the nurses with the required competencies in perinatal care.Therefore,it has become necessary to compensate, through other methods,for what cannot be learned clinically.Moreover, the growingnumber of high-risk pregnantwomen due to the increasein the average age of first-timemothersinJapan has added to the challenges in the perinatal care. For instance, advanced-age motherhood is associated with a higher risk of diabetes.[7] Consequently, the nurses and midwives who are engagedin perinatal care are increasinglyrequired to learn and developparticular skills tobe able toidentify non-normal pregnancies and post-partumissuesto formulate the appropriatemedical treatment.Also, there is a growing appreciation for improved clinical judgement in this domain of health care and the significanceof simulation-based education in fostering this ability.[8] Therefore, here, we will explore the pedagogy forsimulation-based education as the instructional model for training nursing students in perinatal care to enhance their clinical judgement skills to empower them as professional health care providers. It needs to premise on the provision of safeand high-quality medical care to patients to avoidthe risk of lawsuits due tomedical accidents. As medical accidents were criminalised and medical providers arrested in some cases since 2000, the safety and quality of medical treatment have become the top priority in Japan.[9] Therefore, training nurses in these aspects is the most significant task in the nursing pedagogical curricula.[10]

The purpose of this paper is topropose an instructional design forsimulation-based educationfor maternity nursingto improve clinical judgement skills as an alternative to training in the clinical setting. The relevant literature on this subject will be reviewed to clarify the major elements.

Review of Literature and Proposal for Instructional Design

Introduction of simulation-based education

The demand for simulation-basednursing and midwifery education in the clinical setting has increased worldwide to compensate for increased demands on the training hours. This form of training is also widely recommended to ensure patient safety and quality of care and to develop clinical judgement.[8, 11, 12, 13] This hasgiven rise to a new paradigm of education in health care.

As thefirst step in developing a simulation-based instructional design, it is important to adapt it to the level of the student.[11] Sweller[14] mentioned cognitive load theory as a key element inthis endeavour. Itis based oncontrolling three types of load: intrinsic;

extraneous; and germane loads, which enable students to learn in a way that is suitable for them. The intrinsic load is increasedif a less proficient learner is assigned a task with a high level of difficulty.Poor design of instructional materials results in a high extraneousload asthelearners are confused by the interpretation of information that is not directly relevant to the task. Germanic load refers to the mental resources devoted to the acquisition and automatisation of schemas in long-term memory. Avoiding overloading, i.e. not exposing students to an excessive amount of information at one time, while at the same time placing a suitable load on working memory, will enhance learning.We created a simulation task in which these three loads were appropriately controlledand also determined its cognitive load by interviewing individual students after the simulation (Table 1).

Table1: The rating scale for the cognitive load level

Controlled cognitive load	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Intrinsic load	1.Utilised knowledge that I already knew	5	4	3	2	1
Extraneous load	2.The presented simulation scenario simulates exactly	5	4	3	2	1
	3. The simulation scenario was completely immersive	5	4	3	2	1
Germane load	4.Case study could be applied	5	4	3	2	1
	5. Learning outcomes could be reflected on effectively	5	4	3	2	1

The instructional design of simulation-based education for maternity nursing

All the recommended instructionsfor simulation-basedmaternity nursing education were based on the principles of instructional design. They included a wide range of activities such as teaching, selection of the instructional materials, monitoring of time progression and teaching activitiesthat enhance learning.[17]When designing the instructions, the focus wason supporting the learning process and designing the learning plan in a student-centredmodel. Merrill'sfive first principles of instruction[18] state that:*(a) Learning is promoted when learners are engaged in solving real-world problems. (b) Learning is promoted when existing knowledge is activated as a foundation for new knowledge. (c) Learning is promoted when new knowledge is demonstrated to the learner. (d) Learning is promoted when new knowledge is applied by the learner. (e) Learning is promoted when new knowledge is integrated into the learner's world.*

We referred to Merrill's five first principles of instruction for developing the maternity nursing education programme's instructional design (Table2).

These principles are based on the following 5 components: task/problem-centred instruction, activation, demonstration, application and integration.

Table 2: The instructional design based on Merrill's 5 first principles for maternity nursing

Merrill's five first principles of instruction	Timetable	Our instruction
1. Task: Challenge students with real-world tasks.		To prepare a task the situation for nursing practice of a mother and child in the post-partum period during hospitalisation. Use an unfolding case study (It includes information from pregnancy through to the post-natal period in hospital).
2. Activation: Encourage students to use the knowledge they already have.	The first 27 hours of the 90-hour programme.	Remind the students of the knowledge and skills needed to assess the progress and adjustment of the mother and child on a post-partum day. A written exam to test knowledge.
3. Demonstration: Show the characteristic skills to students.		In observing the post-partum mothers and newborns, characteristic skills that have not been mastered in previous nursing skills will be demonstrated (observation of contraction and height of the uterine and new-born health examination).
4. Application: Opportunities for Application.	The first 36 hours of the 90-hour programme	Take an unfolding case study* (e.g. from the first to the fourth day after childbirth) and simulate nursing practice with a simulated patient. Debriefing after each simulation
5. Integration: Apply the new skills acquired.	The first 27 hours of the 90-hour programme.	Objective Structured Clinical Examination (OSCE) to confirm that the skills have been acquired.

Written exams were conducted after completion of all relevant lecturesto test the knowledge of clinical skills gained by the students as perMiller's guidelines.[19]An objective structured clinical examination (OSCE)was usedto assess whether the students had integrated their knowledge and skills and would be able to practice them in real-life situations on mothers and babies.

In instructional design, it is essential to motivate the learners. Keller[20] presented four domains related to motivation to learn: (1)'attention', which involvesstimulatingand sustainingthe learner's curiosity and interest; (2)'relevance'–to make the learner believe that the learning experience

would be personally meaningful; (3)'confidence'–the appropriate expectation of success rather than overconfidence or lack of confidence and (4)'satisfaction'–whether the learner would be satisfied with the process and outcome of the learning experiences.Then, the attention, relevance, confidence, satisfaction and volition (ARCS-V) model was developed[21]to assess the motivation among the students for the task of theinstructional design (Tables3).

At the end of the study,the students were asked to evaluate how well the simulation-based education model motivated them to acquire the maternity nursing competencies.

Table3: The rating scale for the students' motivation for the simulation task

ARCS-V	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Attention	1. It was interesting.	5	4	3	2	1
Relevance	2. It was worthwhile.	5	4	3	2	1
Confidence	3. I could do it.	5	4	3	2	1
Satisfaction	5. It was satisfying.	5	4	3	2	1
Volition	4. I could finish it.	5	4	3	2	1

How can the competenciesof clinical judgement be improved by simulation-based education?

Clinical judgement

In USA,the data indicatedthat only 23% ofthenewly graduated nurses demonstrate entry-level competencies and practice readiness despite havingpassed the national exam for nurses.[22]Considering that this situation has been going on for a long time, it is necessary to fundamentally revise the basic nursing education model. The primary goals of nursing education havebeen forced to change to predominantlydeveloping practical skillssuch as clinical judgement as opposed to the conventional,theory-based education model.At present, our educational programmehas alsobeen focussing on this aspect.

Although the nursing students in Japanare familiar withthe term 'clinical judgement',the extent of their understanding of the concept is unclear.Rubin[23] describes'clinical judgement' in a book 'Expertise in Nursing Practice'as follows:*'We use the term clinical judgement to refer to the way in which nurses come to understand the problems, issues or concerns of clients and patients, to attend salient information and to respond in concerned and involved ways'* (p.200). Also, Tanner[24]describes it asfollows:*'the term "clinical judgement" to mean an interpretation or conclusion about a patient's needs, concerns or health problems and/or the decision to take action (or not), use or modify standard approaches or improvise new ones as deemed appropriate by the patient's response'*.To summarise, clinical judgementcanbedevelopedthroughout the nursing

process duringwhich the nurses assess a situation by using observation skills and acts based on the clinical informationand medical examinationsofthe patients.Consequently, they can analysethe right approachfor nursing practices and consider whether to continue or revise the nursing intervention based on the results.The term 'clinical reasoning' is often confused with 'clinical judgement' in Japan. Clinical reasoning refers to the processof judgement by health providers.[24]Generally, it involves the process ofidentifying a diagnosis and planning anintervention in clinical situations by medical doctors and nurses. The pattern of clinical reasoning may vary depending on the person's level of experience, for example,it widely differs between novices and experts. Clinical reasoning might be the key to interpreting what we notice (or based on the gathered information) in our clinical judgement.

The following sections will discuss the elements that constitute clinical judgement and those that specifically require strengthening in order to become an expert.

The core of clinical judgement model-Intuition is stored as one's knowledge-

Tanner[24] presented the 'clinical judgement model'that includes four phases:'noticing', 'interpreting','responding' and 'reflecting' based on what the nurses notice and how they interpret their observations, respond to the situation and reflect on those responses.This clinical judgement model was constructed based on interviews with expert nurses and their thinking process during decision making in nursing care. An experience becomes transferable through 'reflection'. Tanner used the term 'reflection' to describe the process of reflecting on an action.In simulation-based education, the reflection process is commonly described as 'debriefing',which is recognised as having an important role in this model for the immobilisation of the content and the clinical adaptation of the simulation. 'Reflection' and 'discussion' encourage participants to think autonomously and change their future behaviour.

In the Dreyfus model[25], which is based on the recognition that experiential learning is essential, includes several levels based on the amount of experience such asnovice, advanced beginner, competent, proficient and finally,expert. It is possible for novices to get closer to the expert level by learning how anexpert think. 'interpreting' includes three reasoning patterns: 'analytic', 'intuitive' and 'narrative'.'Intuition'is developedas one progresses through each level (from novice to expert)and is similarto the term 'tacit knowing'. According to Polanyi[26],during the skills developmentprocess, the focus of attention shifts as the things that initially required awareness are eventually captured by the mind unconsciously. To be able to ride a bicycle or play the piano, explicit knowledge needs to be changed to tacit knowledge.Rubin[23]emphasised on theimportanceof intuition in clinical judgements and stated that'intuition is characterisedby immediate apprehension of a clinical situation and is a function of acquaintance with similar experiences'.An intuitive competency means that a nurse has conceptualisedthe events they have experienced before in a clinical setting and are able to organisethem into common patterns of cues that can be applied to other similar situations and accessed in a drawing out of their brain without making a conscious effort.

Experiential learning and the significance of debriefing

The simulation-based education model was formulated based on Kolb's experiential learning theory[27],which consists of four modes: 'active experimentation' by 'abstract conceptualisation'through 'reflective observation'of 'concrete experience'. Dewey[28] suggested that experiential learning is most productive in environments where performance feedback is rich and opportunities to articulate and reflect on experiential

learning are deliberately planned. Schon[29], who conducted a study of the structure of reflection, underlines the significance of reflecting on experiences that encourageus to approach unanticipated outcomes as new knowledge. Solid experience and effective reflection are important in experiential learning. Simulation of actual clinical situations may enable students to accumulate intuitive competencies by reflecting on their experiences. Therefore, effective debriefing is as crucial as the preparation of high-fidelity simulation scenarios.

Furthermore, effective debriefing could contribute to a deeper conceptualisation of the experienced events. Accumulating experiences is not enough forbecoming an expert.It is vital to apply thoseexperiences to the next similar situation.Generalisation can be definedas remembering the common concepts amongthe many individual occurrences and applying them to others. Lasater& Nielsen[30] believe that concept-based learning for students could contribute to the improvement of their clinical judgement. However, it is extremely challenging to conceptualise intangible things.[31]The process of conceptualisation requires reflection oneventsand passing on the knowledge tonewstudents, instructing themtosimilarlyreflect on their ownsuccessfulor unsuccessful experiencesand use themto improve their clinical judgement skills. Lasater[32] proposed a rubric for assessing clinical judgement skills, whichconsists of a four-level assessment scale of achievement for each of the four elements of Tanner's clinical judgement model. However, the evaluation indicators are abstract and it is difficult to assess how to apply them to specific situations. In developingthe maternity nursing simulation, we chose not to adopt Lasater's rubric, which measures the improvement in clinical judgement directly. Considering that the habit of looking back after simulation will eventually lead to improved clinical judgement, we triedto examine effective methods of debriefing. Moreover,our goal was tobe able to assess the post-partum progress of the mother and new-born baby and to perform basic skills required in maternity nursing without assessing clinical judgement itself through simulation and determinewhether these goals couldbe achieved through OSCE.

The debriefing process enables students to effectively acquire knowledge derived from experiences. There are a number of studies on the debriefing methods,theirimportance and waysto facilitate them.[33, 34, 35]

The gather, analyse and summarise (GAS) method is one of the most commonly used in debriefing. The 'gather' phase involves collection of tips to look back on the actions performed in the simulation; 'analyse' looks back at the action tip as to why it was successfully completed and whether there is further improvement and 'summarise' discusses how to apply these results next time. In this study, we decided to compare the GAS and after action review (AAR) methodsto examine whichof these debriefing methods is more effective for novices. The US army has adopted AAR as the primary method for providing feedback after simulation battle exercises.[35,36] The AAR is composed of a series of questionssuch as 'What happened during the collective training exercise?'; 'Why did it happen?'; 'How can units improve their performance?' etc.We have developed further questions to specifically discuss the 'Why did it happen?' of the AAR method. It is a way of focussing on identifying the gaps between what you have achieved and what you were aiming for and what knowledge and skills you have acquired that are not working when you practice the simulation tasks and then considering the implications of these gaps and how to address them. We presented the AAR method to the students (Table 4).

Table4 : Debriefing steps for the AAR method (Group Discussion)

First step	They discuss for identify the best practices in the context of goals.
Second step	After watching the simulation video, they discuss identifying the successful practices.
Third step	After watching the simulation video, they discuss identifying the practices that have not done sufficiently well.
Forth step	They compare what they successfully and unsuccessfully did, they extracted the gaps.
Five step	Thinking about why gaps were emerging, think about what they can do to compensate for what they could not do and reflect on their next steps.

Conclusion

In Japan, the spread of COVID-19 and the changing social conditions surrounding perinatal care have made it necessary to introduce simulation-based education.In this paper, we proposedan instructional design for effective simulation-based education for maternity nursing to improve clinical judgement as an alternative to practical training in a clinical setting.The instructionaldesign and simulation scenarios were set up using the theoretical background. We also reviewed and discussed the literature on intuition and tacit knowledge as the key elements of clinical judgement that students need to acquire. We developed scales to assess the appropriateness of the simulation training presented to the students and whether the students' motivation to study could be maintained.

Maternity nursing simulations wereconducted in placeof a clinical setting.After the simulation, the students were asked to provide answers toall the scales presented in this paper. The data collection is in progress and thestudents' evaluationswill be analysedand reported in a further study.

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Ethical Considerations: The study was approved by the Ethical Committee of Kagawa Prefectural University of Health Sciences No. (319).

Conflictof Interests: The authors declare that they have no conflict interests.

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Effectiveness of Art Therapy on Level of Anxiety among Hospitalized School Age Children in a Selected Hospital at Kanyakumari District

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Abstract

The study was conducted to evaluate the effectiveness of Art Therapy on level of anxiety among hospitalized school age children. Quasi experimental, non-randomized control group design was adopted for the study. The structured questionnaire was developed to collect data. The samples were selected by purposive sampling technique and data collection was carried out among 64 school age children in a selected hospital. Pretest and posttest conducted before and after Art Therapy by using Structured Anxiety Rating scale. The findings revealed that the level of anxiety among hospitalized School age children.The unpaired 't' test value was 8.86 is significant at $p \leq 0.05$ and is highly significant at $p \leq 0.01$, $p \leq 0.001$. It represents the effectiveness of Art Therapy in reducing the level of anxiety. There was a significant association between the Gender, Extracurricular activities, Previous experience with type of illness and Activities of the child during hospitalization. The study concluded that Art Therapy was effective in reducing anxiety level among hospitalized School age children.

Keywords: *Effectiveness, Art Therapy, Level of anxiety, Hospitalization, School age children.*

Introduction

Children play a major role in a nation. Their well-being is to make family happy. The parents have a great role in caring their children. However, child rearing is not aneasy task when the situation of hospitalization arises. Hospitalization can be a stressful experience for the children. They are sensitive to what happens around them. Children naturally have a tendency tobe moreanxiousthan others.Hospital experience will make them to have more stress and anxiety [(7)]. Art Therapy can be a good choice to Navigating anxiety. Art Therapy helps the children to improve their self-esteem, relieve stress, and decrease the symptom of anxiety, depression and Cope up with a physical illness.[(4)] Reawakening memories and relive from an unconscious mind.Itserves as an alternate mode of communication [(6)]. Art Therapy provides away to gain insight and understanding through self-expression [(5)]. This interactive Art helps to hospitalized children to forget about their illness and normalize their experience [(8)].

Statement of the Problem: A Quasi Experimental Study to Evaluate the Effectiveness of Art Therapy on Level of Anxiety among Hospitalized School Age Children in a Selected Hospital at Kanyakumari district.

Objectives

1) To assess and compare the pre test and post test level of anxiety among hospitalized school age children in study group and control group.

2) To evaluate the effectiveness of Art therapy on Level of Anxiety among hospitalized school age children in study group and control group.

3) To find out the association between selected demographic variables among hospitalized school age children with their pre test level of anxiety in study group and control group.

4) To find out the association between selected clinical variables among hospitalized school age children with their pre test level of anxiety in study group and control group.

Hypotheses

H_1: There is a significant difference between pre test and post test level of anxiety among hospitalized school age children in study group and control group.

H_2: There is a significant difference between post test level of anxiety among hospitalized school age children in study group and control group.

Research Methodology

Research approach: The researcher utilizedquantitative research approach.

Research design: Quasi experimental non randomized control groupdesignwas used in the study.

Research setting: The study was conductedat Gerdi Gutperle Agasthiyarmuni child care center,Kanyakumaridistrict.

Population: Hospitalized school age children.

Sample: Hospitalized school age children between 6 to 12 years of age who have fulfilled inclusion, exclusion criteriaand admitted in Gerdi Gutperle Agasthiyarmuni child care center,Kanyakumaridistrict.

Sample size:32school age children in study group and 32 school age children in control group were participated in this study.

Sampling technique: Purposive sampling technique was adopted for the study.

Description of Tool

The tool used in this study consisted of two parts.

Part I: In this part Structured questionnaire was used to collect the demographic variables such as Age, Gender, Education of the father, Education of the mother, Occupation of the father, Occupation of the mother, Type of family, Religion, Area of residence, Family income, Type of school education, Class of study, Extracurricular activities, Exposure to drawing.Clinical variables consisted of previous history of hospitalization, previous experience with type of illness, Primary care giver, Activities of the child during hospitalization, Present illness, Number of living children, Birth order of the child.

Part - II

This part of tool consists of Structured Anxiety Rating Scale to rate the level of anxiety by Mild anxiety, Moderate anxiety, Severe anxiety.

Method of Data collection

Phase: 1 Selection of hospitalized school age children

After obtaining formal permission from the Principal of St. Xavier's Catholic College of Nursing, Chunkankadai, Managing Director and Nursing Superintendent of Gerdi Gutperle Agasthiyarmuni Child Care Center,Vellamadam.Prevalence was assessedby Facial Affective Scale and those who scored above 2 were selected. All the 64 school age children had anxiety and they were divided in to study and control group with 32 in each, Participants were selected based on the criteria of sample selection.The investigator obtained informed written consent from the Mother/ Guardian of each child separately before introducing Art Therapy and proceeded with the data collection. Data on Demographic and Clinical Variables were collected through structured interview

schedule.

PHASE:2 Pre test

The data was collected from the participants by Demographic and Clinical Variablesthrough structured interview scheduleand the Structured Anxiety Rating Scale was used to assess the level of anxiety on the first day of admission in study group and control group.

PHASE:3 Interventions

Study group received Art therapy and control group received hospital routine care. The Art therapy consisted of different diagrams in each session. The investigator divided the Art therapy in to 9 sessions for3 days, 3 sessions per day, each session with20minutes duration.

PHASE:4 Post test

On the third day, after completing the IX session, the investigator post test level of anxiety with the structured Anxiety Rating Scale.

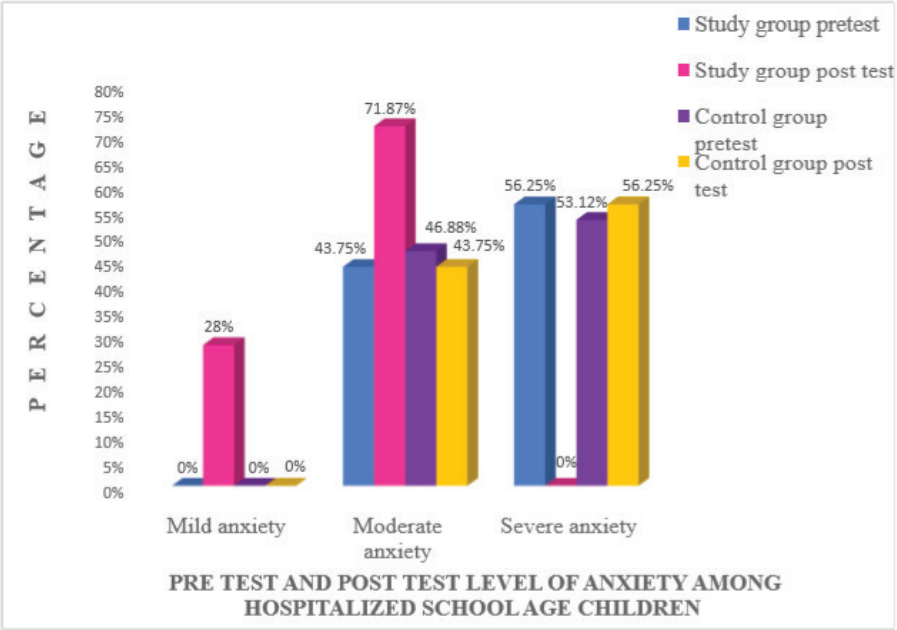
Results

Table 1: Comparison of Mean, Standard deviation, and unpaired 't' value on post test level of anxiety among hospitalized school age children in study group and control group.

N=64

Variable	Group	Mean	SD	Unpaired 't' test
Level of anxiety	Study group(n= 32)	32.56	5.85	8.86***
	Control group(n= 32)	46.95	7.24	

Significant at *p≤0.05, **p≤0.01***, p≤0.001



Discussion

The aim of the study was to evaluate the effectiveness of Art therapy on level of anxiety among hospitalized school age children in a selected hospital. Based on the data collection the mean score on level of anxiety among hospitalized school age children in study group is 48.75 in the pre test and 32.56 in the post test and in control group is 47.85 in the pre test and 46.95 in the post test. The paired 't' value for anxiety level is 20.27*** which is significant at $p \leq 0.05$ and is highly significant at $p \leq 0.01$, $p \leq 0.001$. The estimated unpaired 't' value is 8.86*** which is significant at $p \leq 0.05$ and is highly significant at $p \leq 0.01$, $p \leq 0.001$. The association between the level of anxiety among hospitalized School age children with selected demographic variables such as Gender and Extracurricular activities and the clinical variables such as previous experience with type of illness and activities of the child during hospitalization showed a significant association.

Conclusion

The study concluded that providing Art Therapy was effective in reducing the level of anxiety among hospitalized school age children. Art therapy is one of the best, non-pharmacological and cost-effective interventionsfor hospitalized children.Nurses can apply the Art Therapy like a play therapy to divert and relax the child to facilitate communication between staff and children and encouragesthe child's co-operation in hospital procedure.

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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 CatholicCollege ofNursing and prior permission was obtained from managing director of Gerdi Gutperle Agasthiyarmuni child care center. Informed written consent wasobtained fromchild'smother/guardian before starting data collection. Assurance was given to the studyparticipants regarding the confidentiality of the data collected.

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A Study to Assess the Knowledge and Attitude Regarding Weaning among Mothers of Infants in selected Rural Area at Rohtak with a View to Develop an Information Booklet on Weaning

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Abstract

Introduction: Weaning is that the most important amount for the expansion of the kid. this can be the time once growth faltering and organic process deficiencies manifest in youngsters. Weaning, a shift amount from breast-feeding to adult diet is sometimes related to variety of issues and issues in developing countries. the main issues area unit what foods ought to lean to the kid, however and after they ought to lean. The age to introduce a lactation foods varies and is influenced by the tradition of the various ethnic population within the country, urbanization and therefore the socioeconomic standing of households Objectives of the study: To assess the information of mothers of infants relating to a lactation. To assess the perspective of mothers of infants relating to a lactation. To develop associate data leaflet. Material and Methods: The scientist conducted the study exploitation quantitative approach and non- experimental style on a hundred mothers of infants by non likelihood convenient sampling technique. Structured form was accustomed assess the information of mothers of infants and perspective list was accustomed assess the perspective of mothers of infants relating to a lactation. Descriptive and inferential statistics accustomed analyze the info. Results: The norm of take a look at information score and perspective was fifteen.4 and 9.45respectively. None of mothers of infants had inadequate information, thirty first had moderate information and sixty nine had adequate information relating to a lactation. Majority of samples that's ninety eight of mothers of infants had favorable perspective, and solely two mothers had unfavorable perspective relating to lactation. There was vital correlation between information and perspective of mothers of infants relating to lactation. Conclusion: The investigator finished that the information of the mothers of infants is adequate. And there's vital correlation between information and perspective of mothers of infants relating to a lactation. {the information the information |the data} leaflet can facilitate in up the knowledge of mothers of infants relating to a lactation.

Keywords*: Assessment of data, assessment of perspective, mothers of infants and data leaflet.*

Introduction

Children are the long-term investment & the long-term voters so only by taking note of their health; one can imagine a sturdy & pleasant method forward for the country.[1] The average milk output of a mother is regarding 600ml, which could offer only barely over four hundred calories. this can support the organic process demands of the child up to four months mature only, and thus on the way facet this age the child desires more food things.[2] The term "weaning" implies that to be started out the breasts or introduction

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of prime feed. The later which means could be a heap of relevant in child nutrition.[3]Weaning could also be a way of Gradual & progressive transfer of the baby from breast milk to the family diet. It doesn't suggest discontinuing to nursing.[4] one of the foremost necessary components of maintaining a Childs health is that the promotion of fine nutrition & dietary habits. The nurse's role involves encouraging and serving to of us in providing adequate nutrition for his or her child.[5]In the first year of life, infants endure periods of rising once smart nutrition is crucial. In fact, nutrition at intervals the first years of life could also be a serious determinant of healthy growth and development throughout childhood and of fine health in adulthood.[6] The term "weaning" comes from the word "wemian," which implies to habituate. substitution is that the method of gradual and progressive transfer of the baby from the breast-feeding to the same old family diet. throughout substitution, the kid gets acquainted with foods aside from aside from. substitution foods area unit given additionally to lactate. once the quantity of breast milk is insufficient. Solid food else to associate associate diet is named beikost.[7]

Need for the Study

The most applicable length of the breastfeeding amount has typically been a topic of disceptation. Some authors have found a useful result of breastfeeding into the second year of life, or perhaps into the third year in special things.8Others have suggested that kids ought to give suck now not than eighteen months because of a negative impact on organic process standing among kids WHO give suck for quite eighteen months.[9] The relationship between prolonged breastfeeding and organic process standing of young kids in developing countries has been subjected to dialogue for the last ten years. several cross sectional studies have according lower weight-for-age, height-for-age and weight-for-height among breastfed kids compared to weaned kids between the ages of twelve and thirty six months .[10] Using knowledge from the Demographic Health Surveys (DHS) applied in nineteen developing countries, it had been recently according that kids WHO were breastfed on the far side the primary year of life were shorter and lighter compared with non-breastfed kids. Most of the studies that have examined this question, together with the massive and representative DHS, area unit restricted by their cross-sectional style that doesn't enable examination of temporal relationships between full ablactation and below nutrition.[10] The alimentation practices have their roots in unclear socio-cultural pattern, spiritual beliefs, superstitions and taboos rife in each grouping. The information is passed down the generations from mothers to daughters and by observation of women within the neighborhood. However, mere acquisition of information doesn't guarantee that it'll be effectively used. Attitudes have a really necessary role to play in crucial whether or not the information is applied or not. sadly attitudes have remained the 'Cinderella' of health educators. Studies on attitudes concerning alimentation not assessed exploitation commonplace accepted scientific methodology. No surprise that almost all health education programmes stay localized to the extent of transmission information. No try is created to either assess attitudes or modification them, with the result that the beneficiaries fail to rework the information into actual follow.[11]

Problem Statement

"A Study to Assess the Knowledge and Attitude Regarding Weaning among Mothers of Infants in selected Rural Area at Rohtak with a view to develop an information booklet on Weaning."

Objectives of the Study

1. To assess the knowledge of mothers of infants regarding weaning.
2. To assess the attitude of mothers of infants regarding weaning.
3. To develop an information booklet.

Operational Definitions

1. **Knowledge:** It refers to amount of information

or awareness of the mothers about weaning, which is evaluated in terms of correct response to knowledge item given in structured questionnaire and compared in terms of knowledge scores.

2. Attitude: It refers to the general feeling or a frame of reference around which a mother organizes knowledge towards weaning which is measured in terms of expressed responses of weaning to structured questionnaire.

3. Infant: A male/female child aged 1 to 12 months.

4. Weaning: Weaning, which is often referred to as "mixed feeding", proceeds in stages from liquids to solids, and from one method of feeding to another.

5. Information booklet: It refers to the written information guide regarding the weaning, its importance and benefits.

Assumptions

1. Mothers will have some knowledge regarding weaning.

2. Information booklet will enhance the knowledge of mothers regarding knowledge and attitude about weaning.

Delimitations

study is limited to:

v This study is limited to selected rural area at Rohtak.

v Limited to only to mothers of infants

v The study was limited to assess the knowledge and attitude of mothers of infants at CHC Kahnaur, Rohtak regarding weaning.

v The study was limited to 100 samples only.

v The data was collected by using purposive convenient sampling techniques.

v The study was limited to mothers who are willing to participate in the study.

Research Methodology

· Reseach Approach:

Quantitative approach adopted by the researcher for the accomplishment of the present study.

· Research Design :

Non- experimental research design.

· Settings Of The Reseach:

The present study was conducted in CHC, Kahnaur, Rohtak, Haryana.

Population:

· In this study, the target population consisted mothers of infants at CHC, Kahnaur, Rohtak.

· SAMPLE :

· The sample in this study includes mothers of infants at CHC, Kahnaur, Rohtak.

· SAMPLE SIZE :

In the present study, the sample size comprised of 100 mothers of infants.

· **Sampling Technique:**

The sample for this study was drawn by non-probability purposive sampling technique.

Plan For Data Analysis

Ø Descriptive and inferential statistics was used to analyze the data.

Ø Frequency and percentage would be computed to describe demographic data.

Organization Of Findings

The analysis of data from study is presented under the following headings: SECTION A: Distribution

of socio-demographic characteristics of samples. SECTION B: Analysis of knowledge of samples regarding weaning. SECTION C: Analysis of attitude of samples regarding weaning.

SECTION D: Correlation between knowledge and attitude score.

SECTION A

Distribution of socio-demographic characteristics of samples

Table No. 1: Frequency and percentages socio-demographic characteristics of samples. n=100

SR. NO.	SAMPLE CHARACTERISTICS	FREQUENCY	PERCENTAGE
1	Age in years		
	a. 18-24	61	61%
	b. 25-31	32	32%
	c. 32-38	02	2%
	d. 39-45	02	2%
2	Religion		
	a. Hindu	98	98%
	b. Muslim	02	2%
	c. Christian	0	0%
	d. Sikh	0	0%
3	Education		
	a. Illiterate	11	11%
	b. Primary	27	27%
	c. Middle	05	5%
	d. High	13	13%
	e. Sr. secondary	22	22%
	f. Graduation andabove	22	22%
4	Occupation		
	a. Housewife	72	72%
	b. Private job	19	19%
	c. Govt. job	03	3%
	d. Self -business	06	6%
5	Family income		
	a. Rs.5000-10,000	10	10%
	b. Rs. 10,001-15,000	54	54%
	c. Rs. 15,001-20,000	28	28%
	d. Above Rs. 20,000	08	8%

Cont... **Table No. 1: Frequency and percentages socio-demographic characteristics of samples. n=100**

6	Types of family a. Nuclear b. Joint c. Extended	 80 20 0	 80% 20% 0%
7	Number of children a. One b. Two c. Three d. More than three	 42 35 13 10	 42% 35% 13% 10%

Table No.1 indicates that majority of subjects 61% are in the age group of 18-24 years; about 32% were in the age group of 25-31 years while 2% were in 32-38 years and minimum numberof subjects 2% was in age group of 39-45 years. In relation to religion most of 98% were Hindu, and 2% were Muslim. In relation to education 11% were illiterate, 27% were in primary category. 5% of samples are in middle category, 13% of samples were in higher category, 22% were belongs to senior secondary category & 22% of samples were belongs to graduation and more. In relation to occupation, 72% of samples were housewife, 19% were in private job, 6% were self employed and minimum 3% of samples were in govt. job. In relation to family income,10% subjects were in family income group of Rs. 5000-10000, 54% were comes under the groupof Rs.10, 001 to 15000, 28% were comes under the group of Rs. 15001 to 20000 and minimum number of subjects 8% monthly income is above Rs. 20000.In relation to types types of family, most of 80% were from nuclear family, 20% were from joint family and no one in extended family. In relation to number of children, 42% mothers had single child, 35% had two children, 13 % mothers had three children and minimum 10% mothers had more than three children.

Section –B

Section B: Analysis of Knowledge of samples regarding weaning.

Table No. 2: Grading of knowledge of samples regarding weaning.

S. No.	Grading of Knowledge	Frequency(f)	Percentage (%)
1.	Inadequate Knowledge (0-7)	00	0%
2.	Moderate Knowledge (8-14)	31	31%
3.	Adequate Knowledge (15-20)	69	69%

The data depicted in above Table no. 2 shows that majority 69% samples had adequate knowledge, 31

% had moderate knowledge and 0% had inadequate knowledge regarding weaning.

SECTION C

Section C: Analysis of attitude of samples regarding weaning.

Table No. 3: Grading of attitude of samples regarding weaning.

S. No.	Grading of Attitude	Frequency(f)	Percentage (%)
1.	Unfavorable attitude (0-5)	02	2%
2.	Favorable attitude (6-10)	98	98%

The data depicted in above Table no. 3 shows that majority 2% samples had unfavorable attitude,and 98% had favorable attitude regarding weaning.

SECTION D

CORRELATION BETWEEN KNOWLEDGE AND ATTITUDE SCORE Table no. 4: Correlation between knowledge and attitude score

Variable	Mean	SD	Correlation
Knowledge	15.4	1.8	r = .215* p=0 .032
Attitude	9.45	0.75	

Table no. 4 shows that calculated correlation coefficient (r) was .215* with p value 0.032 whichshows that the study was statistically significant.

Discussion

This study concluded that most of mothers (69%) were there with adequate knowledge. And 31% mothers were having moderate knowledge and none of them having inadequate knowledge. The study also concluded that only 2% mothers were having unfavorable attitude and 98% mothers had favorable attitude regarding weaning. The study concluded that there was significant correlation between knowledge and attitude of mothers of infants regarding weaning. There are fewer programmes organized by the health department especially for mothers so that they can improve and update their knowledge time to time. Most of mothers of infants had heard about weaning and source of information for most of them was their personal experiences, TV, magazine, internet etc. The written prepared material by the investigator in the form of information booklet will help in improving their knowledge and attitude.

Nursing Implications

The findings of this study recommended the implications on nursing practice, nursing education, nursing research and nursing administration.

Nursing Practice

Health care professionals should educate the mothers of infant regarding the knowledge and attitude regarding weaning. Information booklet will enhance the knowledge and attitude of mothers of infant regarding weaning and play an important role to promote the health and prevention of infections in children.

Nursing Education

Nursing education and curriculum should plan in a way that it will encourage the students to provide knowledge to mothers of infant in the community and hospital settings. Along with imparting the knowledge, special attention and motivation to be given to specific areas regardingweaning. Continuing nursing education program can be organized on this aspect. In service educations to acquire advanced knowledge regarding weaning can be organized. The curriculum should include newer advancement in child health practices.

Nursing Administration

Nurse administrators will use various approaches of health education to plan and organize the health teaching program for nursing students regarding knowledge and attitude regarding weaning. The nursing conference and group discussions can be organized by the administrators periodically. The nurses can be provided with adequate allocation of budget and manpower to implement effective health education which helps the mothers to gain adequate knowledge.

Nursing Research

More researches should be done related to knowledge and attitude regarding weaning. Management and administrative authorities should give encouragement, motivation and financial support to conduct the research. The effectiveness of the study for the analysis field is verified by its utility by the nurses within the sensible field. The findings of the study will help the professional nurses and students to developthe enquiry for further research.

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Nursing Students' Perceptions and Practices of Physical Restraint in a Hospital Setting: A Qualitative Study

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Abstract

Physical restraint is generally used in the healthcare setting, implying that students were exposed to it during their clinical placement and may have participated in it, either actively or passively.This study explores the student nurses' knowledge and practice of physical restraints in clinical practice. A descriptivequalitative design using one semi-structured individual interview and five focus group discussions on nursing students (N=24) from two higher nursing institutions in Brunei Darussalam. The data were analysed using thematic analysis.We identified three meaningful themes focused on the use of physical restraint in the hospital setting from the perspective of nursing students, namely, the definition of physical restraint, the uses of physical restraint and concerns towards its practice. The student nurses reported that physical restraint was justified in providing safe and high-quality patient care.However, they have concerns about its practice, both for themselves and the patients. The need for theoretical and practical guidance onsafe and efficient use of physical restraint may further provide educational supports to the students.

Keywords: *Nursing, Perceptions, Physical, Restraint, Safety, Students, Brunei*

Introduction

Physical restraints are often regarded to jeopardisethe patient's rights when used as a punishment and convenient for the nurses working in the ward.[1]Restraint should only be applied to keep patients, healthcare professionals, and families in the ward safe.[2]Numerous studies have assessed the nurses' perceptions, knowledge and attitude on using physical restraint. For example, Jose et al.[3] studied 90 nurses working in medical-surgical, pediatric, post-operative and psychiatric settings. The research found that 76.6% of the staff nurses approved physical intervention, while 23.3% of the nurses had unfavourable attitudes towards physical restraints on patients.

Meanwhile, positive opinions on physical restraint were presentedwith 95.8% of the nurses stated that physical restraint could lead to less risk of falls among the patient; 71.1% of nurses reported that guidelines on physical restraint in their hospital and their knowledge of physical restraint are average.[4]Another study reported that the psychiatric nurses described physical restraint as their primary method to manage psychiatric patients, especially aggressive behaviours.[5]However, the studyexpressed ethical concerns when using a restraining method since it can potentially cause physical injury and compromise patients' dignity.

The use of physical restraint has been debated in many studies.[5] For example,Sokol[6] argued that physical restraint is ethically acceptable as long as it poses more benefits than harm to the patients.[7]In

a German study, it is argued that physical restraints were used solely to ensure the safety of the patients in preventing the risk of falls, especially for patients that are dependent on nurses.[2] In addition, physical restraint is commonly implemented to avoid confused patients injuring and harm themselves, particularly in the intensive care unit.[8]ABritish studyfound that the most common type of restraint used in healthcare settings is bed rails, restraint belts, and bed linen to lock the patient bed.[9]

Karagozogluet al.[10] have studied 91 final year nursing students' opinion and their practice on physical restraints in Turkey hospitals. They agreed thatphysical restraint is used to ensure patient safety, family, and healthcare professionals. This, however, must only be considered when other alternatives were tried before the use of physical restraint. Meanwhile, Özcanet al.[11] conducted a study involving 120 final year student nurses, whereby most of the students exhibited unbiased attitudes towards physical restraints such as bed rails, straps, or belts. The research also stated that the student nurses are more likely to approve physical restraint or any restraints, as it aimsto prevent patient's aggression and ensure patient safety.

Materials and Methods

Design

This descriptive qualitative research was conducted in 2021. The interviews were conductedin a designated private classroom in the University premises to ensure participants and researchers' safety andmaintain the participants' confidentiality and the data collected during the interview.

Participants

Nursing students from Universiti Brunei Darussalam and Politeknik Brunei were recruited by disseminatingan electronic poster and a series of face-to-face recruitment briefings. The type of sampling used was purposive sampling, andno relationship was made with the participants before the study period. Seventy students attended the recruitment briefing, and a total of twenty-four nursing students have volunteered and are eligible to participate in the research.

Data collection

The study used two interview types for the data collection: individual face-to-face interviews and focus group interviews. A total of seven key questions related to the research topic were constructed based on the aim and objectives of this study. The duration of each interview was approximately 30-60 minutes. Field notes were written throughout all the interview sessions to help improve the quality of the data analysis.[12]Allrecorded interviews were transcribed verbatim.

Data Analysis

In analysing the data, all the interviewtranscripts were read repetitively and critically analysed for few times, word by word and divided into themes by identifying patterns from the responses. Five initial themes were developed, condensed into three final themes after further discussion with the research team. All the themes obtained were derived from the transcribed data verbatim and categorised according to the codes. The data management was handled manually by using a pen, coloured papers and highlighters.

Rigour

Lincoln and Guba[13] introduced criteria to assess a study's trustworthiness. Students from two different education levels and universities were recruited for data collection to ensure credibility is achieved. The dependability is accomplished when all research members were fully involved in collecting and analysing the data. The study's transferability is demonstrated where participants were recruited using purposive sampling. This allows the data results could be adapted and applied to other situations. Lastly,

the study's confirmability was established when the researchers referred back to the raw data taken during the data collection and data analysis period.

Ethical considerations

This study was approved by the Faculty Research Ethics Committee with reference number UBD/PAPRSBIHSREC/2020/40. A gatekeeper was used to approach the students for recruitment briefing and ensuring their participation was voluntary. All the study details were explained to the participants; hence, written informed consents were also obtained. The protection of the research participants' privacy and confidentiality and data wasensured. Only the researchers and participants knew their identity, and in maintaining the participants' anonymity, no names were asked or collected during the discussion or the interview.

Results

The analysis of the data has found three core themes: (1) Meaning of physical restraint, (2) The uses of physical restraint, and (3) Concerns towards physical restraint. Each of them has its sub-themes which is further explained below.

Theme 1: Meaning of physical restraint

Some of the students defined physical restraint as a form of restriction to the patient's movement. This perception was reflected in the following narratives by several of the students:

From my understanding, physical restraint is, I guess, anything that restricts the patient's movement is considered as patient's restraint. (Participant 6, FGD 1)

In other cases, the studentsbelieve thatphysical restraints are used to ensure the patient's safety. For example:

From what I understand about physical restraint, it restrains the patient to the bed or keeps the patient from hurting themselves. (Participant 1, FFI 1)

Moreover, most students gave examples of different physical restraints they observed throughout their practicum in the ward.

The patient was physically restraint in which his hands were tied to the side rails because he kept trying to scratch his wound. (Participant 6, FGD 4)

It can be seen from the narratives above that they have categorised two forms of physical restraints, physical restraint with the use of aids and physical hold without the use of aids. In addition, most students have mentioned side rails as the most common type of physical restraint done to the patient in the ward setting.

Theme 2: The uses of physical restraint

The students are collectively aware of the reasons behind the use of physical restraints. These are identified as three key reasons, withthe first reason that restraint isa form of 'control'. They identified that such control is necessary because some patients may act aggressive or try to harm themselves in the ward.

There was an autistic patient. He was screaming, trying to move around, and he hurts the mother. They put him inside a room and tried to calm him down. He does not interfere with the other patients in the ward. (Participant 5, FGD 1)

The second one uses physical restraint as a necessary treatment to ensure the patient benefits from the treatment.

The orthopaedic patients or maybe the doctors themselves do not want them to move around that much because it might harm them. Hence, this needs us to restraint them, so they could not move that much to heal quickly and correctly. (Participant 1, FGD 1)

The third reason is where physical restraints are used for preventive measures, which could help prevent damage to the patients and their surroundings.

Few of the students narrated this point;

Physical restraint can be helpful when patients are confused and try to pull out some tubing, for example, pulling out the catheter or nasogastric tube. (Participant 1, FGD 3)

Based on these three reasons, the students feel that physical restraint benefits provided substantial justification for its application. As one student put it:

As a student nurse, before doing any physical restraint on the patient, I think it is essential to assess the patient's situation. For example, what would happen if we were to physically restraint him or her? Simultaneously, if I were to encounter such a thing in the ward, if it would bring good to the patient, which is the top priority in the ward or the hospital, we should restrain him. If I cause harm, then I believed that we should find other solutions that would benefit the patient because the top priority is everything that has to do with the patient. (Participant 6, FGD 1)

This narrative highlightstheir preference to find other alternative methods despite the agreement onusing physical restraint. When they failed to find other solutions, physical restraint is used, provided that it is beneficial to the patient.

Theme 3: Concerns about physical restraint

Despite the awareness of the clinical uses of physical restraint, some students voiced their concern over the consequences of restraint on the patient, nurses and student nurses. One student reflected on her clinical placement, whereby the patient appeared to be uncomfortable when the student observed the nurses applied physical restraint on the patient.

There is one patient in our ward where she was physically restraint using hand mittens. Even though it was just her hands that were restraint, I definitely can see that she felt uncomfortable as her hand was kept inside the mittens the whole time. Hence, making her more agitated. (Participant 3, FGD 5)

Another group of students has also shared a similar concern about the patient's psychological effect, mainly when other alternatives can be done instead.

A patient can get traumatised when you apply physical restraint on them. They would get scared as it will give them the idea that they would be restrained again if they were to admit to the ward again. (Participant 1, FFI 1.)

The students realised the importance of physical restraint, but it is not always easy to apply it to patients.

For me, physical restraint is helpful, especially when there are procedures that needed to be done on the patient, especially on a restless and agitated patient. Some procedures needed to be done immediately to prevent further health problems, and yet, it can be hard to do it when family patients are around and refuse the use of restraint. By not respecting their decision, we are compromising their rights. (Participant 1, FGD 2)

Discussion

This study establishes that all the student nurses have witnessed physical restraints, and most of them have participated in using physical restraints on patients in the ward. The studentsdefined physical restraint as restricting patients' movement—such definition extends to the limited regular access to patient's body by any means.[10]Not limited to that, the students mentioned that physical restraints are utilised on the patient as it could help in ensuring the patient's safety despite the limitation to the patient's activity[14]. However, the students believe that the applications of physical restraint are accepted when there is a high possibility of harm and injury to the patient and the surroundings. They also indicated that nurses must ensure patient safety is confirmed even with physical restraint.[15]

In this study, the students have also mentioned different physical restraints they have encountered during their practicum in the ward. Lai et al.[16] found

that the most common form of physical restraint is bedrails (16.9%), followed by jacket restraint. They mentioned that the most common physical restraint is applying bedrails where the patient's hand is tied up to the rails to avoid patients pulling any tubes connected to the patient and avoiding fall. When no aids are used, the student nurses mentioned physically holding patient's bodies to ensure tasks were quickly done on the patient. Physical restraint can only be used for emergency procedures, depending on the patient's behaviour.[17]However, nurses holding the patient, especially without the patient's willingness, are still considered to use another physical restraint.[9]

The study also focuses on physical restraints, where the students viewed physical restraint as a procedure that may benefit the patients during its application. It is observed in the ward that such physical restraint was used to ensure the patient's safety.[18]Hence, physical restraint is usually used to avoid harming themselves and their surroundings, especially patients who act aggressive and restless.[19]In ensuring the patient's safety, physical restraint was also used to ensure the patient receivesthe appropriate treatment needed for the patient for better healing progress.[20]

Several students have mentioned physical restraint in the findings to hinder patients from interrupting nurses' work and harming. In addition to that, physical restraint is also said to help patients harm themselves and their surroundings. Similarly, such a point was mentioned in a study of Turkey hospital.[21]The nurses utilised physical restraints to minimise interference from the patient and therefore easing the burden. Nevertheless, given the use of physical restraint as a treatment, it should be noted that the user should be adequately documented with consent from the patient or the family, as it can cause a problem when not appropriately tackled.[8]

Meanwhile, the students also deep concerns about the use of physical restraint. Regardless of whether physical restraint is genuinely used to ensure the patient's safety, the student nurses discussed the social considerations of physical restraint.In terms of ethical views of physical restraint, when the patient is physically restrained, the first principle of ethics is already compromised:the patient's anatomy.[22]The second principle is justice, where the patient should be treated as a human being to avoid the patient from being treated with judgement and unfairness.

Moreover, when applying physical restraint to the patient, it could also become more aggressive, which could cause more physical injury to the patient[23], referred to as the third principle of ethics beneficence. Thus, the usage of physical restraint should be only applied as a last resort. The last principle of ethics isnon-maleficence, where it means no harm to the patient. However, this can be contradicted with beneficence.

The use of physical restraint affects the patient physically and emotionally, and psychologically, where they can get traumatised during their admission in the ward, resulting in their refusal to seek further treatment at the hospital in the future. Simultaneously, the utilisation of physical restraint can also affect a patient's dignity, where their dignity is also described as part of nursing care.[24]Jeopardising a patient's dignity is considered a breach of the patient's rights and not respecting the patient's decision.[25]Therefore, before physical restraint application, finding alternative methodsusuallyinvolves having the patient's family or carer around with the patient in the ward.[14]

Conclusion

The study found that most of the students defined physical restraint as an act of restricting patient's autonomy, and the most common form of restraint used is bedrails to ensure patients are restricted in the bed space. Not only that, when no aids are required, the only type of physical restraint is physically holding the patient to the bed. Nonetheless, even with the wide use of physical restraint and the students' acceptance

of physical restraint, they also indicate concerns about patient safety, including physical injury and psychological effect on the patients when physical restraints are applied. They also verbalised concern about the aspect of rights and protection if physical restraint is commonly practised.Moreover, the focus should now shift to how the nurse educators can teach the student nurses about the safe application of physical restraint and handling aggression in the healthcare context. The focus should also be on examiningthe nurses' understanding of the appropriateness of physical restraint across all different health settings.

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A Study to Assess the Knowledge Regarding Breast Self-Examination among the Nursing Students of RP. Inderaprastha Institute of Medical Sciences with the view to Provide Education Through Video

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Abstract

A breast self-exam involves checking your breasts for lumps or changes. Many breast problems are first discovered by women themselves, often accidentally. Breast lumps can be noncancerous (benign) or cancerous (malignant). Breast cancer can occur at any age, though it is most common in women older than 50. Lumps or changes also could also be signs of other breast conditions, like mastitis or a fibro adenoma. Breast cancer is third most common cancer following Kaposi's sarcoma and cervical cancer with incident rate of 22 per 100,000 women. It is recommended that ladies over the age of 20 years perform monthly breast self-examination. The present study aimed to assess the level of knowledge regarding breast self-examination. **Objectives of the Study**: To assess the knowledge regarding breast self-examination among the Nursing students; To find out the association between knowledge score of breast self-examination with selected demo graphical variable **Research Methodology:** A descriptive design was used to select 60 nursing students purposively. Self administered questionnaire was used to collect information. The collected data were exported into SPSS for analysis. **Results:** A total of 60 nursing students participate in the study. Majority of nursing students 48.3 % (29) had good knowledge regarding breast self-examination and among them 41.7 % (25) had average knowledge and only 10 % (6) had below average knowledge regarding breast self-examination. **Conclusion and Recommendation:** knowledge of breast self-examination was low even through majority of them have good attitude. The ministry of health is recommended to promote awareness about breast self-examination.

Keywords: *knowledge ,Breast self-examination, Nursing students,video.*

Introduction

Over the past decade, several research findings and data sources have indicated an increasing burden of carcinoma in terms of incidence, morbidity, and mortality associated with carcinoma. Breast cancer is additionally the first explanation for cancer death among women globally, liable for about 425,000 deaths in 2010[1,2]. There will be an estimated 18.1 million new cancer cases (17.0 million excluding non melanoma skin cancer) and 9.6 million cancer deaths (9.5 million excluding no melanoma skin cancer) in 2018. In both sexes combined, carcinoma is that the most ordinarily diagnosed cancer (11.6% of the entire cases) and therefore the leading explanation for cancer death (18.4% of the entire cancer deaths), closely followed by female breast cancer (11.6%), prostate cancer (7.1%), and colorectal cancer (6.1%) for incidence and colorectal cancer (9.2%), stomach cancer (8.2%), and liver cancer (8.2%) for mortality[3]. BSE monthly between the 7th and 10th day of the cycle is that the simplest yet extremely important thanks to detect carcinoma at the first stage of growth. Doing BSE is one way for a woman to know how her breasts normally feel so that she can notice any changes that do occur. This examination is critical

for Ghanaian women because black women have been found to bear the greater burden of breast cancer mortality compared to other races. In order to perform BSE, the individual must possess the knowledge of and have the skill of doing so. BSE is important for enabling women become familiar with the feel and appearance of their breast; and help them easily and quickly detect any changes that occur.[4]

Need for the Study

Monthly breast self-exams can assist you detect changes which will be signs of infection or carcinoma (such as breast lumps or spots that feel different). When carcinoma is detected early, the probabilities for survival are far better. Not similarly CBE and mammography which require hospital visit and specialized equipment and expertise, BSE is inexpensive and administered by women themselves. Although mammography remains the simplest diagnostic tool within the detection of carcinoma, it's not routinely performed in Nigeria due to cost, technology equipment and expertise required. Mammograms miss most breast lump in the younger age groups; this is likely to happen in Nigeria where cases below 30 have been reported To reduce the burden of breast cancer in India, it is necessary to first determine the level of knowledge and practice (skill) relating to breast self-examination as a breast cancer prevention strategy especially among our teaming youths who at this stage of life can continue this practice to adulthood. Therefore, this study was aimed to identify the level of knowledge and practice of breast self-examination among female undergraduates in RP IIT campus, carnal, Haryana, India[4] . There is a scarcity of huge scale breast screening programs in India. BSE is advocated, but data on what proportion exercised is not available[7]. Nearly all Indian BC's are clinically detected; almost none are detected by screening[8].

Problem Statement

"A study to assess the knowledge regarding breast self examination among the Nursing students of RP. Inderaprastha Institute of Medical Sciences. with the view to provide education through video."

Objectives of the Study

1. To assess the knowledge regarding breast self-examination among the Nursing students.

2. To find out the association between knowledge score of breast self-examination with selected demographical variables .

Operational Definitions

Knowledge: It refers to the ability of nursing students to respond to questions dealing with breast self examination as evident knowledge score measured by a structured knowledge questionnaire and categorized as Very good(>75%), Good (61-75%), Average(50-60%) and below average(<50%).

Breast self-examination (BSE): It refers to regular systematic examination of both breast and unclear area by women visually and by palpation using her own hand on her breast for the purpose of detecting any abnormality.

Nursing students: It refers to ANM and GNM students of R P Inderaprastha Institute of Medical Sciences.

Video: It refers to the well planned teaching video regarding breast self-examination.

Assumptions

The study assumed that

1. Nursing students has inadequate knowledge regarding Breast self-examination.

2. Video helps to improving the knowledge of nursing students regarding the breast self examination.

Delimitations

The study was limited to ANM & GNM Students

of R.P. Inderaprastha Institute of Medical Sciences.

Research Methodology

· RESEACH APPROACH:

Explorative descriptive approach adopted by the researcher for the accomplishment of the present study.

· RESEARCH DESIGN :

The investigator has adopted descriptive research design.

· SETTINGS OF THE RESEACH:

The present study was conducted in selected nursing college of Haryana , R.P Indaraprastha institute of medical sciences.

· POPULATION:

In this study, Target population comprises of all subjects study in GNM 3rd year and ANM 2ND year and accessible population includes all subjects studying in ANM and GNM fulfilling the inclusion and exclusion criteria and studying in R.P Inderaprastha Institute of Medical Sciences.

· SAMPLE :

The sample in this study includes 3rd year GNM and ANM students.

· SAMPLE SIZE :

In the present study, the sample size comprised of 60 students of GNM and ANM .

· SAMPLING TECHNIQUE:

The sample for the present study was drawn by non-probability purposive sampling technique.

· DESCRIPTION OF THE TOOL:

Tools prepared by the present study is a structured questionnaire divided into two sections-

Section 1: Demographic data

Section 2: Structured knowledge questionnaire

The data collection was done in month of march 2015 . During this period the investigator gave a tool to the 3rd year GNM and ANM students . First the researcher introduced himself and the study topic. Researcher then explained about the consent to the participants and assured the confidentiality of the data, explained how to fill the answers in the sheet. All participants willingly participated in the study.

PLAN FOR DATA ANALYSIS

The collected data is analyzed in terms of the objectives of study using descriptive and inferential statistics:

1. The data will be coded and entered in excel sheet.

2. Analysis will be done by using descriptive and inferential statistics.

3. Demographic and personal data was described in frequency and percentage .

4. Manual as well instant statistical software will be used for all statistical analysis.

Analysis of demographic variables:

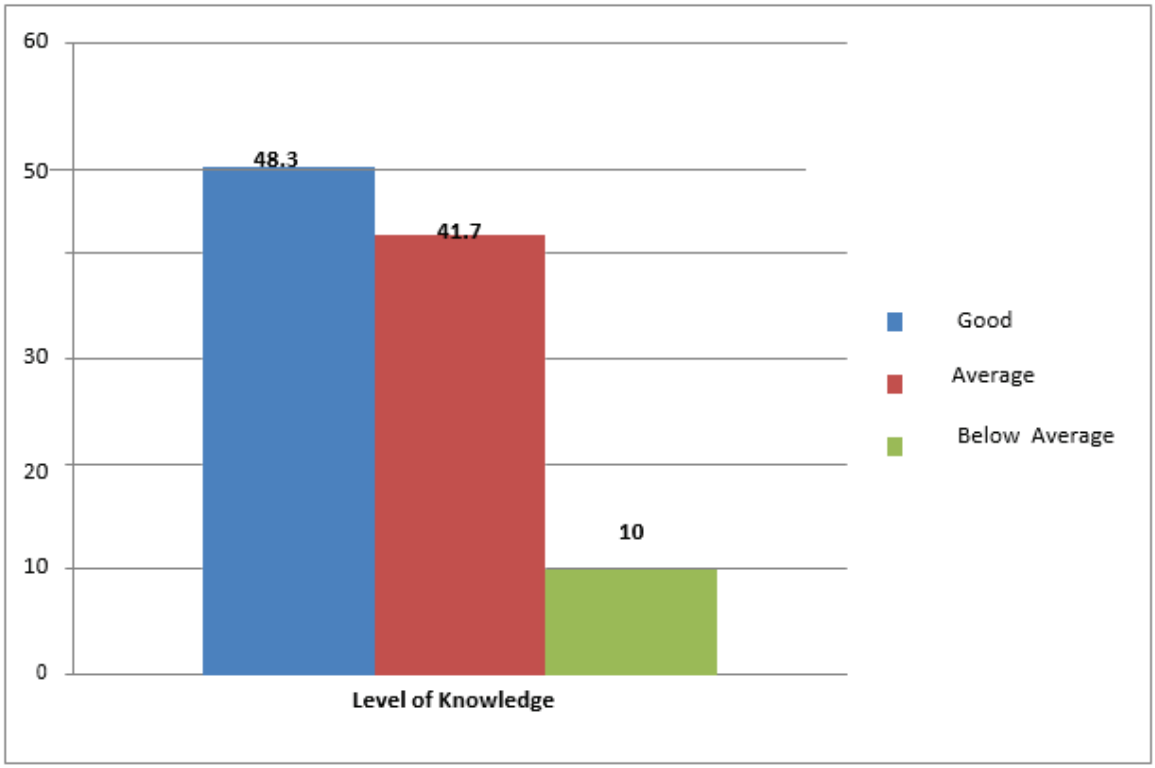
This section deals with the analysis of data related to the demographic variables. It reveals that 65% of nursing students were in the age group of 18-22 years , whereas 28% lies in the age group of 23-30 years and there were only 7% nursing students who lying in age group of 31-40 years. With regard to religion, 93 % of the nursing students belong to Hindu. mean while, the second major group 3% belong to Muslims and other religion followed by 3% each. The study also revealed that 85% of nursing students were unmarried and 15% of them were married. In context of educational status 83% of nursing students had 10+2 qualification and 17% of them had graduate. With regard to type of

family 70 % had nuclear family and 30 % had joint family. It was thus inferred that across the samples, majority of the nursing students belong to 20-30 years 39 (65%), Hindu religion 56 (94%) and majority of marital status were single. Maximum number of nursing students was not exposed to mass media (65%) only fewwere exposed to (35%) to mass media.

interpretation of data revealed with level of knowledge related to breast self examination among the subjects .The study revealed that majority of nursing students 48.3 % (29) had good knowledge regarding breast self examination and among them 41.7 % (25) had average knowledge and only 10 % (6) had below average knowledge regarding breast self examination.

Section 2:

This section deals with the analysis and



Section 3: n=60

Demographic	Good	Average	Low	Chi	P	d f	Table	Result
Variables				Test	Value		Value	
Age 18-22	18	16	5	2.02	0.732	4	9.488	Not
23-30	8	8	1	0				Significant

Cont... **Section 3:** n=60

31-40	3	1	0					
Educational status 10+2	22	22	6	2.75	0.252	2	5.991	Not
Graduation	7	3	0	8				Significant
Marital status Married	6	2	1	1.71	0.425	2	5.991	Not
Unmarried	23	23	5	0				Significant
Type of family Nuclear	20	16	6	3.01	0.221	2	5.991	Not
Joint	9	9	0	5				Significant
Religion Muslim	1	1	0	3.17	0.530	4	9.488	Not
Hindu	28	22	6	1				Significant
Others	0	2	0					

There is no correlation seen between breast self-examination among the scholars and therefore the variables like age, education standing, legal status, style of family, faith at the amount of significance of zero.05 that's five.99.

Discussion

The discussion highlights the most findings of this study and the way those findings compare with findings from similar studies conducted on the topic of carcinoma and breast self-examination. during this current nursing students 48.3 % (29) had good knowledge regarding breast self examination and among them 41.7 % (25) had average knowledge and only 10 % (6) had below average knowledge regarding breast self examination. This finding of low awareness and knowledge of BSE is analogous but lower compared to the findings in Nigeria[5] during which 97% reported ever hearing of BSE and only about 50% reported adequate knowledge of BSE. It's also almost like a finding of poor knowledge of BSE in Ibadan, Southwest Nigeria where 70% of 603 market women, that's women buying and selling various commodities within the market, reported not knowing about and the way to perform BSE. Earlier studies reported similar poor knowledge of BSE.[5, 6]

Implications:

Nursing Services:

Breast self-examination is one among the vital parts of a women's health, and it's found that there as several factors that have an effect on health. A nurse with decent information associated with breast self-examination is going to be able to offer far better care

to her patients. Creating use of agencies like steerage, counseling, mass-media, sensible education, cluster activities, seminars, displays which can facilitate a nurse to enhance nurses' information relating to breast self-examination and with a brand-new confidence she will be able to offer a top quality care to her patients.

NURSING EDUCATION: Nursing program is being revised sporadically supported the wants of the society and therefore the profession. Associate in nursing awareness of breast self-examination and problems can be enclosed within the basic program of student nurses because it might facilitate them to arrange for the longer term. Awareness relating to carcinoma program and vanity improvement program etc. got to be emphasized inside the program and short courses on these as typically conducted. Faculty authorities got to take initiative and responsibility in beginning such program in their establishments.

NURSE ADMINISTRATION: Nurse directors will take active role in build up a positive self-worth in student nurses. Social support from co-workers ought to be sustained at the present levels. Larger attention has to be directed to not solely acknowledging nurses' information relating to breast self-examination however conjointly to produce a mechanism that promotes header. It's within the best interests of each party to require affordable steps to boost information of nurses associated with carcinoma that successively would end in quality shopper care.

NURSING RESEARCH: Research could be a crucial tool for the continual development of a relevant body of {information} in nursing, and it generates information from nursing investigations that facilitate outline the distinctive role of nursing as a profession. Future analysis will broaden the scope of the present results and supply a lot of comprehensive understanding of nurses' quality of life. Researchers are often done by incorporating interventions to enhance awareness associated with carcinoma and procedure for breast self-examination among student nurses.

LIMITATIONS OF THE STUDY:

• The study was conducted on a smaller sample size.
• The study has concerned sample solely finding out in R.P Inderaprastha Institute of Medical Sciences.

RECOMMENDATION FOR ANY STUDIES:

• an analogous study are often conducted on an oversized scale cluster.
• A comparative study are often conducted to find the changes within the level of data student nurses with the expertise gained.
• A descriptive study are often conducted to seek out the factors touching information relating to breast self-examination of the scholars.

Ethical Clearance- Taken from RP. Inderaprastha Institue of Medical Sciences.

Source of Funding- Self

Conflict of Interest - NIL.

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Quality of Life in Maintenance Hemodialysis; Stakeholders' Perspectives – A Qualitative Inquiry

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Abstract

Quality of life is a major concept in the arena of healthcare, especially in chronic diseases. ESRD patients undergoing maintenance hemodialysis experience unique issues involving varying aspects. Using a qualitative approach, the current study explored the perspectives of stakeholders on quality of life. Thematic analysis done and three major themes - Dialysis - the life line, Global impact of the disease and strategies to be made, were emerged. Quality of life in hemodialysis patients is markedly impaired due to a variety of factors and a comprehensive and tailored approach will be beneficial.

Keywords: *Hemodialysis, Quality of Life, Qualitative, Kerala)*

Introduction

Chronic diseases carry a distressing concern among all stakeholders of the health care delivery system. Quality of life, one of the most important health related indicator facilitates important information regarding patients' perceptions of their life. Maintenance hemodialysis population experience many constraints in day to day life and these will possess a substantial bearing on their quality of life[1]. According to the World Health Organization (WHO), quality of life is "a broad ranging concept affected by the person's complex physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of their environment"[2].

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Maintenance hemodialysis is a major treatment option in ESRD though kidney transplantation is considered as a more preferable renal replacement alternative in terms of quality of life. But the cost involved and dearth of donors makes it a less popular option and this forces the patients to continue on maintenance hemodialysis (MHD) for sustaining their life especially in middle and low income countries like India[3]. Though there are plethora of numerical tools to measure the health related quality of life in dialysis, use of an optimal tool is always controversial[4]. Here the researchers assumed that a qualitative approach will throw much light into the nuances of their perceptions and outlook towards life. So this study aimed to explore the QOL of patients with ESRD on maintenance hemodialysis through various stakeholders.

Materials and Methods

A qualitative thematic approach was used to explore the topic under study. Study setting was the dialysis unit of a tertiary care center from South Kerala, India. A non-probabilistic purposive sampling was used to select appropriate participants so as to

generate rich data on the attribute. The major mode of data collection was in-depth interviews (among 6 patients, 4 family members, 2 nurses, 2 doctors and one dialysis technician) and FGDs (2), conducted based on an interview guide grounded in study objectives (Table 1). Data collection took place at a mutually agreed time, which stretched a period of seven months and each session lasts around 45- 60 minutes. The whole process of communication was audio recorded with permission. Serial field notes also were taken generously to have a rich description of the data.

Institutional ethics committee approval obtained prior to the conduct of the study and written informed consent from the patients and family members also collected. The whole study process adhered to the ethical principles of health research.

Table: 1 population characteristics

S No.	Characteristics	Value (n =15)
Respondents - Patients n = 6		
1.	Mean age	60 (± 9.4), Range 43-76
2.	Gender (Male / Female)	5 / 3
3.	Mean years of dialysis	4.57 (± 1.74)
Respondents - Family members n = 4		
4.	Mean age	46 yrs.
5.	Gender (Male / Female)	2 / 3
6.	Relationship with the patients	Spouse
Respondents – Health care personnel n = 5		
7.	Nurses	2
8.	Nephrologist	2
9.	Dialysis Technician	1
10.	Mean Years of experience	7 (± 3.39) Range 3 – 11 yrs.

Data analysis has been viewed as the most complex and enigmatic phase in qualitative research[5]. Here the researcher carried out a thematic analysis by following the linear six step process postulated by Braun and Clarke [6]. At first, the researcher reviewed the field notes, listened to the audio clips, made transcripts and then read and re-read the transcripts to catch promising codes. Preliminary codes were identified

and in the second phase, scrutinized these in a view to develop subthemes. In the third phase, researchers picked out the quotes which are in agreement with the central themes. Then the themes were reviewed and later defined and named them. As the themes get finalized, report writing process started.

Results

The data analysis produced three themes. *Dialysis - the life line, Global impact of the disease and strategies to be made.*

Theme 1 Dialysis - the life line

Though there are innumerable distresses and concerns associated with dialysis, people view it as a grip to life too. As one elderly male patient commented,

"Without this, how could I have survived? At least a facility is there to avail... I think I should be grateful to this....." (69 yr. old female patient on MHD for 5 yrs.)

"I am little tired after dialysis...but after some time I will be ok. Happily living with wife, children and grandchildren.... so dialysis... in fact keeps me forward..."

(72 yr. old male patient on MHD for 6 yrs.)

Theme 2 Global impact of the disease

Participants described their disease experiences as something which covers almost all domains of life such as physical, psychological and social.

Physical issues

Most of the patients reported an array of physical symptoms which in fact limit their life in many ways. Among them, the most reverberated issue was sleep disturbances. Though it is listed under the subtheme physical issues, its psychological underpinnings cannot be denied.

"I couldn't sleep..... Sleepless nights ...quite common now..... you know…now, my earnest desire is to sleep madly…. fed up with this long night hours… simply lying in bed... same thing .... every day and every night." (67 yr. old male patient on MHD for 6 yrs.)

Apart from sleep, most frequently quoted difficulties were dyspnea, anorexia, pain and generalized skin issues like itching or irritability.

"For years...I have been sleeping in sitting position...breathlessness is always there."

(68 yr. old female patient)

Anorexia was not reported as a rampant issue, but still, few expressed it as something always annoying...

"I used to think and plan to eat something to get rid of fatigue… but no taste at all…don't like food nowadays……very little only I eat". (56 yr. old female patient)

"Itchy feel is terrible..... Irresistible.". (72 yr. old male patient)

Ø Psycho social issues

Frustration and despair out of restrictions (mostly dietary) were some common reflections from patients.

*"Its **no..... no**....everywhere.....my wildest thought is to drink enough water without any limit..... may be next birth.... (smiles wryly)*
(Male patient, 69 yrs. MHD for last 4 yrs.)

Existing burden of a chronic illness get augmented many times with the frequent hospitalizations. An array of negative emotions also expressed mostly by the family members regarding the patient's behavior. Though it was not obvious during the interview, at times it gets reflected.

"Very difficult to manage his behavior. Previously also he was very short-tempered. Now with these disturbances, it gets worsened. just added up the

troubles..... Now all the time he is extremely arrogant and irritable even for silly matters. To tell you the truth..... I am really fed up.....” (Spouse, Female, 59 yrs.)

“Still he wanted to look after all family affairs. But the thing is that..... he is not able to. But he never admits that..... sometimes I feel my head is shattered.... you know he speaks like that...” (Wife, Female, 44 yrs.)

Similar kind of overt or covert signs of straining relations could observe during interactions. Certain patients were reluctant to open up their issues with the family. One lady who is a widow and stays with the daughter revealed,

“I used to have extreme lethargy....at times...but I won’t tell her. (Patient, Female, 68 yrs.)

‘*Being dependent,* was a major disappointing concern expressed by majority of the patients across gender or other demographic factors. ‘*Distress out of dependency role’*.

“I was the senior most person in our family...an elder brother figure...I used to run for all... but now, what happened? I am bound to this machine.... here they (nurses) decide my routine. Everybody used to care me a lot. But I feel very much belittled...” (Patient, Male, 68 yrs.)

Annoyance and irritability out of surroundings especially the familial and social surroundings were also evident in the talk.

“The funny thing is that every people around me are advisors.....kuzhappamilla.... ellam sheriyakum’ is the most dreaded statement for me nowadays..... simply showing sympathy and hollow words...no use at all....” (Patient, Male, 57 yrs.)

Though not so predominant, many times negative or depressive shades were evolved out of interactions.

“For me, now life means something always going through the same route...same people around... weather in hospital or home. You know..... how this disease turned my life upside down?” (3 2 yr. old male patient – CKDu, on MHD for 2 yrs.)

Some of the participants especially, patients with CKD of unknown origin often expressed their disbelief over this machine dependent life. A young Male patient, 32yrs. commented,

I was a person surrounded by friends. Now everything around this machine. Suicide is not an option...right? (smiles wryly) Just going with the flow.....that’s all.

Perceived state of extreme alienation and fear of death

A gradual yet, painful process of moving back from the habitual, relentless interactions with the society and stepping in a circumscribed, limited circle was a major concern expressed by many.

“You know... I was always around people... at my shop.....that was my routine...once.....(sighs...) .... off dialysis days I used to be there.....even now.... but I think people view me differently.....a disease role!!

One of the major concern expressed by many are the feeling of a mechanized life. Two participants have used the term ‘*tied to a machine*’. A 59 yr. old male retired government official who previously enjoyed an active community living commented,

“No social life, functions...outing.... something like tied.....totally stagnant life...”

More or less negative tones were the most predominant feelings throughout...The whole flood of feelings swings around anger, grief, annoyance, distress and so on.... Certain participants also expressed their agony over rejection or neglect by the friends and kinfolks.

“You know...it’s a new period in life.....what to say? The whole routine turns to a new set of things....

hospital may be..... my second home...every other day I have to be here..... what to do? This is fate...I didn't even think of such a twist in my life.....if you are being excluding from known circles.....means....it is the most hurting thing." (CKDu, Patient, Male, 32 yrs.)

Our son is staying nearby only.....he could pay occasional visits.... but he never does.....a burden may be....." (spouse, female, 62 yrs.)

Concerns regarding death, though preferred to be masked often overflown during sessions. The unexpected, abrupt nature of death among dialysis patients made them more nervous and worried.

Actually speaking.....now my best company is here only.....kind of relatives.....regularly meeting them.....we know each other...sharing the sorrows and joys together.... the most troubling thing...you know.....all of a sudden we hear...he is no more...one fine morning.... that's horrible.....a creepy feel it's..... of imminent death.....who knows..... who's next?

(Patient, Male, 58 yrs.)

Theme 3 Strategies to be made

Individualized and more organized style of care are imperative in dialysis care as highlighted by the healthcare team we interviewed. Major subthemes evolved were holistic person centered care and need of comprehensive ongoing patient support services.

Holistic person centered approach

Remarks from the health care providers implied that the measures which they adopt need a sea change. Many thoughts have evolved over the talks such as, hectic schedules, lack of a genuine effort to integrate newer concepts in care and dearth of an ongoing wholesome patient support system. A practicing nephrologist commented,

"It is totally unacceptable that.....we do not have a clinical practice guideline of our own. As some are in pipeline, lets expect the same in near future. "(Nephrologist, 48 yr. old, Male)

Change in the pattern of management before and after dialysis has been highlighted by practitioners. Lack of a comprehensive preparation and orientation were also mentioned.

"A preemptive channel for hemodialysis is very much important.... that will equip these patients to better adapt to the challenges imposed of a new life".

"Therapeutic communication is the most important thing. In fact, lending an ear to patients is a great thing. But the hectic schedules.... often may be task oriented.....need to restructure and modify this". (Nurse in charge, Female, 46 yrs.).

"A 'one size fits all' approach is not at all suitable.... have to have tailored, sufficient and continuous opportunity for interactions with the patient and family.....ya...quality time". (Nephrology resident, female, 32 yrs.)

"I think one major issue in communication is due to the lack of consistency of the care giver". (Nephrology resident, Female, 32 yrs.).

And you know…it's something mechanical……. they are always concerned about schedules..... and we.... getting sessions done… and wrapping up. So I think…have to go more and find time to speak with them……apart from the usual hai……. bye…, and routine procedures like weighing or BP monitoring, (Dialysis technician, Female, 29 yrs.)

Comprehensive patient support services

Majority of the patients and family were yet curious, but not aware about the basic physiologic alterations with CKD and dialysis.

They are in fact.... not aware about the underlying pathological changes and the therapeutic measures which the new situation demand.....yes...definitely..... we have to train them a lot...." (Nephrologist, Male,

48yrs.)

Majority of the participants made positive comments about the health related information they received from their health providers and proposed few suggestions also for spreading awareness on related field.

"*I pay regular visit to doctor and follows the prescriptions....and you know...always he finds time to clear my doubts". But to be frank...I am very much hesitated to ask many of my queries". (Patient, Male, 57 yrs.)*

"*I told you know.... I used to dump a bagful of doubts here.... they (sisters) will answer.... so kind they all are(smiles) .....but busy too.... I always think and tell them that if it is possible to have someone there for us.....to listen...and to clear up our worries.....fears... and concerns....it could have been a great relief for the patients and relatives." (Patient, Female, 48 yrs.)*

Discussion

In this qualitative study, we aimed to explore the various aspects of quality of life of dialysis patients through different stakeholders. This study finding revealed that a majority of participants with ESRD on dialysis were experiencing varying degrees of stresses. Ranging from physical to emotional and social, this population experience incomparable distresses out of disease and treatment modality as well. This is in congruence with few previous studies[7].

Family members also going through marked emotional burden which is an established finding across many studies[8]. Family play a crucial role in the care of dialysis patients. But whether they receive sufficient acknowledgement and support is questionable[9].

Few patients, especially, elderly find dialysis as a bridge to life itself. This can be viewed as a thought of positive coping and spiritual enlightenment. Among the literature, very few studies only have reported these sort of a positive stroke[10].

Though there are limited social security measures available in Kerala, hemodialysis patient related services requires structural changes in many aspects. health care personnel participated in the study also expressed the same[11].

This study has conducted at one of the premier tertiary care hospital of south India in public sector. So the researcher could handpick representative subjects from various strata of society.

Conclusion

Striking deterioration in the quality of life of dialysis patients deserves ongoing evaluation and demands center specific, tailored interventions. The findings of this study propose a patient centered team approach in enhancing the quality of life and assuring a dignified life for the dialysis population.

Conflicts of interest

Both authors Radhika C K & Dr. Asha S Kumar have nothing to disclose and declare that they have no conflict of interest.

Funding: Self

Ethical Clearance: All procedures followed were in accordance with the ethical standards laid down by the international, national and institutional bodies. Informed consent was obtained from all patients for being included in the study.

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Student Nurses' Perception of Bulling Experience and Its Coping Strategies During Clinical Training: A Cross Sectional Study

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Abstract

Background: Bullying remains as a disturbing problem in the nursing career. Nursing students may meet bullying behavior during clinical practice. Nevertheless nursing students may not be prepared enough to be acquainted with bullying behavior when faced . Aim: To explore student nurses perception regarding bulling experience and its coping strategies during clinical training. **Subject and Methods:** A descriptive cross-sectional design on 106 student nurses at port-said university , Egypt using three tools as follows: the first tool for student's perceptions assessment sheet regarding bulling experience , the second tool for assessment of students self esteem level while the third tool for student's coping strategies methods of bulling. **Results:** Reflected that there is that there is a statistically significant correlation between student's sociodemographi characteristics and there Rosenberg scale levels of self esteem only in the item related to If they faced bulling situation, what is the reason of not telling any person (Ps= 0. .001) . In addition to , revealed that there is a statistically significant correlation between student's socio demographic data and their dealing methods with bulling situation based on a Kobe scale in the item related to gender (Ps= 0.041) and also in student's thought of leaving the nursing profession and college because of bullying(Ps= 0.004) .**Conclusion & Recommendations**: Based on study results there are a low feeling of self confident and esteem among student nurses during clinical practice and there are an underestimated with unfair criticism negatively affecting their ability to provide care . So, there are needs for implementation of multimedia educational program for students regarding corrective actions of bulling situations during clinical training.

Key Words: *Perception, bulling experience, coping strategies, clinical training, student nurses*

Introduction

Today, Bullying has been recognized as a serious problem. It is essential that educators understand the dynamics and consequences of bullying, as well as what the proper actions should be taken to support students in these situations (***Allen, 2010***) [(1)]. Bullying is identified as one of the most major problems faced also children in the education, as well as one of the most considerable health hazards (***Block.,2014***) [(2)]. Although Bullying in nursing is not a novel phenomenon faced nursing students there is restricted literature that directly deals with bullying faced nursing students in the clinical settings (***Minton & Birks ., 2019***) [(3)].

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Perfectly, the culture of nursing should be supportive, caring, kind, and empathetic especially when it comes to interactions between nursing colleagues. While the patient care linked within the culture of nursing and their compassionate, the collegial culture often is aggressive. In nursing profession, bullying has a harmful effects not only on the bullied persons but also on the delivering quality of health care and patient protection ***(Obeidat et al., 2018***) [4] .

In Egypt, previous studies of school bullying did not address the both adolescents personality for who bully and have been victimized and their involvement with their behavioral disorders in rural areas (***Galal et al ., 2109***) [5] .

Incivility is a form of bulling which impends to cause emotional distress as a negative effect resulting of stressful environment of nursing school. Furthermore, Uncivil students' behavior contradict academic outcomes , affect the professional nursing ethics when students used discourteous symbols during care with their patients ***(Ibrahim & Qalawa ., 2016***) [6] .While, Indirect bullying involves interaction between the bully and others that then indirectly affects the person being bullied as withdrawal and isolation, lies and making false accusations (***McMahon et al., 213***) [7] .

Psychological health was considered as a hard cognitive and life attitude which bullying is considered as a stressor that negatively affects the psychological health which is needed to improve nursing students abilities to educated successfully and continue their career (***Ren & Kim .,2017***) [8] .

Bullying others was associated with low psychosocial adjustment, which was a composite their psychological disappointment of problem behaviors, social and emotional well-being ***(O'Donnell , 2015***) [9] . Consequently, bullying avoidance strategy must be a part of deal with unpollited attitude come again (***Serafin &Czarkowska-Pączek ., 2019***)[10] .

Justification of the problem:

Nursing students have reported that faculty sometimes low-prepared to address bullying situations which the major role of them that how to give students feedback regarding bullying, recognition and take proper actions which affect learner communication skills (***Seibel & Fehr ., 2018***) [11] . Therefore, the current aim was to explore student nurse's perception regarding the effect of bullying behaviors on their self esteem and clinical Competency.

Conceptual framework

A conceptual framework deal with Social cognitive theory (SCT), used in psychology, education, and communication, holds that portions of an individual's knowledge acquisition can be directly related to observing others within the circumstance of experiences, and influence of social communication channels. According to Albert Bandura theory clarified how learner imitate a model behavior through observe and keep in mind the cycle of situation and then use this observation to formulate their consequent behavior. (***Bandura., 2011)*** [12] . Although social influences and environmental factors may be highly variable, according to social cognitive theorists, underlying all developmental competencies in adolescence is self-efficacy, which refers to the scope to which individuals suppose they can be successful in their actions .(***O'Donnell , 2015***) [9] .

Research Questions:

Q 1 : What is the student's perceptions of bulling experience.

Q 2 : What are the coping strategies of bulling that student's follow.

Q 3 : Are there a relation between student's self esteem levels and their demographic data

Q 4 : Are there a relation between coping strategies with bullying situations with student's demographic data

Subjects and Methods

A descriptive cross-sectional design on 104 of purposive sampling of all available both sex student nurses in all levels during academic year 2019-2029 distributed as 14 from the first level , 28 from second level , 49 from third level , and 13 from fourth level from faculty of Nursing at Port-said university. Data collected online as a preventive strategies for corona virus at this time by using three validated adapted tools **from Clarke., 2009** [13] & **Ümmet., 2015** [14] as follows: **Tool I : student's perception of bulling sheet** , it includes two parts which part 1 includes 7 questions to assess sociodemographic characteristics such as age, sex, levels , experience of bulling , actions taken when faced bulling situation while part 2 includes 34 questions to assess student's perceptions and attitude regarding bulling experience . **Tool II: (Rosenberg Self-Esteem Scale sheet)** . This tool includes 10 items used to assess the student's self esteem. **Tool III: COPE Inventory sheet.** it includes adopted 25 validated inventory questions to assess actions taken to coping with experiences of bullying during clinical practice.

Ethical Considerations

Online informed consent was obtained from all students before starting the participation on the study through using link of questionnaire after clarification of assured confidentiality and their right of refuse. Ethical approval will obtain from ethical board of Faculty of nursing, Port-said University.

Procedure

Based on literature review the tool was developed and then validated after translated into Arabic through face validity from five professors specialized on Medical- surgical nursing field in port-said faculty of nursing was done , then **Pilot study** on 10% of students was carried out to test possibility of tool application and needs for necessary modifications . Otherwise, these students were then excluded from the studied sample. Reliability was done using Cronach alpha coefficient test which calculated as 0.94. Data collected through distributing the questionnaire to patient's ; data collected from August 2020 until December 2020 through online questionnaire link as a preventive measures for infection control of corona virus (Covid 19) at this time . Data were analyzed using SPSS software package version 20.0. Mean and standard deviation Significance of data was judged at the 5% level.

Scoring system:

Scoring systems for **Tool I** including assessment of student's perception towards bulling experience and **Tool II** assessment of **Rosenberg Self-Esteem Scale** for perception questions it is ranged from 0-1 scores which zero score for wrong answer and 1 for right answer. For self esteem scale it is ranking from 1 to 4 as Never, often, some time, and all the time respectively. **Tool III** was **COPE Inventory sheet** which scores ranged from 1 to 4 which as strongly agree , Agree , disagree , and strongly disagree respectively , then classified as high level for above 75% , Moderate 50-75% , Low ≤ 50% (**Ümmet., 2015**) [14] .

Results

Table (1) revealed that (71.7%)of students were female , (84.6%) were in age group below 22 year , (47.1%) from third level, .Also, (66.3%) were have thought about leaving the nursing profession and college because of bullying , (34.6%) were response of action if faced bulling that not told any one will (73.5%) of them choice if told person they choice the supervisors of practical training , (41.3%) of them reasons of not told any one others feeling that it is useless.

Table (2) noted that there are (41.3 %) of students agree toward confidently during perform most of the procedures of patient's care, while (43.3%) of students agree that feel being underestimated is negatively

affecting their ability to provide care , (38.5%) feel agree & strongly agree regarding the screaming is negatively affecting their ability to provide care to patients , (39.4%) agree that feel the exclusion is negatively affecting their ability to provide care to patients . Finally , (42.3%) feel that unfair criticism is negatively affecting their ability to provide nursing care

Table (1): Distribution of the nursing students according to their socio demographic data (n = 104)

Q	Sociodemographic data	No.	%
1	Sex		
	Male	19	18.3
	Female	85	71.7
2	Age		
	Less than 22 year	88	84.6
	More than 22 year	16	15.4
3	Grade		
	First	14	13.5
	Second	28	26.9
	Third	49	47.1
	Fourth	13	12.5
4	Have you thought about leaving the nursing profession and college because of bullying?		
	Yes	12	11.5
	No	69	66.3
	Sometimes	23	22.1
5	If you were bullied during training, would you tell anyone about it?		
	Yes	25	24.0
	No	36	34.6
	Probably	32	30.8
	I haven’t thought yet	11	10.6
6	If yes, who would you tell? (N = 104)		
	Supervisor of practical training	39	37.5
	Your colleagues	15	14.4
	Your friends	20	19.2
	the mother	10	9.6
	Brother / Sister	4	3.8
	hospital manager	2	1.9
	Dean of the College	5	4.8
	Last mention	9	8.7
7	. What is the reason (n = 104)		
	the fear	6	5.8
	Shy	12	11.5
	weak personality	1	1.0
	Anxiety over evaluation	6	5.8
	Feeling that it is useless	43	41.3
	I do not want anyone to know anything about me	28	26.9
	I can’t find someone to trust	8	7.7

Table (2): Distribution of Students' feeling responses regarding bullying situations during clinical training (n = 104)

Q	Second: Students' feelings about bullying situations during field work	Strongly disagree		Disagree		Sometimes		Agree		Strongly agree	
		No.	%	No.	%	No.	%	No.	%	No.	%
1	Feel confident that i can perform most of the skills needed to care for patients	0	0.0	5	4.8	19	18.3	43	41.3	37	35.6
2	Feel that being underestimated is negatively affecting my ability of patient's care	1	1.0	9	8.7	21	20.2	45	43.3	28	26.9
3	Feel the screaming is negatively affecting my ability of patient's care	2	1.9	9	8.7	13	12.5	40	38.5	40	38.5
4	Feel the exclusion is negatively affecting my ability to provide care to patients	5	4.8	10	9.6	14	13.5	41	39.4	34	32.7
5	Feel that unfair criticism is negatively affecting my ability to provide nursing care	4	3.8	10	9.6	17	16.3	29	27.9	44	42.3

Table (3): Distribution of the nursing students in relation to the Rosenberg scale of self-esteem items (n = 104)

Q	Third: the Rosenberg scale of self-esteem	Strongly disagree		Disagree		Agree		Strongly agree	
		No.	%	No.	%	No.	%	No.	%
1	Generally, I am satisfied with myself	2	1.9	8	7.7	44	42.3	50	48.1
2	Sometimes I feel that I am not feeling well	4	3.8	21	20.2	58	55.8	21	20.2
3	I feel that I have the quality of performance	1	1.0	9	8.7	64	61.5	30	28.8
4	I am able to accomplish tasks like others	0	0.0	6	5.8	59	56.7	39	37.5
5	I feel like I don't have much to be proud of	14	13.5	39	37.5	37	35.6	14	13.5
6	I definitely feel pointless sometimes.	11	10.6	29	27.9	51	49.0	13	12.5
7	I feel that I 'm less worth than others	40	38.5	38	36.5	17	16.3	9	8.7
8	I hope to have more respect for myself	2	1.9	11	10.6	56	53.8	35	33.7
9	In general, I feel like a failure compared to others	32	30.8	34	32.7	29	27.9	9	8.7
10	I take a positive attitude towards myself most of the time	0	0.0	10	9.6	70	67.3	24	23.1

Table (4): Relationship between student's sociodemographic data and their levels of self-esteem

Demographic data	Rosenberg scale of self-esteem Levels						χ2	MCp
	Low (n =14)		Moderate (n =69)		High (n =21)			
	No.	%	No.	%	No.	%		
Sex								
Male	4	28.6	13	18.8	2	9.5	7.154	0.088
Female	10	71.4	56	81.2	17	81.0		
It is preferable not to authorize	0	0.0	0	0.0	2	9.5		
Age (years)								
Less than 22 year	12	85.7	59	85.5	17	81.0	0.453	0.918
More than 22 year	2	14.3	10	14.5	4	19.0		
Grade								
First	4	28.6	8	11.6	2	9.5	3.870	0.699
Second	2	14.3	20	29.0	6	28.6		
Third	6	42.9	33	47.8	10	47.6		
Fourth	2	14.3	8	11.6	3	14.3		
Have you thought about leaving the nursing profession and college because of bullying?								
Yes	3	21.4	9	13.0	0	0.0	5.484	0.222
No	7	50.0	46	66.7	16	76.2		
Sometimes	4	28.6	14	20.3	5	23.8		
If you were bullied during training, would you tell anyone about it?								
Yes	4	28.6	16	23.2	5	23.8	6.050	0.403
No	7	50.0	25	36.2	4	19.0		
Probably	3	21.4	21	30.4	8	38.1		
I haven't thought yet	0	0.0	7	10.1	4	19.0		
If yes, who would you tell?								
Supervisor of practical training	6	42.9	23	33.3	10	47.6	18.846	0.082
Your colleagues	5	35.7	9	13.0	1	4.8		
Your friends	1	7.1	16	23.2	3	14.3		
the mother	0	0.0	9	13.0	1	4.8		
Brother / Sister	1	7.1	3	4.3	0	0.0		
hospital manager	0	0.0	2	2.9	0	0.0		
Dean of the College	0	0.0	1	1.4	4	19.0		
Last mention	1	7.1	6	8.7	2	9.5		

Cont... **Table (4): Relationship between student's sociodemographic data and their levels of self-esteem**

If the answer is no. So what is the reason								
the fear	2	14.3	4	5.8	0	0.0	31.221*	<0.001*
Shy	5	35.7	6	8.7	1	4.8		
weak personality	0	0.0	1	1.4	0	0.0		
Anxiety over evaluation	2	14.3	3	4.3	1	4.8		
Feeling that it is useless	3	21.4	37	53.6	3	14.3		
I do not want anyone to know anything about me	2	14.3	14	20.3	12	57.1		
I can't find someone to trust	0	0.0	4	5.8	4	19.0		

c^2: **Chi square test** MC: **Monte Carlo** *: Statistically significant at $p \leq 0.05$

Table (5): Relationship between student's socio demographic characteristics and their coping methods with bulling situations based on a Kobe scale

Sociodemographic data	**A Kobe scale for methods of dealing with bullying situations**						**χ^2**	**MCp**
	Low (n =3)		**Moderate (n =95)**		**High (n =6)**			
	No.	**%**	**No.**	**%**	**No.**	**%**		
Sex								
Male	2	66.7	16	16.8	1	16.7	10.024*	0.041*
Female	1	33.3	78	82.1	4	66.7		
It is preferable not to authorize	0	0.0	1	1.1	1	16.7		
Age (years)								
Less than 22 year	2	66.7	81	85.3	5	83.3	1.554	0.540
More than 22 year	1	33.3	14	14.7	1	16.7		
Grade								
First	2	66.7	12	12.6	0	0.0	8.375	0.102
Second	0	0.0	28	29.5	0	0.0		
Third	1	33.3	43	45.3	5	83.3		
Fourth	0	0.0	12	12.6	1	16.7		
Have you thought about leaving the nursing profession and college because of bullying?								
Yes	3	100.0	8	8.4	1	16.7	13.700*	0.004*
No	0	0.0	64	67.4	5	83.3		
Sometimes	0	0.0	23	24.2	0	0.0		

Cont... **Table (5): Relationship between student's socio demographic characteristics and their coping methods with bulling situations based on a Kobe scale**

If you were bullied during training, would you tell anyone about it?								
Yes	2	66.7	20	21.1	3	50.0	7.435	0.164
No	1	33.3	33	34.7	2	33.3		
Probably	0	0.0	32	33.7	0	0.0		
I haven't thought yet	0	0.0	10	10.5	1	16.7		
If yes, who would you tell?								
Supervisor of practical training	1	33.3	35	36.8	3	50.0	10.143	0.822
Your colleagues	1	33.3	14	14.7	0	0.0		
Your friends	0	0.0	18	18.9	2	33.3		
the mother	0	0.0	10	10.5	0	0.0		
Brother / Sister	0	0.0	4	4.2	0	0.0		
hospital manager	0	0.0	2	2.1	0	0.0		
Dean of the College	0	0.0	5	5.3	0	0.0		
Last mention	1	33.3	7	7.4	1	16.7		
If the answer is no. So what is the reason								
the fear	0	0.0	6	6.3	0	0.0	16.173	0.128
Shy	3	100.0	9	9.5	0	0.0		
weak personality	0	0.0	1	1.1	0	0.0		
Anxiety over evaluation	0	0.0	6	6.3	0	0.0		
Feeling that it is useless	0	0.0	40	42.1	3	50.0		
I do not want anyone to know anything about me	0	0.0	26	27.4	2	33.3		
I can't find someone to trust	0	0.0	7	7.4	1	16.7		

c^2: **Chi square test** MC: **Monte Carlo**

*: Statistically significant at $p \leq 0.05$

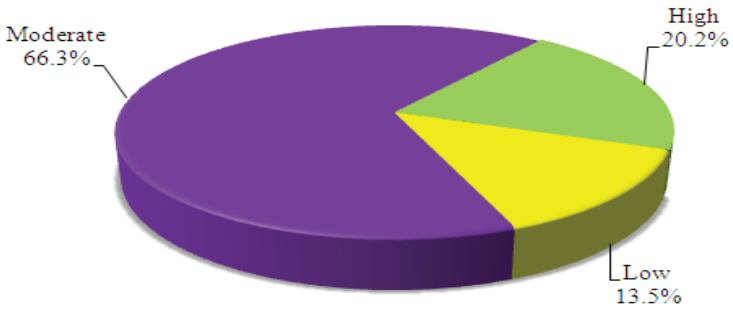

Figure (1): Distribution of the studied nursing students based on Rosenberg levels (n = 104)

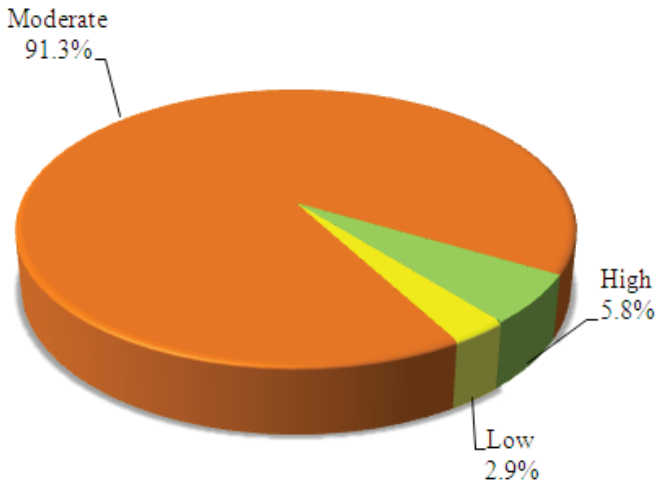

Figure (2): Distribution of the studied nursing students in relation to of Kobe levels for methods of coping with bullying situations (n = 104)

Discussion

Globally, work bullying has critical effects on nursing staff health ***(AL-Sagarat et al ., 2018)*** [15] . Otherwise, nursing bullying is implicit phenomenon that negatively impacts the learner's physically, mentally, emotionally and learning outcomes (***Minton & Birks ., 2019***) [16] .

Regarding sociodemographic characteristics of studied sample, the current study revealed that nearly two-third of students were female , while the majority of them were in age group below 22 year , below half from third level, .Also, more than half were have thought about leaving the nursing profession and college because of bullying . These findings supported with ***Ontario Ministry of Education., 2009*** who concluded that school is a place that is meant to ensure safety, free from harm, and provide a well rounded education .Unfortunately, those experiences have been hindered for some, and it is important that educators have the capacities to help students get on the right track (***Block.,2014***) [2] .

Regarding student's feeling regarding bulling situation during clinical training , the current study clarified that there are near half of students agree that feel confident when perform most of the patient's care procedures and agree that feel being underestimated is negatively affecting their ability to provide care , while , more than one quarter feel agree & strongly agree regarding the screaming and have unfair criticism which negatively affecting their ability to provide care to patients . These findings supported with ***Obeidat et al., 2018*** [4] who found that the majority of Jordanian nurses perceive themselves as victims of unkind workplace bullying.

Whereas, ***Minton & Birks ., 2019*** [16] reported that there were various uncivil behaviours among students during clinical placements which affect student's physical and psychological status that directed them to leave the nursing career . While in New Zealand, ***Minton et al ., 2018*** [17] found that there is restricted literature that dealing with nursing students bullying in the clinical enviroment .

In Australia , ***Budden et al., 2017*** [18] necessitate on that nursing bulling are undesirable behaviours in the work environment . The majority of students experience of being bullied made them feel anxious (71.5%) and depressed (53.6%) with an impact for their education abilities and clinical training outcomes.

Regarding student's quality of clinical performance, the present study demonstrated that there are more than half of students agree that sometimes they feel that not feeling well, agree that they have the quality of performance, agree that they able to accomplish tasks like others , and agree of take a positive attitude towards them self most of the time .These findings supported with ***Kassem ., 2015*** [19] who highlighted on that nursing students experience of bullying situation which let them feel anger and unconcentrated , their ability of required achievements. Also a concept of self-confidence is essential to nursing students' performance during the clinical training.

In New Zealand , ***Minton et al ., 2018*** [16] emphasized on that nursing students are a vulnerable for bullying from many factors as preceptors, mentors and clinical facilitators which affected clinical performance and 27% of bullied students.

Regarding the relationship between student's sociodemographic characteristics and their self esteem levels , the present study reported that there is a statistically significant correlation between student's sociodemographic characteristics and levels of self esteem using Rosenberg scale only in the item related to the reason of not telling any person if they faced bulling situation. This findings goes in the same way with ***Ren & Kim .,2017*** [8] who recommended utilize proper conflict management and psychological management strategies for coping with bullying behaviors among nursing students and staff nurses and promoting their psychological health.

Moreover, the current study reported that there is a statistically significant correlation between student's socio demographic characteristics and their dealing methods with bulling situation based on a Kobe scale in the item related to gender and student's thought of leaving the nursing profession resulting from bullying. These findings supoorted with ***Pörhölä et al ., 2019*** [20] who found that there are a significant associations have been found between social anxiety and bullying both childhood and adolescence . While ***Minton & Birks ., 2019*** [3] added that there are an obvious needs for proper preparation regarding preventive strategies of student's bulling experience in the clinical settings .

In this regard, ***Gillespie et al ,2017*** [21] stressed on increasing require for nursing professionals, nurse educators to work collaboratively with clinical staff and leaders in health care settings in order to maintain a culture of safety and easiness for bullying situation.

In Jordan , ***Al-Ghabeesh & Qattom ., 2019*** [22] revealed that bullying is a significantly predisposed the nurses' perception of their competence and delivered quality of care which these perception affect their identify of bullying situation , reply to it correctly . From another point of views, ***Kub & Feldman ., 2015*** [23] highlighted on that schools role are to prevent bullying occurrence , and support positive youth development.

Based on current findings , there are more than half of student's have moderate level of self esteem during clinical training according to rosenberg scale and the most of them have moderate level of competent performance during clinical training according to Kobe scale for dealing with bulling situations.These findings in contrast with ***Ebrahim & Elrefaey., 2018*** [24] who reported that there was no statistically significant correlation between total bullying perception and total self-esteem, however, coping strategies were recommended for a low level of self-esteem.

Courtney-Pratt et al .,2018 [25] recommended that efforts must be made in academic institutions to pay

attention for guidance of undergraduates with using a great strategies to address this issues. Besides , ***Dimitriadou–Panteka et al ,2014*** [26] added that the nursing education should enhancing the self-esteem of students through giving the proper knowledge and skills required to practice as a nurse.

Pigozi & Bartoli ., 2016 Found that school nurses have an essential role in helping students to cope with bullying. Nevertheless, there is a need to student training strategies to take proper actions with bulling situation.

Finally, student's self-esteem is highly affected by teacher interaction and perception of support because teaching staff is considered as a model for the progress of healthcare professionals. Otherwise, teaching staff should replicate on their communication practices, and seek to increase their management skills in order to support student learning (***Pigozi & Bartoli ., 2016***) [27] . Thus, activated implementation of staff member's rules regarding uncivil behaviors and how to deal with both uncivil and bullying students. (***Ibrahim & Qalawa , 2016***) [6] .

Conclusion & Recommendations

From the foregoing results, it can be seen that there are a low feeling of self confident and esteem among student nurses during perform patient's care procedures and there are an underestimated with unfair criticism negatively affecting their ability to provide care . So, there are needs for implementation of multimedia educational program for students regarding corrective actions of bulling situations during clinical training in order to build their self - esteem and competency to dealing with bulling situations in clinical settings. . Also, a guideline needs to sit for those students to diminish bulling effects and proper actions in clinical settings.

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Ethical Clearance: An official authorization was allowed from obtain from ethical board, faculty of Nursing , Port-Said University authority at Egypt as a responsible committee in this institution, to get their authorization to conduct the study after clarifying the reason for the study IRB/ IECs= PSNUR-26-03OBJ . Additionally, Online informed consent was obtained from all students before starting the participation on the study through using link of questionnaire after clarification of assured confidentiality and their right of refuse.

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Conflict of Interest: There are No conflicts of interest

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Empowerment of Area Development Society Workerson Awareness and Attitude Regarding Family Financial Management

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Abstract

Background: Financial management within the family is essential to avoid disease and disaster and to make a healthy family. The study was aimed to analyze the effect of empowerment programme on awareness and attitude regarding family financial management among the Area Development Society workers in selected panchayath in Thrissur District.

Objectives: The objectives of the study were to evaluate the effect of empowerment programme on awareness and attitude regarding family financial management.

Methods: The research design was two group pretest posttest design. The population was ADS workers in Thrissur district. 60 ADS workers were selected using multistage random sampling with 30 each in experimental and control group. The tools used were valid and reliable -FFM questionnaire (r 0.86) and FFM attitude (r 0.95).

Results and Conclusion: Statistical analysis was done using unpaired t test which revealed that mean scores of awareness and attitude regarding family financial management were significantly higher in experimental group than in control group (t 0.25, p 0.001 & t 4.26, p 0.001). It was concluded that the empowerment programme was effective in enhancing awareness and attitude regarding family financial management among ADS workers.

***Key words**: ADS workers: Empowerment programme; Family Financial Management*

Introduction

Managing money and financial resources in a family is one of the important goals and activities at home. Everyone face financial disturbances in his life. Many families experience financial problems because of lack of budget, lack of resources, emotional reasons or catastrophic health expenditure. Poverty is a major determinant of health. Poverty and ill-health are age-old problems of mankind and a complex societal issue. WHO states that there is no single cause of poverty and the outcome of poverty is also different. WHO supports countries to design and implement 'pro-poor' health policies which are health policies that prioritize and respond to the needs of poor people.[1]

The emergence of Covid 19 also created a long-lasting impact on the various spheres of life especially among people in the lower social strata. As the economically suffering people were forced to live at the subsistence level during this pandemic period they are facing a precarious financial situation. It does not bode well for such groups because the predictions of financial recovery are a time taking process.[2]

Financial literacy is a significant factor in family financial management. It is a set of knowledge, skills

and a favourable attitude to foresee, make effective decisions and implement the most suitable financial plan. The unseen and invisible determinant of health is the family financial management which is the main concept core point of this research.

According to Amartya Sen, broad disparities between the 'haves' and 'havenots' are to be managed only through empowerment. Three distinct layers of empowerment are at individual, institutional and national level; thereby economic advancement and prosperity can be achieved.[3] The health care system addresses family as a whole at the primary health center level. The structure and function of a family differ across the country based on social norms, cast, culture and income. There are remarkable variables run in families that contribute to the poverty illness vicious cycle. Income influences health and longevity through various clinical, behavioural, social, and environmental mechanisms.

The Kudumbashree Mission is under the Ministry of Rural Development and a pioneering attempt in Kerala for women empowerment. Area Development Society workers are employed for familiarizing Government schemes and programmes for women leadership, connect through neighbourhoods networks and connect for change through a group of neighbourhood women in society. Kerala Government started Kudumbashree mission in 1998 for poverty eradication, women empowerment in villages. Neighbourhood groups is the basic unit at grass root level, constituted with minimum 10, maximum 20 women in villages. 7-10 neighbourhood group is monitored by one Area Development Society worker. ADS workers are supervised by CDS workers who called Kudumbashree Chairperson. The ADS and CDS do auditing of accounts frequently. It was the pragmatic style of Kerala in decentralize the power to Panchayati Raj Institutions with the aims of eradicate absolute poverty within a definite time frame of 10 years under the Local Self Government and imposed by 73, 74th amendment of Indian constitution. It also stands where deprivation of basic rights of women. As of today, 2.77 lakh neighbourhood groups, 19854 ADS and 1073 CDS now working under Kudumbashree in Kerala. This 3 tier structure play significant role in development activity to develop, participated planning an social audit. [4]

Though the income is high, several families run out of financial resources and are helpless in emergencies. The family financial emergencies are usually driven out of diseases and disasters that affect one or members of a family. Hence proper financial management within the family is essential. [5-6]

The population selected for the present study is Area Development Society workers under the Kudumbashree mission in Thrissur district. Area Development Society workers are employed under the Ministry of Rural Development Department, Government of Kerala. Their role is familiarizing Government schemes and programmes for women leadership, connect through neighbourhoods networks and connect for change through a group of women in society. Therefore the unidentified areas of financial management on knowledge and attitude of ADS workers to be focused for eliminate poverty among women in rural areas.

Statement of the problem

A study to evaluate the effect of empowerment programme on awareness and attitude regarding family financial management among Area Development Society workers in selected panchyaths in Thrissur.

Objectives of the Study

1. Analyze the effect of empowerment programme on awareness regarding family financial management among Area Development Society workers.

2. Analyze the effect of empowerment programme on attitude regarding family financial management

among Area Development Society workers.

3. Determine the relation between awareness and attitude regarding family financial management among Area Development Society workers.

Hypotheses: All hypotheses were tested at 0.05 level

H1: There is a significant difference in the mean score of awareness regarding family financial management between experimental and control group of Area Development Society workers.

H2: There is a significant difference in the mean score of attitude regarding family financial management between experimental and control group of Area Development Society workers.

H3: There is a significant relation between awareness and attitude regarding family financial management of Area Development Society workers.

Operational definitions

Empowerment programme: It is an educational program regarding family financial management for ADS workers. The education session comprises general aspects of family financial management, family budgeting techniques and Government financial assistance schemes. The teaching session is imparted through lecture cum discussion using power point side which is lasted for 45 minutes, 15 minutes for sample family budget preparation, 10 minutes for feedback.

Awareness regarding family financial management: It is the knowledge of Area Development Society workers on family financial management, family budgeting techniques and Government financial assistance schemes.

Attitude regarding family financial management: It is the belief of Area Development Society workers regarding the aspects of self appraisal of family financial management, readiness to do budgeting, belief about financial planning and valuing money which is measured using financial management attitude scale.

Conceptual framework

Theory of planned behavior by Jack Ajzen and Fishbein was used in this study.[7] The concepts of key are variables are –Normative beliefs and subjective norms, Control beliefs and perceived behavioral control and Behavioral intention and behavior.

Methodology

Research design : Two group pre test post test design.

Variables

· **Independent variable:** Empowerment programme

· **Dependent variables:** Awareness and attitude regarding family financial management

Setting of the study :

Kudumbashree offices in the selected panchayat, Thrissur were the setting of this study. Panchayats were Adat, Tholur, Kaiparamba, Avanur, Kolazhi and Mulamkunnathukavu Grama Panchayats under Puzhakkal block Panchayat in Thrissur district.

Population : The population selected for the present study are Area Development Society workers in Thrissur district.

Sample : The sample in this study were ADS workers under Puzhakkal Block Panchayath, Thrissur District. Sample size were 60 ADS workers, 30 in each control and experimental group of ADS workers.

Sampling criteria

Area development society workers who are working for minimum of 2 years and reside in the

selected area during study are included as sample.

Sampling technique: Multi stage sampling technique was used for this study. Multi stage sampling technique was used for this study. Sample selection started with enlisting 16 blocks in Thrissur district. By simple random sampling (lot method) Puzhakkal block selected from the enlisted 16 block Panchayats. There are 95 CDS workers in Puzhakkal block Panchayat.Among them 70 CDS workers were selected randomly. Under the 70 CDS workers there are 420 ADS are working. Out of them, 210 ADS workers were recruited by simple random sampling method. The final stage was selection of 60 ADS workers from the selected 210 ADS worker by simple random sampling method. Total of 60 ADS workers were recruited from each Panchayath for this study. That is 30 in control and 30 in experimental group of ADS workers.

Tools and techniques

Tool 1- Socio personal data sheet of ADS workers

Tool 2-Family financial management questionnaire

Tool 3- Financial management attitude scale

Family financial management questionnaire include 15 items related to 3 areas; basics of financial management, family budgeting techniques and government schemes for financial assistance. The scores were arbitrarily classified into 3. Good (10-15), average (5-9), and poor (1-4). Test retest reliability was estimated (r 0.86, p 0.001).

Financial management attitude scale includes statements of beliefs on family budgeting practices. The scores were arbitrarily classified into 3: Favourable (10-15), partially favourable (5-9) and unfavourable (1-4) and the scale was found reliable(r 0.95).

Ethical Considerations: The study got ethical clearance from Institutional Ethics Committee , Government College of Nursing, Thrissur, No.B1/312/2015/CONTSR dtd 29.05.2019. Informed consent was obtained from all participants and privacy and confidentiality was maintained.

Data collection process

The study was conducted after obtaining permission from the Scientific Review Committee, Institutional Ethics Committee and administrative sanction from the Principal, Govt. College of Nursing, Thrissur and District Kudumbasree Mission Coordinator, Thrissur. The main research study was conducted from 20/05/2020 to 29/02/2020.

Pilot study : A pilot study was conducted among 6 ADS workers from 02/05/2020 to 07/05/2020.

Results

A. Socio personal characteristics of ADS workers

Among 60 ADS workers, 23.3 % in control group and 26.7% in experimental group belonged to the age group of 36-40 years. Majority, 73.3% in control group and 50.1% in experimental group were between 31-45 years of age and majority in both groups belonged to the Hindu religion (%). More than half (66.7 %) in control group and 73.3 % in experimental group of ADS workers belonged to nuclear family and most of them (96.7%) in both the groups were married. Majority, (86.7%) of ADS workers in control group and 83.3 % of ADS workers in experimental group were home makers. More than half of ADS workers (53.3%) in control group were educated up to secondary and the same percentage in experimental group were having above secondary education.

More than half of the ADS workers (53.3 %) in control group and majority (73.3%) in the experimental group belonged to families with a monthly income of Rs. 1001-4000/- and 56.7% of them in control group and 50% of them in experimental group belonged to

APL category. Moreover, 43.3% of ADS workers in control group and 30% of them in experimental group had income from self employment.

Majority of ADS workers 73.3% in control and 43.30 % in experimental group preferred investment in Kudumbashree fund. Among them, 53.3% in control group and 70% in experimental group did not spend on expensive items in last month. Majority (73.3%) of ADS workers in control group had debt while more than half (53.3%) of ADS workers in the experimental group had no debt above two lakhs.

B.Effect of the empowerment program on awareness and attitude regarding family financial management among ADS workers between control and experimental group

Before the intervention, only 16.7% had good awareness regarding family financial management in both the groups of ADS workers. The mean pretest score of awareness in control and experimental group were 8.43±1.83 and 8.23±2.45 respectively. In posttest, it remained same in control group while mean awareness enhanced in experimental group to 13.53±1.63.

Majority of ADS workers (86. 7%) in the control and (76.7 %) in experimental group had favorable attitude regarding family financial management before intervention (43.3 ± 4.91 and 48.7±3.32).

There was a significant change in mean awareness score (t 10.25, p <0.001) and mean attitude score (t 4.26, p 0.001) regarding family financial management between the experimental and control group after the empowerment programme. The programme was effective in enhancing the awareness attitude of ADS workers regarding family financial management.

Karl Pearson Correlation coefficient between awareness and attitude score (r= +0.08, p 0.51) indicates a weak positive correlation existing between awareness and attitude regarding family financial management among ADS workers, but the relationship was not statistically significant.

Discussion

The focus of the study was to evaluate the effect of empowerment programme on awareness and attitude regarding family financial management among ADS workers.

ADS workers are employed at ward level, they encourages and motivates neighbourhood groups and provide leadership to neighbourhood groups in taking up poverty eradication programmes. The ADS workers have potential and position to reach out to families through neighbourhood groups. They can make a great influence on rural women population with respect to the family financial management. Asian Development Bank published the 2011 statistics on personal and socioeconomic development reported that 21.9% global populations were below poverty line. The employed population is only 50%.[5-6] A study was conducted to understand the family budget and its justification among residents and findings showed importance of family budget. This can contribute health of family members both mentally and physically.[8]

The present study identified that 46.7% ADS workers in control group only 30 % of ADS workers in experimental group had family budget. So there is a need of educational programme regarding family financial management for making changes in the family budgeting practices. It was found that only 16.7% in control group and 5% in experimental group of ADS workers had good awareness and attitude was favourable in 56.7% in control & experimental group was 63.3% in pretest. A study was conducted on financial literacy of professional women in the District of Kochi, in 2012 also found that only 32% of respondents answered the financial concepts correctly[9]. A study conducted to measure the level of personal financial management attitude of medical practitioners in Malaysia and found that 76.4% of respondent had a positive attitude towards personal

financial management.[10] A cross sectional study was conducted to find financial management systems and practices used by rural women on the family budget and welfare of their families revealed that respondents some incorrect financial management practices like mental planning of expenditure (89%) and 79% could not handle financial emergencies.[11] A research study on financial problems and dissatisfaction influenced attitude towards financial counseling in Australian workers revealed that financial management practices and money attitudes significantly predicted financial problems. Financial management practices, money attitudes, and financial problems also significantly predicted financial satisfaction.[12]

Conclusion : Empowerment programme was effective in enhancing awareness and attitude regarding family financial management among ADS workers. It was also found that majority of them are not maintaining family budget as a tool for family financial management.

Implications of the study

The present study has got implications in the field of public health, social sciences, policy making and women empowerment programmes and on stainable development goal SDG 1 and 3. It also marks its milestone in empowerment of women to make financial choices and thereby improving health status of people as poverty is a major determinant of health. Educate women regarding family budgeting to as a tool improve family welfare. Realistic family budgeting during home visit is earmark in enhancing family health. Adequate training can be given to all levels of health workers such as accredited social health activists, anganwadi workers, and junior public health nurse to the top of the infrastructure the mission coordinators as well.

Source of Funding- Self

Conflict of Interest –Authors declare no conflict of interest.

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Impact of Staff Development Programme Importance in Nursing among Female Staff Nurses Working in Tertiary Care Centre, Chennai 40

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Abstract

A descriptive study carried out the knowledge regarding staff development programme importance in nursing among female staff nurses working in tertiary care centre, Chennai -03. The knowledge was assessed using structured knowledge questionnaires. The data analysis, among the 30 staff nurses level of knowledge of SDP importance in nursing according to their knowledge assessed by using self structured questionnaire 16% of female staff nurses having inadequate knowledge, 22 % of the female staff nurses having moderate knowledge, 62 % of the female staff nurses having adequate knowledge.

Keywords*: SDP, tertiary care centre, staff nurses*

Introduction

Education plays an important role in achieving organizational goals through a combination of organizational and the workforce interests. Nowadays, training is an essential factor contributing to greater efficiency of the staff and organizations. In fact, it is a vital investment that will lead to internal promotion, staff development and success of organizational plans[1]. Training is an investment in achieving productivity and employee retention through providing career development and job satisfaction in the long run. Training programs are essential for the survival and viability of the organization in the competition arena. The literature review suggests that certain training programs do not demonstrate any efficacy in improving the quality of patient care. In order to expand the capacities and improve educational outputs, it is crucial to develop and adopt new models of clinical education for nurses . In addition to theoretical knowledge, vocational training should enhance the technical capacity and quality of services, leading to innovation. Training programs must be organized in such a way that they enhance the beneficial capabilities of employees.

Staff development programmes include a set of measures taken to promote empowerment and competency among employees for the better undertaking of their tasks, thus helping the organization to achieve its goals[2]. Previous research has shown that job characteristics and professional factors can contribute to the involvement of employees in staff development programmes. Nurses play an important role in improving health standards. Hence, they need to be updated about theoretical and practical knowledge in this field[3]. In fact, SDP serves to update the staff's occupational knowledge and professional skills and improve the best practices for fulfilling various tasks and responsibilities[4].

Statement of the Problem

A STUDY TO ASSESS THE KNOWLEDGE ON STAFF DEVELOPMENT PROGRAMME IMPORTANCE IN NURSING AMONG FEMALE NURSES WORKING IN TERTIARY CARE CENTRE CHENNAI-03.

Objectives of the Study

1. To assess the level of knowledge on staff development programme importance in nursing among female nurses working in tertiary care centre,Chennai.

2. To find out the association between knowledge on staff development programme importance in nursing and their selected demographic variables.

Research Hypothesis

· H1 _There will be a significant association between the levels of knowledge regarding Staff development programme importance in nursing among female staff nurses working in tertiary care centre in Chennai-03.

Materials and Methods

The study is focussed to assess the knowledge regarding staff development programme importance in nursing among female staff nurses in tertiary care centre in Chennai03..The framework of the study was based on Rosenstock's health Belief model(1950).A descriptive study was conducted in the month of December in a well known Government tertiary hospital Chennai-3 . A sample consisting of 30 staff nurses met the inclusion criteria and they were randomly assigned in the group. A structured knowledge questionnaire was used to assess the knowledge of EBP among the samples.

A formal written permission was obtained from the authority concerned and data was collected among staff nurses. In present study, 30 nurse subjects were selected by random sampling technique using lottery method. The investigators informed the subjects the date and venue of data collection through the notice. Prior to the data collection the investigators familiarized themselves with the subjects and explained to them the purpose of the study. They requested the participant's full cooperation and assured them confidentiality of their response. An informed consent was obtained from the subjects .Self Structured knowledge questionnaire on SDP was administered to the participants. The average time taken by the participants to complete the tool was 20-30minutes. The selected subjects were cooperative and the investigators expressed their gratitude for their cooperation. The collected data was compiled for analysis.

Results and Discussion

The frequency and percentage distribution of personal variables among female staff nurses who are working in Tertiary care centre in Chennai-03. According to age of female staff nurses (age in years) 60 % of them are in the age group of 20-25, 36% of them are in the age group of 26-30, 7 % of them are in the age group of 31-35.

Education of the female staff nurses 30 % of them had completed a diploma in nursing. 50 % of BSc had completed their studies of higher Post BSc n20 % of them had completed their studies at degree courses. Majority of 90 % staff nurses had 1-5 years of experience, above 10 years 10 % of them participated in this study.

According to the working area 20 % of them working in general wards, 80% of them working in intensive care unit. Regarding experience 93% of them had no experience of SDP In this institution, 7% of them have experience in SDP.

If they were attending in SDP in these 1 female staff attended in community related, another one staff attended in general topic in nursing remaining members were 98% not attending SDP in this institution.

According to the knowledge percentage assessment 40% of the female staff nurses have inadequate knowledge, 50% of them have moderate knowledge and 10 % of them have an adequate level of knowledge.

Regarding association of demographic variables with knowledge score there is significant association with age in years, education of nurses, years of experience, working area, any previous attending of SDP with moderate and inadequate knowledge score that means significant relationship with knowledge and selected demographic variables.

Association between the level of knowledge regarding SDP importance in nursing among staff nurses working in tertiary care centre

S.NO	Demographic Variables	In adequate knowledge	Knowledge moderately adequate	Chi square	p value	Inference
1.	AGE 20-25 years 26-30 Years 31-35 years	2 6 6	2 6 6	0.053***	0.97 DF-2	S***
2.	EDUCATION Diploma BSc Post Basic BSc	4 10 -	10 2 1	DF-2 x2-8.8799	0.011	S**
3.	Experience 1-5 years 6-10 years above 10 years	9 7 -	10 1 1	DF-2 x2-5.08	p-0.07	S***
4.	Area of working Intensive units General wards	6 4	10 7	DF-3 x2-.231	p=0.972	S**
5.	Previous experience Yes No	7 4	9 7	DF=2 x2=0.12	p=o.oo1	S**
6.	If yes Community General None	- 1 14	1 - 12	DF-2 X2-2.74	p-0.252	S**

S-Significant**

Table 1 show that there is significant association between the demographic variables

Conclusion

The findings of this research indicated that registered nurses working in the participating health care institutions were aware of the benefits of staff development programmes in nursing, and of the need to remain updated.

Finally the following 2 major conclusions well drawn

1. There is a majority of staff nurses (50%) have moderate adequate knowledge among staff nurses regarding SDP importance in nursing.

2. Sponsoring much of SDP can improve knowledge among staff nurses regarding professional as well as personal knowledge.

Recommendations:

1. A similar study can be undertaken with a large sample for better generalization

2. A similar study can be undertaken by adapting an experimental design.

Conflict of Interest: There is no conflict of interest

Source of Fund: Self

Ethical Clearance: Obtained from institutional ethical committee

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Public Awareness and Compliance with Preventive Measures for the Novel Coronavirus (COVID-19) Pandemic in Jazan Area, KSA

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Abstract

Objectives: COVID-19 being one of the significant public health challenges, preventive measures play an essential role in reducing infection rates and the severity of the disease. This study obtained to estimate the general level of knowledge, attitude, and practices regarding emerging COVID-19.

Study design: cross-sectional community based.

Methods: Data collected using a structured self-administered online questionnaire, distributed to Jazan residents, KSA between March to September 2020.

Results: 345 eligible participants were enrolled, among whom the total mean score of the knowledge, attitude, and practice were 19.6 ± 10.8, 34.8 ± 3.4, 32.7 ± 3.4 consecutively, In term of prevention and protection against the virus transmission, only 186 (53.9%) know that hand washing and (54.5%) know that using of the face mask can protects against the virus transmission.

Conclusions: The community was highly significant regarding transmission of (COVID19) and implemented most of the precautionary practices, such as avoiding handshaking and using an alcohol hand rub. Most of the participants obtaining an average level of virus-related information and retaining a positive attitude towards overcoming COVID-19 infection, but they reflect a low to moderate level of awareness of Covid19's clinical manifestation.

Keywords: *COVID-19, public awareness, preventive measures, public compliance, KSA.*

Introduction

COVID-19 was first reported in China in December 2019 when the mortality rate increased worldwide; the World Health Organization (WHO) then called it a pandemic in March 2020 [1,2]. Before the outbreak of COVID 19 in Saudi Arabia, Middle East Respiratory Syndrome-coronavirus (MERS-CoV) was the primary concern in 2012 [3,4]], but it was successfully controlled by restrictive measures, which were made by the government [4].

COVID-19 poses health threats to the population worldwide [3], and the KSA authorities have monitored the COVID-19 situation from its first detection. Plans

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were put in motion to prepare for its suspected outbreak in the Kingdom [5,6,7]. These measures included the closure of schools, universities, public transportation, and all public places as well as the isolation and care of infected and suspected cases [4]. This was in addition to some unprecedented measures related to awareness and prevention to control COVID-19 transmission in the country [8].

The fight against COVID-19 continues globally, and to ensure control, individual adherence to these control measures is essential. Some studies have reported that knowledge and attitudes towards the pandemic disease has contributed to fear and anxiety among the population and complicated endeavors to prevent the spread of the disease [9,10,11].

Awareness creation and changing attitudes are among the public health intervention measures recommended by the WHO. Various studies have shown demographic, social, and technological factors that are known to affect the level of knowledge, attitude, and practices towards the disease and its prevention [12] A descriptive cross-sectional study conducted by Ahmed Abdelhafz et al. to study Egyptian knowledge, perceptions, and attitudes towards the novel coronavirus disease (COVID-19) concluded that the study participants had good knowledge about COVID-19 and had a positive attitude towards using protective measures. Thus, this study aimed to assess the Saudi community's awareness regarding the coronavirus and identifying their Compliance to prevent transmission of the virus.

Methods

This study included a cross-sectional community-based design in Jazan Province, KSA, from March to September 2020. In brief, participants enrolled through a self-administered online questionnaire; the questionnaire was initially designed in the English language and then translated into Arabic to match the local language, which included Arabic terminology used by the general community considering variations among different areas**.** Eligibility criteria included residing in the Jazan region and being between 18 and 60 years of age. Moreover, it included self-assessment of knowledge attitudes and compliance regarding Covid-19. For this analysis, the sample was restricted to participants who completed a baseline survey who were eligible for inclusion in this analysis. Participants completed a self-administered questionnaire, eliciting information connected to socio-demographic characteristics, such as age, gender, marital status, educational level, nationality, occupation, residence, monthly income, medical history, and secondary questions that assessed their knowledge regarding the necessary information of disease, such as clinical presentation, incubatory period, causes, contiguity, and methods of transmission. Third, **attitude questions,** which required answers of "Strongly Agree," "Agree," "Disagree," or "Strongly Disagree regarding the obedience to infection prevention guidelines were answered. Finally, questions about **compliance and practice, which** contained statements that reflected to which extent the respondents comply with the preventive methods of COVID-19 transmissions, e.g., hand washing and shaking, use of alcoholic hand rub, covering the nose and mouth during sneezing or coughing, use of a face mask, throwing used tissues in the trash, health styles, and social distancing. A pilot study was performed on 10% of the study participants to test the tools' reliability and validity. The Cronbach alpha showed that the questionnaire reached acceptable reliability of $\alpha = 0.850$. The respondents included only 345 people. Regarding data management, the collected data were coded and entered SPSS (Statistical package for social sciences) version 26; the data were organized, tabulated, and analyzed using descriptive and inferential statistics. After the analysis, data were presented in tables and figures and expressed using frequencies, percentages, the chi-square test and a regression model. The statistical significance was set as p value of <0.05 with a 95% confidence interval.

The Standing Committee approved the study protocol according to scientific research ethics at Jazan University (HAPO-10-Z-001). Online consent was obtained from each participant who enrolled in this study.

Results

In total, 345 individuals participated, and the majority were female (85.8%). In total, 40% of the participants were of the age group from 18 to 24 years of age, and 60.9% had a bachelor's degree. Saudi nationality accounted for 61.2%. Most of the study participants (71.3%) were urban residents, and the study participant mean monthly income was 2.94 ± 0.973, and 32.5% of them were government employed. The responses of the study participants regarding COVID-19 knowledge are shown in (Table 1) with the total mean score of the questions regarding knowledge being 19.6406 ± 10.80. 98.3% of participants had heard of coronavirus disease and 91.3% and 98% were aware of the causes and the contagiousness of the disease, respectively; the major sources of their information were the MOH website (68.4%), social media and the internet (54.5%), and TV (53.0%).

In terms of prevention and protection against virus transmission, only 53.9% knew that hand washing can protect against virus transmission, and 54.5% knew that using a facemask protects against virus transmission, whereas 49.9% of the study participant were not aware of the protective methods against virus transmission.

The total mean score for positive attitude was 34.8638 ± 3.40255, and 333(96.5) of study participants had a positive attitude with only 12(3.5) of the study participants reflecting a negative attitude response.

The mean score for all items from the study participant's regarding COVID-19 was 32.73, 3.48, and the p value was 0.25. Then, 7.2% of the study participants always avoided hand shaking, whereas 84(24.3%) of them avoided it sometimes; additionally, 20(5.8%) of the study participants were willing to receive a vaccine if it is available.

Table: (1) Responses of participants to knowledge questions (n = 345)

Variable	YES		NO		I do not know	
Statement	N	%	N	%	N	%
Have you ever heard of coronavirus?	339	98.3	4	1.2	2	.6
The cause of coronavirus disease is the COVID-19 virus	315	91.3	14	4.1	16	4.6
Coronavirus is a highly contagious disease	338	98.0	2	.6	5	1.4
Do you know someone who is infected with coronavirus?	199	57.7	137	39.7	9	2.6
Is there a vaccine against coronavirus?	28	8.1	231	67.0	86	24.9
The incubation period for COVID-19 is between 2 and 14 days.	315	91.3	11	3.2	19	5.5
Infection with the virus may be more dangerous for the elderly and those who have chronic illnesses.	336	97.4	3	.9	6	1.7

Cont... **Table: (1) Responses of participants to knowledge questions (n = 345)**

The clinical presentation of COVID-19 includes:					
Fever	179	51.9	166	48.1	
Cough	159	46.1	186	53.9	
Sore throat	159	46.1	186	53.9	
Shortness of breath	181	52.5	164	47.5	
Diarrhea	91	26.4	254	73.6	
Abdominal pain	53	15.4	292	84.6	
Loss of smell	131	38.0	214	62.0	
Loss of taste	131	38.0	214	62.0	
Headache	140	40.6	205	59.4	
Chest pain	120	34.8	225	65.2	
Fatigue	94	27.2	251	72.8	
Could be asymptomatic	96	27.8	249	72.2	
All the above symptoms	188	54.5	157	45.5	
COVID-19 can be transmitted via:					
Coughing and sneezing	181	52.5	164	47.5	
Hand shaking	171	49.6	174	50.4	
Touching surfaces, such as door knobs	155	44.9	190	55.1	
Transmission is increased in crowded places.	71	20.6	274	79.4	
Can be transmitted from animals to humans	53	15.4	292	84.6	
All the above	204	59.1	141	40.9	
Protection and prevention against CORONA virus transmission:					

Cont... **Table: (1) Responses of participants to knowledge questions (n = 345)**

Hand washing protects against virus transmission.	186	53.9	159	46.1	
Using a face mask protects against virus transmission.	188	54.5	157	45.5	
Avoiding contact with infected individuals reduces risk of infection.	186	53.9	159	46.1	
Avoiding touching the nose, mouth and eyes reduces risk of infection.	183	53.0	162	47.0	
There is no evidence that self-quarantine can prevents the spread of coronavirus.	39	11.3	306	88.7	
Isolation and treatment of people who are infected reduce the spread of the virus.	161	46.7	184	53.3	
All the above	173	50.1	172	49.9	
Sources of information:					
TV	183	53.0	162	47.0	
Social media and internet	188	54.5	157	45.5	
Friends/neighbor	91	26.4	254	73.6	
MOH website	236	68.4	109	31.6	
Newspapers	82	23.8	263	76.2	
All the above	4	1.2	341	98.8	
Others	36	10.4	309	89.6	
Knowledge score: mean 19.6406 SD ±10.80555					

Table: (2) Responses of study participants to attitude questions (n = 345)

Statement	Strongly Agree	Agree	Not sure	Disagree	Strongly disagree.
	N %	N %	N %	N %	N %
Washing hand frequently can reduce the risk of COVID-19.	249(72.2)	81(23.5)	12(3.5)	0(0.0)	3(.9)
Face masks can prevent viral transmission.	198(57.4)	123(35.7)	18(5.2)	3(.9)	3(.9)
Travelling across the country is safe during this time.	18(5.2)	14(4.1)	49(14.2)	121(35.1)	143(41.4)
Individuals should avoid going to crowded places and avoid taking public transportation.	311(90.1)	9(8.4)	0(0.0)	2(.6)	3(.9)

Cont... **Table: (2) Responses of study participants to attitude questions (n = 345)**

If I get infected, I will go to a hospital as advised.	261(75.7)	47(13.6)	22(6.4)	6(1.7)	9(2.6)
Social distance is essential for reducing the spread of coronavirus.	319(92.5)	23(6.7)	0(0.0)	0(0.0)	3(.9)
The virus is not a stigma, and I should not hide my infection.	261(75.7)	53(15.4)	17(4.9)	7(2.0)	7(2.0)
I will quarantine/isolate myself if I show symptoms of the disease.	304(88.1)	29(8.4)	3(.9)	6(1.7)	3(.9)
Positive attitude	333(96.5)				
Negative attitude	12(3.5)				
Attitude scores mean 34.8638	SD ±3.40255				

Table: (3) Participant compliance with Covid-19 preventive measures (n = 345)

Statement	Always	Sometimes	Not at all	X2	p
	N %	N %	N %		
I avoid hand shaking	25 (7.2)	84 (24.3)	263(68.4)	206.104	.000
I wash my hands with water and soap regularly for enough time	4 (1.2)	86(24.9)	256(73.9)	284.887	.000
I use an alcoholic hand rub	13(3.8)	103(29.9)	299(66.4)	204.730	.000
I cover my nose and mouth during sneezing or coughing	6(1.7)	45(13.0)	294(85.2)	424.539	.000
I avoid touching my eyes, nose, or mouth as much as I can	13(3.8)	120(34.8)	212(61.4)	172.504	.000
I throw a used tissue in the trash	3(.9)	19(5.5)	323(93.6)	565.426	.000
I maintain healthy eating and health style	51(14.8)	143(41.4)	151(43.8)	53.704	.000
I usually put a face mask when outside	9(2.6)	40(11.6)	296(85.8)	431.496	.000
I stopped attending weddings and social gatherings	14(4.1)	24(7.0)	307(89.0)	481.270	.000
If there is an available lab test for detecting the virus, I am willing to take it	10(2.9)	15(4.3)	320(92.8)	548.261	.000
If there is an available vaccine for the virus, I am willing to get it	20(5.8)	24(7.0)	301(87.2)	451.322	.000
I usually follow the updates about the spread of the virus in my country	7(2.0)	75(21.7)	263(76.2)	305.809	.000
Practice score Mean	32.7304 SD 3.48499				

Table: (4) Comparison of socio-demographic parameters with knowledge attitude and practice score (n = 345)

Variable	N	%	Knowledge score			Attitude score			Practice score		
			Mean	SD	P	Mean	SD	p	Mean	SD	p
Gender											
Male	49	14.2	22.2041	8.68902	.000	13.0612	4.11505	.278	13.0000	3.42174	.295
Female	296	85.8	19.3630	11.07604		13.1781	3.28212		12.7945	2.95422	
Age											
18–24	138	40.0	13.0362	7.81484	.000	13.3696	2.57182	.002	13.4855	2.58077	.000
30–25	39	11.3	17.8462	11.45825		7.680	2.54832		12.8718	3.27815	
40–31	88	25.5	24.5341	9.32423		13.1250	3.41334		12.0114	2.67597	
Over 40 years old	80	23.2	27.4737	8.81888		12.8684	4.85618		12.5395	3.71462	
Marital status											
Single	150	43.5	13.1267	7.29466	.000	13.3800	2.62837	.000	13.2667	2.66890	.000
Married	185	53.6	24.6575	10.37110		12.7569	2.79017		12.3481	2.73970	
Divorced	4	1.2	27.5000	5.19615		12.5000	1.73205		11.5000	.57735	
Widowed	6	1.7	33.3333	1.03280		20.3333	15.24030		17.0000	10.07968	
Education level											
Elementary school	2	.6	27.0000	2.82843	.000	11.5000	.70711	.002	17.5000	.70711	.134
Secondary school	29	8.4	19.4828	10.27348		13.4828	2.89853		12.7931	2.49828	
Bachelor	210	60.9	15.3048	9.24015		13.1286	2.83479		12.9333	2.79188	
Postgraduate	104	30.1	29.0900	7.70294		13.1700	4.52168		12.5100	3.54337	
Nationality											
Saudi	211	61.2	14.3460	8.79441	.000	13.2891	2.93855	.010	13.0616	12.4385	.095
Non-Saudi	134	38.8	28.5769	7.43433		12.9538	4.05937		2.90664	3.17208	
Occupation											
Governmental employee	112	32.5	26.7768	9.14321	.000	13.2411	3.31593	.010	12.3304	2.90507	.000
Private sector	36	10.4	20.0294	9.16345		12.1176	2.10000		11.9118	2.26124	
Healthcare professionals	54	15.7	13.2407	8.88487		12.8519	1.73104		12.9259	2.40951	
Teacher	22	6.4	26.0500	9.70879		12.6000	1.72901		12.7500	2.24488	
Business owner	13	3.8	15.2308	6.67275		13.9231	2.25320		12.7692	1.73944	
Unemployed	108	31.3	15.0741	9.60014		13.5741	4.56562		13.5926	3.66605	
Residence											
Urban	246	71.3	22.1777	10.81442	.000	12.9669	2.90495	.004	12.4669	13.6970	.000
Rural	99	28.7	13.8889	8.23741		13.6364	4.38330		2.64829	3.65182	
Monthly income/SR											
Less than 1000	4	.6	7.0000	.00000	.009	19.0000	.00000	.003	16.0000	.00000	.030
1000–5000	148	42.9	18.8767	10.29824		12.8356	2.62620				
More than 10000	69	20.0	23.4058	10.66374		13.1159	3.66436		12.4521	2.33735	
I do not want to answer	111	32.2	19.3945	11.27273		13.6055	4.20101		12.3043	3.02103	
Other	13	3.8	16.0769	9.58698		12.3846	.96077		12.4615	2.63361	

Discussion

In December 2019, the outbreak of COVID-19 in the urban center of Wuhan, China and its rapid global spread have resulted in one of the largest pandemics in recent times with many devastating and important public health challenges[11]. Given the serious threats posed by COVID-19 and the lack of a COVID-19 vaccine, preventive measures are essential for reducing the incidence of infection and managing the spread of the disease. This suggests the need for public adherence to measures of prevention and control, which are influenced by their awareness, attitudes, and practices (KAP).

Limited published data on population knowledge, attitudes, and practices regarding COVID-19 are available to date, specifically in the Jazan area. Thus, the aim of this study was to estimate the general level of awareness, attitude, and practices towards the emerging COVID-19 disease in communities in Jazan.

To obtain data that could be used to guide the mapping of an awareness campaign and to assess whether the knowledge of people varied based on a specific feature of the target population, different socioeconomic characteristics of the population were analyzed.

Most respondents were female (85.8%), and 60.9% had a bachelor's degree with an overall COVID-19 knowledge of 50.1%, which demonstrated that respondents were moderately aware of the COVID-19 pandemic.

In line with our results, previous studies performed in various countries [12-14] and in Egypt [15] have revealed a high level of COVID- 19 knowledge among the population.

Nearly 4.1% of the participants did not know the etiology of the disease, which is considered to be the first step in patient education. When people know the cause, they will most likely understand how the disease is spread and what the prevention measures restricting its transmission are.

The obtained results indicate that most of the participants in the survey were familiar with COVID-19 and had an average degree of knowledge of the virus.

In the information questionnaire, participants achieved an average score of 19,6406. While 98.3% of the participants have heard of corona virus, only 53.9% and 54.5% know that hand washing and the use of face mask, respectively, will protect against virus transmission.

Most of the participants (68.4%) gained understanding and knowledge of the disease and its transmission from the MOH website, 54.5% – from social media and internet, and 53.0% – from television, which is consistent with other results reported by [17] social media represents the main tool for obtaining information on COVID-19 [18],[17].

In terms of knowledge of the clinical manifestation of the disease, participants had a moderate to low level of understanding of the signs and symptoms of COVID 19 (Figure 5) because their responses were: shortness of breath (52.5%), fever and sore throat (46.1%), fatigue (27%), and diarrhea (26.4%). Thus, intensive public knowledge is needed to prevent and monitor disease spread. This agrees with an Iranian study, which showed that a smaller proportion of the sample population (56.5%) had adequate knowledge of COVID-19 transmission and symptoms [19].

It is important to remember that many government initiatives were made at all levels, including public awareness campaigns which was initiated by the Saudi Arabian Ministry of Health (MOH) and communicated through its website, television, and different social media and COVID-19 guide for providing information and precautionary messages in more than 10 languages. These early steps in prevention and control initiatives, as well as attempts

to fight rumors and disinformation, were essential in raising knowledge and awareness in the community.

This study showed that the majority (96.5%) of participants in the study had a positive attitude towards overcoming the COVID-19 infection (i.e., a total mean score of 34.8638 + 3.40255), while only 3.5% of the participants had a negative attitude response. This result agrees with a China-based KAP study, which reported a high degree of positive attitudes among the participants [12]. These results also support assumptions in previous studies, which observed a correlation between higher awareness levels with higher trust and positive attitudes in health crises [20].

In practice, most study participants follow the measures for COVID-19 transmission prevention such as avoiding hand shaking, using alcohol hand rubbing, and stopping attending weddings and social gatherings. These results are like those in other studies [21], [22], which determined that approximately 90% of the respondents reacted positively when going outside the home. In another KAP study on COVID-19 conducted among the Malaysian population, 51.2% of the participants reported wearing a face mask when they went out in public [23]. This result shows the participants' general ability to make behavioral improvements in the context of the COVID-19 pandemic.

The total score regarding knowledge, attitude, and practice showed a significant relation with some demographic characteristics, such as age [young adults (18–24 years) have the highest score regarding knowledge, attitude, and practice p value (0.000)], marital status [married – p value (0.000)], and monthly income (0.30) [24], [25], and [26], while education level does not have a significant difference in the P value (0.134) in contrast to what has been stated in the literature because educated respondents are more knowledgeable about emerging communicable diseases [27] and [28].

These results also indicate that the intervention in health education will be more successful if it targets, e.g., the abovementioned population groups, specifically those with a low level of education. Finally, the results of this study indicated that health education activities aimed at enhancing awareness about COVID-19 are effective in promoting a positive outlook and ensuring healthy practices.

Conclusion

Since WHO declared on March 12, 2020 that the COVID-19 disease was a pandemic, raising awareness became essential in reducing COVID-19 transmission. While this study concluded that most of the research participants were highly aware of COVID-19 transmission and implemented most of the precautionary practices (e.g., avoiding hand shaking and using an alcohol hand rub), it identified areas of misconceptions and particular groups that should be targeted for COVID-19 education programs.

Recommendation

The obtained results clearly show the importance of improving community knowledge which may also result in improvements in attitudes and practices towards COVID-19.

To increase awareness and achieve adequate information, a comprehensive public health education program is necessary.

Limitations of the study

An opportunity for the participants to provide socially desirable responses. As they filled out the self-administered questionnaire, they may have answered attitude and practice questions positively, according to what they perceive to be expected of them.

The use of the convenience sample technique via social media resulted in the greatest likelihood of bias because the needed community may not have been able to contribute to the survey. Moreover, the sample of the study had an over-representation of 18–24-year-

old women; thus, a methodical inclusive sampling method is needed to obtain better representativeness and generalizability of the results.

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Pedagogical Framework Versus Traditional Method on Knowledge and Self-Efficacy of Nursing Students Regarding Neonatal Resuscitation: A Randomized Controlled Trial

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Abstract

Background: Since its inception, the Neonatal Resuscitation Program (NRP) has been in quest of evidence-based strategies that promises the best outcome specifically in developing regions. Hence, the present study aims to investigate the efficacy of pedagogical framework versus traditional method of education on knowledge and self-efficacy of nursing students regarding neonatal resuscitation.

Methods: A randomized controlled trial was conducted between November 2020 to March 2021. The 60 nursing students were randomly assigned to experimental and control groups taught through traditional method (Learn, Practice), and LSPPDM Pedagogical (Learn, see, practice, prove, do, maintain) steps respectively. Students were assessed at the baseline and after the intervention using validated questionnaires. Masking of data assessment was provided by assigning a code to each student. ClinicalTrials.gov registration number (NCT04748341).

Results: Both knowledge and self-efficacy had been significantly improved ($p < 0.001$) after the intervention. However, the posttest mean change in knowledge scores was significantly higher ($p < 0.001$) in the experimental group (13.3±1.30) as compared to the control (9.97±1.22) with an insignificant difference ($p = 0.655$) in mean self-efficacy level.

Conclusion: Both methods are effective in improving knowledge and self-efficacy. Yet, education through integrating diverse strategies under the umbrella of LSPPDM pedagogy is a more effective approach in enhancing knowledge regarding neonatal resuscitation.

Keywords: *Neonatal resuscitation, Nursing, students, knowledge, self-efficacy.*

Background

Globally, 2.9 million neonatal deaths occur annually [1], and one-quarter of these ensue due to asphyxia [2]. The large majority of these deaths are reported in developing countries [3] and indicated as 10 times more in number than the developed regions [4]. Pakistan is one of the top ten countries that carry two-thirds of the global burden of neonatal deaths [5]. The neonatal mortality rate in Pakistan is reported as 46/1000 live births [6]. It is suggested that 30% of these deaths can be prevented through trained emergency birth attendants'[1]. Nevertheless, the majority of health

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professionals including both doctors and nurses possess inadequate knowledge and need additional support [1].

Since nurses are the largest workforce in the healthcare system that are directly engaged in the provision of newborn care. Therefore, they should be conversant and competent in neonatal resuscitation. However, the majority of them are not skillful in the respective field [7]. The situation is consistent with nursing students, our future workforce, often is unprepared and lacking confidence in simple, yet life-saving skills such as resuscitation [8,9]. The knowledge regarding neonatal resuscitation was assessed by Malarvizhi, Glory [10] among 85 nursing students in Coimbatore and found that 52% of them had insufficient knowledge and 48% had nearly adequate knowledge. While no student had enough information on neonatal resuscitation. Thus, expressing a dire need of developing effective educational strategies in the field of resuscitation.

In Pakistan the education of nursing students is mostly based on the traditional methods that are lacking the component of adequate learning and training in neonatal resuscitation [11,12], resulting in an insufficient knowledge among many trainees on assessment [12]. Though, in recent decades the neonatal resuscitation program (NRP) has been adapted both in developing and developed countries. Yet, still in quest of evidence-based strategies to disseminate NRP knowledge, training, and guidelines to health providers that promise the best outcome specifically in developing regions [13].

The "Learn, See, Practice, Prove, Do, and Maintain" (LSPPDM) pedagogy is one of such frameworks synthesized after intensely reviewing the literature and acting as a guiding path for educators [14]. It is based on adult learning theory that can support the acquisition of knowledge [15] leading to increase self-efficacy in the area of neonatal resuscitation. The framework is based on six phases of the "Learn, See, Practice, Prove, Do, and Maintain" [14]. Hence, efficient in learning and retaining all the steps of skill.

As Knowledge is considering a prerequisite for competence in skill performance and to evaluate the effectiveness of an educational program self -efficacy measurement is an important tool [16]. Thus, the imperative variables knowledge, and self-efficacy, have been selected for this study. Moreover, to the best of our knowledge, this is the first study to determine the effectiveness of diverse strategies under the umbrella of LSPPDM pedagogy in the education of neonatal resuscitation and evaluating the outcomes concerning knowledge, and self-efficacy among nursing students.

Objectives

The study objective was:

To compare the knowledge and self-efficacy among undergraduate nursing students learning of neonatal resuscitation through "Learn, See, Practice, Prove, Do, Maintain pedagogy" as compared to those who had learned through the traditional method.

Methods

Design and Setting

The study was a randomized control trial following the PICO (Population, Intervention, Comparator, Outcome) framework and was formerly registered at ClinicalTrials.gov (NCT04748341). The study was conducted between November 2020 and March 2021 in the College of Nursing, Allama Iqbal Medical College, Lahore Pakistan.

Sample and Sampling Technique

The sample size was calculated using the *OpenEpi* software [17] and the minimum sample size was 24 participants, having an 80% power at $\alpha = 0.05$. After adding a 20% dropout rate the final sample size was 36 and this sample size was exceeded to 72 (36 in each group). First, the list of all students enrolled in 3rd and 4th professional was established and participants

were selected through simple random sampling. The nursing students were included in the study that (a) were currently enrolled in the Bachelor of Science in Nursing (4 years) 3rd and 4th year (b) were willing to attend the education and (c) had an age of 18-25 years. The nursing students were excluded from the study that had already received any education on neonatal resuscitation and was on leave at the time of intervention.

Randomization and Allocation

Initially, 62 students were randomly assigned to experimental and control groups through the lottery method [18]. The envelop method was used to conceal the allocation. The students from each professional were equally divided into both groups. The two students were dropped in the follow-up and the final sample size remained 60 students.

Educational Intervention:

Six weeks of educational intervention was given to both groups. The lectures were prepared from the Textbook of Neonatal Resuscitation 7th edition of the American Association of Pediatrics and were the same for both groups [19]. The experimental group was learned through the six steps of LSPPDM pedagogy. The control group was taught through the 2-steps traditional method. The comparison of intervention between both groups is given in table 1.

Table1. Comparison of the intervention among two Groups.

Steps	LSPPDM PEDAGOGY (Experimental group)	Steps	Traditional Method (Control group)
1. Learn through didactic lectures (2 lectures/week). 2. See-through video on an infant resuscitation 3. Practice skill on the Low fidelity neonatal Simulator under instructor (1 skill session/week) 4. Prove skill through evaluation checklist 5. In the Do phase, students will observe neonatal resuscitation during clinical rotation. 6. Maintain skills on a simulator for self-directed learning (1 skill session/week).		1. Learn through didactic Lectures (2 lectures/week). 2. Practice skills on the Mannequins under instructor (1 skill session/week)	

Data Collection Procedure:

Data on knowledge and self-efficacy will be collected before and after the intervention. Masking of data assessment was provided by assigning a code to each student. Permission was taken from the primary tool developers. The following tools were used for data collection.

1. Demographic Data Tool

The demographic form contains information regarding age, level of education, marital status, previous result, previous resuscitation exposure.

2. Knowledge Tool

Knowledge was tested through 17 items multiple-choice questions adopted from the Knowledge Questionnaire [20]. The total score ranged from 0 to 17.

Each of the correct answers was score 1 and 0 for the wrong answer.

3. Self-efficacy Tool

Self-efficacy for Neonatal Resuscitation (SENR): The SENR instrument is a 23-item scale valued on a 10-point Likert scale. The SENR established good internal consistency with a Cronbach alpha value of 0.93 was reported [4]. The final score will be calculated by averaging the items from the subscales and thereafter averaging all 24 items for the total SENR score.

Data Analysis

The data were analyzed by using SPSS 25. Mean and SD was given for age, knowledge score, and self-efficacy score. Frequency and percentage were given for education, marital status, previous result, and previous resuscitation exposure. An independent sample t-test was used to compare the mean age, knowledge score, and self-efficacy score between both groups. The paired t-test was used to compare the pre- and post-education knowledge and self-efficacy score in both groups. A P value of ≤ 0.05 was measured as significant.

Results

Sixty-two nursing students were enrolled in the study and randomly assign to an experimental and control group. Two students were lost in follow up and the final analysis included sixty participants. The mean age in the experimental and control group was group 21.9±1.1 and 22.3±0.75 respectively. In the experimental group, 100.0% of participants were unmarried in contrast to the control group 96.7% were unmarried. In the control group, 93.3% of participants had 1st division whereas all participants in the experimental group had 1st division in previous professional. Previous neonatal resuscitation exposure among the experimental and control group was 10.0% and 16.7% respectively.

An independent sample t-test was used to compare the mean change in knowledge and self-efficacy scores between both groups. Results indicated that the mean change in knowledge scores was significantly higher ($p < 0.001$) in the experimental group as compared to the control. However, the mean self-efficacy level was almost the same among both groups. (Table 2)

Table 2: Showing The comparison of mean knowledge, and self-efficacy score between both groups

Variables	Group	Pre M±SD	p-value	Post M±SD	p-value	Difference M±SD	p-value
Knowledge score	Exp.	5.87 ± 1.83	0.946	13.3 ± 1.30	< 0.001	7.47 ± 2.03	< 0.001
	Cont.	5.90 ± 1.95		9.97 ± 1.22		4.07 ± 2.26	
Self-efficacy score	Exp.	95.9 ± 37.6	0.983	188.6 ± 24.2	0.759	92.6 ± 20.7	0.655
	Cont.	96.1 ± 35.5		186.6 ± 25.3		90.7 ± 16.5	

The Chi-square test was to compare the proportion of correct answers between both groups. Results indicated that the proportion of correct answers of statements number 2, 4, 5, 11, and 15 were significantly higher in the experimental group as compared to control while no significant difference was observed in the remaining statements. (Table 3)

Table 3: Comparison of correct answer rate between both groups

S. No	Statements	Exp. n (%)	Cont. n (%)	p-value
1.	In uncompromised neonates who do not require resuscitation after birth, when should the umbilical cord be clamped?	0 (0.0%)	5 (16.7%)	0.052
2.	Which room temperature is recommended for support of transition or resuscitation of neonates after birth?	23 (76.6%)	4 (13.3%)	< 0.001*
3.	Which three parameters should be simultaneously assessed during the initial neonatal assessment?	23 (76.6%)	18 (60.0%)	0.165
4.	What do neonates who breathe inadequately or present apneic, with normal or reduced (muscle) tone, and a heart rate of fewer than 100 min−1 require frequently?	23 (76.6%)	10 (33.3%)	0.002*
5.	Which interventions are first needed in gasping or apneic neonates?	28 (93.3%)	10 (33.3%)	< 0.001*
6.	In which situation should the oropharynx be suctioned?	28 (93.3%)	28 (93.3%)	> 0.999
7.	How should the first five positive pressure inflations be delivered?	16 (53.3%)	22 (73.3%)	0.108
8.	Which intervention is required if the chest is not rising during positive pressure ventilation?	30 (100%)	27 (90.0%)	0.237
9.	Which initial inspiratory oxygen concentration should be used in term infants?	27 (90.0%)	29 (96.7%)	0.612
10.	At which time point should an oxygen saturation of 90% be reached?	17 (56.7%)	12 (40.0%)	0.196
11.	What has to be ensured before circulatory support may be effective?	16 (53.3%)	4 (13.3%)	0.001*
12.	In which situation should chest compressions be delivered?	30 (100%)	29 (96.7%)	> 0.999
13.	Which compression-to-ventilation ratio is recommended for the resuscitation of a neonate after birth?	26 (86.7%)	20 (66.7%)	0.067
14.	At which frequency should chest compressions be delivered during resuscitation of a neonate after birth?	23 (76.6%)	19 (63.3%)	0.260
15.	Which compression depth and technique are recommended for delivery of chest compressions during resuscitation of a neonate after birth?	26 (86.7%)	4 (13.3%)	< 0.001*
16.	How often should the heart rate be re-checked during the delivery of ventilation and chest compressions?	19 (63.3%)	17 (56.7%)	0.598
17.	In which situation should the use of drugs be considered during resuscitation of a neonate after birth?	26 (86.7%)	26 (86.7%)	> 0.999

*Significant

An independent sample t-test was used to compare the mean self-efficacy score of each item between both groups. Results indicated that there was no significant difference in the mean score of each item of the self-efficacy scale between both groups. (Table 4)

Table 4: Comparison of self-efficacy score between both groups

S. No	Neonatal Resuscitation Actions	Exp. Mean ± SD	Cont. Mean ± SD	p-value
1.	Prepare area for delivery	7.4 ± 2.0	7.5 ± 1.9	0.947
2.	Prepare equipment for newborn resuscitation	8.5 ± 1.6	8.1 ± 1.8	0.419
3.	Prepare environment to keep baby warm	8.2 ± 2.1	8.9 ± 1.3	0.156
4.	Prepare solution for decontamination of materials	8.2 ± 1.3	8.0 ± 1.5	0.469
5.	Identify a helper and make an emergency plan	8.5 ± 1.3	7.8 ± 1.8	0.075
6.	Put the baby on the mother's abdomen	8.8 ± 1.2	8.8 ± 1.2	> 0.999
7.	Evaluate the amniotic fluid	7.7 ± 1.6	7.1 ± 2.5	0.265
8.	Keeping baby clean.	9.0 ± 1.4	8.9 ± 1.3	0.774
9.	Dry the baby thoroughly and provide initial steps to stimulate the baby	8.9 ± 1.1	8.9 ± 1.2	> 0.999
10.	Identify the need of helping the baby breathe.	8.4 ± 1.5	8.3 ± 1.7	0.875
11.	Evaluate: Cry, color, breath, and movement	8.7 ± 1.4	8.9 ± 1.2	0.695
12.	Time of cutting the umbilical cord.	8.3 ± 1.8	7.8 ± 1.7	0.248
13.	Able to identify the size of cutting the umbilical cord.	7.7 ± 2.1	7.5 ± 2.1	0.758
14.	Able to use chlorhexidine di-gluconate 7.1% routinely but 4% of chlorhexidine gel for care for home delivery.	7.2 ± 2.1	6.4 ± 2.0	0.162
15.	Action to take with a baby who is quiet, limp, and not breathing at birth.	7.6 ± 2.0	7.7 ± 1.4	0.819
16.	Action to take with a baby who is quiet, limp, and not crying, and does not respond to the step of stimulating breathing.	7.7 ± 2.0	7.8 ± 1.6	0.828
17.	Situation to which a baby should be suctioned.	7.9 ± 2.0	8.1 ± 1.6	0.726
18.	Ventilation with bag and mask.	8.6 ± 1.3	8.6 ± 1.3	> 0.999
19.	Action to take if a baby's chest is not moving with bag and mask ventilation	8.2 ± 2.3	8.1 ± 2.2	0.864
20.	The time when you need to stop ventilation.	8.2 ± 1.8	8.2 ± 1.9	0.944
21.	The normal range of the baby's heart rate.	8.7 ± 1.8	9.2 ± 1.0	0.189
22.	Action to take for a baby who received ventilation.	8.3 ± 1.9	8.1 ± 2.0	0.736
23.	Time of disinfecting bag and mask and suction device used.	7.8 ± 1.8	8.0 ± 1.5	0.758

Discussion

Since many factors including theory, clinical rotation, practice, and personal experience have influenced nursing student's knowledge and self-efficacy in real-life exposure to emergency pediatrics. Yet, the addition of innovative, evidence-based teaching strategies is crucial to optimize learning outcomes[17]. Therefore, the current study aims to compare the effectiveness of diverse strategies under LSSPDM pedagogy on knowledge, and self-efficacy of nursing students regarding neonatal resuscitation in a resource-limited setting.

The present study revealed that the students learned neonatal resuscitation following diverse strategies under LSPPDM pedagogy achieved significantly higher score ($p < 0.001$) on knowledge in contrast to traditional group. Though, no empirical study has reported this pedagogy to neonatal resuscitation, yet, Sall, Wigger [21] employed this framework in the education of paracentesis and ultrasound training among residents. The study reported an increase in the average score of knowledge for ultrasound 76.1% and 75.3% for paracentesis with an increase in confidence after education. These results support our results that LSPPDM pedagogy is effective in improving knowledge and self-efficacy in neonatal resuscitation after integrating diverse strategies.

Moreover, the results were in the same line with another study conducted by Tawalbeh and Tubaishat [22] in Jordan. The 100 nursing students were randomly assigned to the intervention and control group were taught through simulation scenario-based education and traditional method respectively. The study revealed that overall, both groups knowledge score was significantly improved. Yet, the scenario-based simulation group score was significantly higher ($p <0.001$) as compared to the traditional group. Furthermore, the study results were aligned with the study by Saeidi and Gholami [23] among 80 nursing students in Iran. The study finds that the simulation-based group achieved a significantly higher ($P<0.001$) score on knowledge as compare to the traditional group.

Contrary to this study, a previous study conducted by Kim and Ahn [17] found no significant difference in knowledge among nursing students taught through the 5-step method versus the traditional method. Overall, the knowledge significantly increased post-intervention with an insignificant difference ($p= .108$) in the experimental and control groups. This discrepancy in results from our study was most likely due to differences in study design, and non-randomized allocation of participants in the intervention and control group. Particularly, the masking of assessment was not done. The significant effects of 6-step LSPPDM pedagogy in our study were attributed to many factors. The main difference was the integration of diverse educational strategies including didactic lectures, videos, practice under an instructor, observing skills through clinical, and further, maintain it through self-directed practice.

Further, a significant difference was found in individual knowledge questions. While a significant difference was observed in two questions related to room temperature maintenance. The correct answer proportion of the experimental group was significantly higher as compared to the control. Literature showed that Hypothermia in newborns is highly prevalent worldwide especially in developing countries leading to hypoxia and respiratory distress syndrome that require resuscitation [24]. Therefore, adequate knowledge on room temperature could prevent it and indirectly reduced neonatal morbidity and mortality. Further, a significant difference ($p < 0.001$) was found in the initial management of a gasping newborn. In which experimental group correct answer proportion was 28 (93.3%), while in control it was only 10 (33.3%). it is evident in research that initial management within the first 30 minutes significantly improves the survival rate [25] while delaying response progress to mortality and lifelong disabilities [3].

Furthermore, a significant difference ($p < 0.001$) was observed on knowledge level at accurate rate and depth of chest compression, an important predictor of successful resuscitation. There is evidence that accurate knowledge on the rate and depth of chest compression improves heart perfusion and reducing the recovery time [26]. While, a study conducted by Vural, Koşar [27] in India showed that 89% of nursing students had poor knowledge regarding ratio, while 84% had inadequate knowledge regarding the depth of chest compressions. Hence, our study contributed essentially to improving knowledge regarding the depth and rate of chest compression.

Self-efficacy is an important predictor of one's successful learning and improve educational outcome [28]. Overall, both the experimental and control group showed significant improvement in self-efficacy after the intervention. Yet, an insignificant difference ($p= 0.655$) was found between groups after intervention. The findings are in align with the previous study conducted by Moon and Hyun [29] in South Korea. The 120 nursing students randomly assigned to intervention and control group learned through blended learning and traditional lecture method respectively. Overall, self-efficacy was improved after the intervention. Nonetheless, the study reported an insignificant difference ($p= .066$) in self-efficacy in the intervention and control groups. Although, the mean difference in self-efficacy is similar among both. Yet, we anticipated that adult learning is best possible in a more flexible and active approach for maximizing learning outcomes [30]. Therefore, we believe that education through LSPPDM pedagogy integrating with diverse strategies is a more effective approach in enhancing knowledge and self-efficacy regarding neonatal resuscitation in resource-limited settings.

Strengths and Limitations

To our knowledge, this was the first experimental study to test the diverse strategies under the LSPPDM framework in the education of neonatal resuscitation among nursing students. The study may have a direct implication for nursing education in determining the effectiveness of a pedagogical framework in the teaching and learning of neonatal resuscitation skills, especially in a resource-limited society. The most significant limitation in this study was recruiting only female nursing students at a single institute. This may affect its generalizability to other settings with a diverse population. Moreover, the posttest assessment of knowledge and self-efficacy was done soon after the intervention. Thus, preclude the retention effect of the intervention over time.

Conclusion

The current study adds a growing body of evidence that neonatal resuscitation education through LSPPDM pedagogy integrating with diverse strategies positively affects students' knowledge and self-efficacy. Nursing students achieved higher knowledge and expressed greater self-efficacy in neonatal resuscitation after the intervention. The study provides a groundwork for future trials to investigate the retaining effect with a more diverse population is warranted.

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Ethical Clearance- Ethical approval was taken from the institutional review board of the University of Lahore (IRB-UOL-FAHS/775/2020). The written informed consent was taken from the students before the start of the study.

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Conflict of Interest - Nil

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Nurses' Knowledge and Attitudes towards Palliative Care: A Study in a Western Province in Indonesia

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Abstract

Background: The delay in the development of palliative care in Indonesia is also related to the dearth of studies related to palliative care in Indonesia, including the study of nurses' knowledge and attitudes towards palliative care. Efforts are needed to explore the knowledge and attitudes of nurses about palliative care. This research was aimed to identify the determinants of related factors to knowledge and attitudes of nurses towards palliative care.

Methods: A quantitative research with cross sectional study design was used for research. Data was collected by using several well-reported questionnaires, namely the the Palliative Care Quiz for Nurses (PCQN) questionnaire to assess level of knowledge, and the Frommelt Attitudes Toward Care of the Dying Scale (FATCOD) Form-B questionnaire to analyze nurses' attitudes. With the Systematic Random Sampling, 256 nurses participated in this online survey. The respondent's response rate which was 94.9%.

Conclusions: This research showed that there was no significant relationship between knowledge and nurses' attitudes about palliative care. However, there was a significant relationship between age, and training of palliative with nurses' knowledge of palliative care. Level of education, and nurses 'employment status with nurses' attitudes about palliative care also showed a significant relationship. Further analysis revealed that level of education was the only predictor which related to nurses' attitudes about palliative care.

Keywords: *knowledge, attitude, palliative, PCQN, FATCOD*

Introduction

Palliative care is an approach taken to prevent and reduce the suffering of adult patients, children and families in dealing with problems related to life-threatening diseases[24]. Palliative care was originally derived from caring for cancer patients in hospitals [6]. Hospital care with a palliative approach was introduced in the US in the late 1970s at the Hospice of Connecticut[4]. Until now, the philosophy and practice of palliative care has spread and developed in 136 countries out of 234 countries worldwide[5].

The World Health Organization (WHO) (2014) states that worldwide, more than 20 million people are estimated to need palliative services at the end of life every year. Lifestyle was identified as the most significant cause of palliative cases[23]. Hannon et al (2015) stated that there were many palliative cases that were under-served and even in 42% of countries there was no access at all to palliative care services[11]. Knaul

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et al (2018) stated that gaps in palliative services, especially pain management, are very visible between developed and developing countries[13].

Putranto's research (2017) found that the efficiency of cancer treatment costs in hospitals can be done with palliative care interventions[16]. DesRosiers et al (2014) found an indication that palliative care is more effective in the form of home care in more advanced palliative cases.[11]. The evidence base is used as a basis for thinking that palliative care continues to grow rapidly abroad, however in Indonesia the development of palliative programs seems relatively slow.

Minimum implementation of palliative services in Indonesia is also related to the knowledge and skills of health workers that have not been properly managed[8]. Such delay and slow progressive of the development of palliative services in Indonesia is also related to the dearth of studies related to palliative care[17]. In cognizant of such gap, this research was, therefore, initiated to explore knowledge and attitudes of nurses towards palliative care in Indonesia.

Materials and Methods

This research is a type of quantitative research with a cross sectional study design. The total population is 696 nurses, who are involved in providing palliative care to patients in the hospital. Sampling in this study was conducted using systematic random sampling technique. The number of samples was determined using the Isaac and Michael method[18]. The number of respondents involved in the study was 230 respondents. Based on the results of the sample calculation coupled with the possibility of a drop out of 10 percent, the number of samples is 256 respondents.

$$s = \frac{\lambda^2.N.P.Q}{d^2.(N-1) + \lambda^2.P.Q}$$

$$N' = \frac{n}{1 - f}$$

Data collection was carried out using a questionnaire which consisted of 3 parts. The first part is demographic variables including age, gender, religion, latest education, employment status, years of service, and training of palliative. The second part is the collection of data on knowledge variables which is carried out using the PCQN questionnaire which contains 20 statements to respond with choices of right, wrong, and don't know[10].

The third part is the collection of data on attitude variables using the FATCOD Form B questionnaire which consists of 30 items. This instrument consists of positive statements and negative statements arranged on a 5-point Likert scale[1].

Result

Of the 256 questionnaires circulated online in the form of google forms, 243 have been completed. All distributed questionnaires were filled in with a response rate of 94.9%. The frequency distribution of nurse demographic data is attached in table 1.

Table 1. Frequency distribution of the demographic data of nurses at the Referral General Hospital of Aceh Province (n=243).

Variable	Category	Frequency	Percent
Age	< 30 Years	83	34,2
	≥ 30 Years	160	65,8
Sex	Men	36	14,8
	Female	207	85,2
Religion	Islam	242	99,6
	Christian	1	0,4
Training of Palliative	Ever	39	16,0
	Never	204	84,0
Level of Education	Vocational (Diploma)	140	57,6
	Profession (Bachelor)	103	42,4
Employment Status	State Civil Apparatus	92	37,9
	Contract	151	62,1
Years of Service	< 10 Years	193	79,4
	≥ 10 Years	50	20,6

The frequency of distribution of nurses' knowledge and attitudes towards palliative care is shown in table 2.

Table 2. Distribution of Knowledge Frequency and Attitudes towards Palliative Care at the Referral General Hospital of Aceh Province (n = 243).

Variable	Category	Frequency	Percent
Knowledge	High	123	50,6
	Low	120	49,4
Attitude	Positive	124	51,0
	Negative	119	49,0

The data shows that most of the nurses' knowledge is in the high category, and the majority of nurses have a positive attitude towards palliative care.

The relationship between knowledge and attitudes of nurses about palliative care can be seen in table 3.

Table 3. Relationship of Knowledge and Attitudes of Nurses to Palliative Care at the Referral General Hospital of Aceh Province (n = 243).

Knowledge	Attitude				Total		α	P Value
	Positive		Negative					
	f	%	f	%	f	%		
High	67	54,5	56	45,5	123	100	0,05	0,277
Low	57	47,5	63	52,5	120	100		
Total	124	51,0	119	49,0	243	100		

Based on the results of the study, it was found that the P value = 0.277 (> 0.05), so it could be concluded that there was no relationship between knowledge and attitudes of nurses in palliative care.

The relationship between the demographic characteristics of respondents to the knowledge of nurses about palliative care can be seen in table 4.

Table 4. Relationship of Demographic Characteristics to Knowledge and Attitudes of Nurses at the Referral General Hospital of Aceh Province.

Variable	Knowledge							Attitude						
Age	High		Low		Total		P Value (α 0,05)	Positive		Negative		Total		P Value (α 0,05)
	f	%	f	%	f	%		f	%	f	%	f	%	
< 30 Years	33	39,8	50	60,2	83	100	0,015	36	43,4	47	56,6	83	100	0,086
≥ 30 Years	90	56,3	70	43,8	160	100		88	55	72	45	160	100	
Sex	High		Low		Total			Positive		Negative		Total		
	f	%	f	%	f	%		f	%	f	%	f	%	
Men	15	41,7	21	58,3	36	100	0,244	19	52,8	17	47,2	36	100	0,820
Female	108	52,2	99	47,8	207	100		105	50,7	102	49,3	207	100	
Level of Education	High		Low		Total			Positive		Negative		Total		
	f	%	f	%	f	%		f	%	f	%	f	%	
Vocational (Diploma)	78	55,7	62	44,3	140	100	0,064	63	45	77	55	140	100	0,028
Profession (Bachelor)	45	43,7	58	56,3	103	100		61	59,2	42	40,8	103	100	
Employment Status	High		Low		Total			Positive		Negative		Total		
	f	%	f	%	f	%		f	%	f	%	f	%	
State Civil Apparatus	51	55,4	41	44,6	92	100	0,241	55	59,8	37	40,2	92	100	0,033
Contract	72	47,7	79	52,3	151	100		69	45,7	82	54,3	151	100	

Cont... **Table 4. Relationship of Demographic Characteristics to Knowledge and Attitudes of Nurses at the Referral General Hospital of Aceh Province.**

Years of Service	High		Low		Total			Positive		Negative		Total		
	f	%	f	%	f	%	0,826	f	%	f	%	f	%	0,430
< 10 Years	97	50,3	96	49,7	193	100		96	49,7	97	50,3	193	100	
≥ 10 Years	26	52	24	48	50	100		28	56	22	44	50	100	
Training of Palliative	High		Low		Total			Positive		Negative		Total		
	f	%	f	%	f	%	0,011	f	%	f	%	f	%	0,463
Ever	27	69,2	12	30,8	39	100		22	56,4	17	43,6	39	100	
Never	96	47,1	108	52,9	204	100		102	50	102	50	204	100	

The results showed that there was a relationship between age and palliative training on nurses' knowledge of palliative care. The results also showed that there was a relationship between education and employment status on nurses' attitudes about palliative care.

The most dominant factor related to the knowledge and attitudes of nurses in palliative care can be seen in table 5.

Table 5. Relationship between age, gender, education level, employment status, years of service, and training with the knowledge and attitudes of nurses in palliative care at the Referral General Hospital of Aceh Province.

Variable Predictor	**Knowledge**					**Attitude**				
	B	**OR**	**P-value**	**95% CI**		**B**	**OR**	**P-value**	**95% CI**	
				Lower	**Upper**				**Lower**	**Upper**
Intercept	14,12	-	.	-	-	-15,924	-	.	-	-
Age	-0,675	0,509	0,028	0,278	0,933	0,540	0,583	0,74	0,321	1.057
Sex	-0,740	0,477	0,060	0,218	1,042	0,182	1,2	0,637	0.563	2.558
Level of Education	0,685	1,984	0,014	1,142	3,448	0,564	0,569	0,039	0,332	0,975
Employment Status	0,545	1,725	0,066	0,959	3,105	0,544	1,7	0,061	0,972	3,051
Years of Sevice	0,536	1,709	0,155	0,814	3,587	0,176	1,1	0,226	0,576	2,470
Training of Palliative	1,050	2,859	0,006	1,305	6,263	0,172	1,1	0,215	0,574	2,457

Based on the results of the analysis above, it can be seen that the training variable with a P value of 0.006 (<0.05) is the most dominant variable related to nurses' knowledge in palliative care. The results of the analysis also shows that only predictors of education level are related to attitudes.

Discussion

The results showed that the majority of nurses' knowledge level in palliative care was still in the high category, but the number of nurses who had palliative knowledge in the low category was still very significant (49.4%). These results are supported by research by Ayed (2015) which found that there are still many nurses who lack knowledge of palliative care [3].

Based on the research results, it is known that the majority of nurses have a positive attitude in palliative care. Fitri (2017) also states that more than half of the research respondents have a good attitude in terms of palliative care[9]. Researchers assess that the high number of nurses who have positive attitudes about palliative care may be influenced by cultural backgrounds and the application of Islamic nuanced services in the hospital.

Based on the results of the analysis, it was found that the value of P value = 0.277 (> 0.05), so it can be concluded that there is no relationship between knowledge and attitudes of nurses in palliative care. However, Ilham (2019) found a relationship between knowledge and attitudes of nurses about palliative care[12]. Effendy (2015) further explains that one of the reasons for the not optimal palliative services in Indonesia is related to the problem of knowledge, skills and attitudes of health workers[8]. The difference between the researchers' findings and the results of previous studies is likely due to other factors that influence attitudes, such as level of education.

The result of the analysis shows that the value of P value = 0.015 (<0.05), so it can be concluded that there is a relationship between age and knowledge of nurses in palliative care. Researchers consider that the more mature a person is, the more his knowledge will be. Widowati (2019) also states that there is a relationship between age and nurses' knowledge of palliative care[21].

Based on the results of the analysis, it shows the value of P value = 0.244 (> 0.05), so it can be concluded that there is no relationship between gender and knowledge of nurses in palliative care. Siagian (2020) also found that there was no relationship between gender and nurses' knowledge of palliative care[19].

The results of the analysis show that the P value = 0.064 (> 0.05), so it can be concluded that there is no relationship between the level of education and knowledge of nurses in palliative care. However, Ayed (2015) found a relationship between education and knowledge of nurses in palliative care[3]. According to researchers, this difference can occur because palliative knowledge can not only be found through formal education. But palliative education can also be improved by nurses by deepening literacy about palliative through journals, books and other readings about palliative care.

Based on the results of the analysis, it was found that the P value = 0.241 (> 0.05), so it can be concluded that there is no relationship between the employment status of nurses and the knowledge of nurses in palliative care. Researchers consider that the nursing status of the nurses is not an obstacle to obtaining better knowledge. Nurses who are motivated to continue learning and want to improve are likely to have better knowledge. Wulandari (2012) also states that the level of knowledge is influenced by various other factors such as experience, culture and environment[22]. Notoadmodjo (2014) suggests that a person's knowledge will be influenced by various factors including age, experience, education, work, information, environment, and socio-culture[15].

The results of data analysis showed the value of P value = 0.826 (> 0.05), so it can be concluded that there is no relationship between tenure and knowledge of nurses in palliative care. These results are different from previous research, for example research by Ayed (2015) which found that tenure greatly influenced nurses' knowledge of palliative care.[3].

Based on the results of the analysis, it was found that the P value = 0.011 (<0.05), so it can be concluded that there is a relationship between palliative training and nurses' knowledge in palliative care. These results are reinforced by research by Ayed (2015) in Palestine which found a significant relationship between training of palliative care and nurses' knowledge of palliative care[3]. Researchers assess the research findings as a phenomenon that emphasizes the importance of training to increase nurses' knowledge of palliative care. With education and training according to predetermined standards, palliative care can be provided in a more optimal and quality manner.

The results of the analysis showed the value of P value = 0.086 (> 0.05), so that the researchers concluded that there was no relationship between age and nurses' attitudes about palliative care. These results are different from previous research, for example by Maghfirah (2017) which found a relationship between age and the measure of an individual's attitude[14]. The researcher assessed that the difference in these results was likely due to other factors that were more dominant in relation to the respondent's attitude in this study, these factors included the education variables and the nurse's employment status.

The results of the analysis show that the P value = 0.820 (> 0.05), so it can be concluded that there is no relationship between gender and nurses' attitudes in palliative care. These results are reinforced by research by Siagian (2020) which states that there is no relationship between gender and nurses' attitudes in palliative care[19].

The results of the analysis also showed a P value = 0.028 (<0.05), so that the researcher concluded that there was a significant relationship between the level of education and the attitudes of nurses in palliative care. Researchers assess that the higher the education of a nurse, the better the nurse's attitude in caring for palliative patients. Furthermore, Notoadmodjo (2014) states that one of the factors that can affect a person's attitude is the factor of education[15].

The results of the analysis show the value of P value = 0.033 (<0.05), so it can be concluded that there is a relationship between nurses 'employment status and nurses' attitudes in palliative care. Agustine (2016) explains that the need to show achievement will encourage someone to overcome challenges in carrying out tasks to achieve the goals set[2]. Researchers assess that there are internal factors such as a contract nurse to give more than expected, which is one of the causes emotionally so that nurses have a positive attitude in working as a palliative nurse. Other internal factors that are contributing to nurses include their previous personal experiences as nurses when working in other agencies, and the possibility of making nurses more comfortable working at referral public hospitals in the Aceh province.

Based on the results of the analysis, it was found that the P value = 0.430 (> 0.05), so that the researcher could conclude that there was no relationship between nurses 'tenure and nurses' attitudes in palliative care. These results are supported by research by Siagian (2020) which also states that there is no relationship between tenure and nurses' attitudes in palliative care[19].

The results of the analysis show that the P value = 0.463 (> 0.05), so it can be concluded that there is no relationship between palliative training and nurses' attitudes in palliative care. These results are reinforced by research by Widowati (2019) which shows that there is no relationship between palliative training and nurses' attitudes in palliative care[21].

Based on the results of the analysis, it can be seen that the training variable with a P value of 0.006 (<0.05), is the most dominant variable related to nurses' attitudes in palliative care. These results are reinforced by experimental research by Wibowo (2019) which found a significant influence between palliative training on nurses' knowledge about palliative care[20].

Based on the results of the analysis, it was found that only predictors level of education was related to attitudes. The analysis showed that the nurse education level variable had a P-value of 0.036 (<0.05). Therefore, researchers can conclude that there is a relationship between the level of education of nurses and nurses' attitudes in palliative care.

Conclusion

Most of the nurses at the referral general hospital in the Aceh province have a high level of knowledge about palliative care. The majority of nurses have positive attitudes about palliative care.

Researchers hope that hospital management can optimize the demographic potential associated with the knowledge and attitudes of nurses in palliative care, so that the results of palliative care will be better. Hospitals also need to pay attention to the presence of factors that are quite dominant in influencing nurses' knowledge of palliative care, namely the factor of palliative training.

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