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Practices Followed by Nurses for Prevention of Pressure Ulcer among Patients Admitted in Tertiary Rural Care Hospital

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Abstract

Background: Pressure ulcer is not a plague of modern man. It is a serious medical problem that can affect a bedridden patient in any health care setting. Pressure ulcer can cause extreme discomfort to the patients and often lead to damage to tissue, underlying muscles, bones or joints. Pressure ulcer occurs across the spectrum of health care settings. Lack of practical skill is also another problem which raises the incidence of pressure ulcer.

Aims: The overall aims of the present study were to assess the expressed practices among nurses regarding prevention of pressure ulcer among patients and develop guidelines for care of pressure points.

Methodology: Quantitative approach was adopted for descriptive study and conducted in MMIMS&R, Hospital, Mullana, Ambala during a period from September, 2017 to April, 2018. 157 nurses were selected by total enumerative sampling technique. The data was collected by assessing expressed practices of nurses by expressed practice questionnaire.

Results: The major findings revealed that gender and area of work were found to be significant at a 0.05 level of significance. In addition to this Majority of nurses were performed expressed fair practices (93.35%) followed by 5.73% good practices and 1.91% poor practices regarding prevention of pressure ulcer. Nurses do not assess patient for presence of pressure ulcer neither use any risk assessment tool. So, the researcher had decided to develop "Guidelines for the Prevention of Pressure Ulcer" which include assessment, prevention and management of pressure ulcer and also distributed to nurses in selected wards.

Keywords: *Expressed Practices, Nurses, Prevention, Pressure Ulcer, Patients.*

Background

Patients get admitted to hospital for getting rid of their suffering, with the help of health care professionals but patients who are bedridden face various problems such as poor personal hygiene, bed sores, depression and nervousness. Pressure ulcer is not a plague of modern man; it has been known to exist since ancient Egyptian times[1]. According to Ayurveda, bed sore is termed as Shayya(lying down)- Vrana(wound). In medical term, they are called decubitus ulcer or decubitus sore.[2] Pressure ulcer can lead to extreme discomfort and serious life-threatening infections[3,4] it reduces blood supply to that area which causing tissue ischemia, tissue deformation and also obstruct lymphatic flow, that leads to accretion of metabolic waste products, protein and enzyme in the affected tissue and lead to tissue damage[5,6]. Bony prominences are most commonly affected like occiput of head, shoulders, sacrum, elbow, hips and ankles, trochanter, malleoli and heels[7]. Only for small duration, tissues are capable to underneath pressure on the arterial side of around 30-32 mmHg. Constant pressure results in distortion, probably describes the occurrence of a pressure ulcer.[8,9,10]

Hospital-acquired pressure injuries are localized areas in which damage occur to the skin, underlying

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tissue, or both. These injuries occur in 3%–34% of hospitalized patients worldwide and result in increased human suffering [11-13]. Diabetic foot ulcers are considered one of the most common and overwhelming chronic complications of diabetes because they elevate morbidity, high hospitalization rates[14].

Mechanical boundary conditions are independent risk factors, involve the aspects pressure duration, friction, shear[15] which may amplify internal distortion of soft tissues that can advances to cause atrophy[16,17]. Friction, along with pressure and shear can occlude flow[18]. Among underweight individuals, body size also affects the potential for increased weight on bony prominences [19]. Immobility, surgical state, turning and repositioning are also independent factor in enhancing the risk of pressure ulcer[20-22]. Severity of illness is measured by acute physiology and chronic health evaluation (APACHE), which measures the score within 24 hour of admission in intensive care unit[23]. In long term care unit, poor intake of protein, zinc & vitamins are associated with development of pressure ulcer[24]. Poor perfusion alters the oxygen delivery to tissues[25]. Vasopressin infusion [26], General skin status[26], edema[27], moisture[28] are the factors which also affect the risk of occurrence of pressure ulcer. In addition, male gender was also independent predictive of risk of pressure ulcer[11]. Smoking was an autonomous risk factor for pressure injury development[22]. Risk assessment scales and lab investigations serum creatinine levels are indicators of tissue injury[12].

Debridement, local wound care, infection control, hyperbaric oxygen therapy and off-loading of pressure are the regular care of pressure ulcers. Negative-pressure wound therapy enhances wound healing [14]. Skin perfusion pressure (SPP) is a noninvasive technique of assessing tissue viability[29]. A multidisciplinary team approach is needed for prevention of pressure ulcer especially those who are at high risk. Everyone who is in contact with the patient is liable for prevention.[28] The bed sheet should be clean, dry, wrinkled free and patient should be turned regularly, every 2 hourly as needed. Comfort devices & back care should be provided to improve the blood circulation. There should be adequate intake of calorie 30-35kcal/kg and protein 1.5g/kg/daily for patients, suffered from pressure ulcers. Adequate hydration should be provided i.e., 1500ml-2000ml, unless it is contraindicated. Encourage the patients to perform range of motion exercises. Prevention is the best solution to manage the occurrence of pressure ulcer[30]. The nurse's knowledge and practice regarding the management of immobilized patient care will enhance the quality of life of the patient. In the present study, Researcher investigates the expressed practices of nurses regarding prevention of pressure ulcer among patients admitted in tertiary rural care hospital. Researcher assumes that nurses follow some practices for prevention of practice ulcer.

Aim - The overall aim of the study was to assess the practices of nurses regarding prevention of pressure ulcer and develop guidelines on care of pressure points.

Material & Method

It used a descriptive research design. The study was conducted at MMIMS&R Hospital Mullana, Ambala. By using total enumerative sampling technique, 157 nurses were selected who were working in Medicine Ward, Surgery Ward, Ortho Ward & Neuro Ward. Data collection tool was expressed practice questionnaire. The reliability coefficient was calculated by KR 20 it was found to be 0.82. Thus the tool was found to be reliable. Guidelines on care of pressure points were formulated for enhancing the knowledge and practice. Guidelines include the components of screening, use of comfort devices, treatment and prevention of pressure ulcer. After obtaining formal permission from the medical superintendent and nursing superintendent, study was conducted in April 2018 & average time occupied to administer tool was about 15 minutes and data was analyzed and interpreted in terms of objectives of the subjects by using descriptive and inferential statistics (Chi Square & ANOVA).

Results

Findings of sample characteristics: Most of the nurses (60%) belong to the age group of 24-26 years whereas 91.7% of nurses are female. Further the table shows that maximum number of nurses belongs to Hindu religion (82.8%) and most of the nurses were single (86.62%). Further the findings reveal that majority of nurses (85.9%) pursue diploma followed by B.Sc. (N) (12.73%) & Pb.B.Sc.(1.27%). In addition to this, only 43.94% had 2-3 year work experience. Most of the nurses (47.4%) work in ICU followed by medicine (19.74%) and surgery ward (19.74%).

Finding related to expressed practices of nurses regarding pressure ulcer prevention

Table 1 Frequency and percentage distribution of nurses expressed practice regarding prevention of pressure ulcer. **N-157**

S. No.	Nurses Activities	Frequency	Percentage
	Screening:		
1.	Screens all patients for pressure ulcer at regular interval once at least each shift.	70	44.58%
2.	Inspect skin of the high risk patients (bed ridden, incontinent, having nutritional deficit, age etc.) Especially at bony prominences at once shift.	131	83.43%
	Comfort:		
3.	Assist/encourage patients in turning, rising, changing position at least 3 times per shift.	140	89.17%
4.	Uses of a comfort device available in the ward for high risk patients.	146	92.99%
5.	Maintain/ assist in personal hygiene, if patient is incapable/ find it difficult to maintain.	149	94.90%
6.	Changes position of high risk patients every2 hourly.	154	98.08%
7.	Keeps the bed sheet wrinkle free & dry.	156	99.36%
8.	Uses non-alcohol based emollients to maintain the skin moisture.	03	1.91%
9.	Does back care for high risk group prone to develop pressure ulcer.	63	40.12%
10.	Does gentle massaging of bony prominences for improving blood supply.	14	8.91%
11.	Ensure that patient hydration status is maintained.	132	84.07%
	Education:		
12.	Motivate the patients to perform range of motion exercise at regular intervals.	89	56.68%
13.	Educate the patient to maintain adequate nutritional status.	144	91.71%
14.	Involve family & client in preventive care:		
	• In assisting, turning, rising, changing position.	157	100%
	• In using comfort devices.	146	92.99%
	• In maintain personal hygiene.	146	92.99%
	• Keeping the bed sheet wrinkle free & dry.	146	92.99%
	• Helping patient to perform range of motion exercise.	21	13.37%
	• In doing gentle massage of bony prominence.	08	5.09%

Table 1 depicts the activities by nurses to prevent the occurrence of pressure ulcer. Maximum performed activities by nurses were changing in position of patient, use of comfort devices, maintenance of personal hygiene and dry, wrinkle free bed sheet. Least performed activities were use of emollient, massaging of bony prominences, helping patient to perform range of motion exercises and screening of all patients at each shift.

Table 2 Frequency and percentage distribution of nurses according to level practices regarding pressure ulcer.   N-157

S. No.	Level of expressed Practices	Frequency(f)	Percentage (%)
1.	Good Practice (>75%)	09	5.73%
2.	Fair Practice (50-75%)	145	92.35%
3.	Poor Practice (<50%)	03	1.91%

Table 2 depicts that only 09 nurses (5.73%) performed good practice in relation to pressure ulcer prevention. Maximum nurses 145 (92.35%) performed fair practice followed by 03(1.91%) performing poor practice.

Factors influencing practice

Table 3 Association of Expressed Practices of Nurses with selected sample characteristics   N=157

S. no.	Sample Characteristics	Mean	S.D.	F-test	df	p-value
1.	**Age in years**					
1.1	21-23	12.28	1.6115			
1.2	24-26	12.09	1.52	0.383	7,149	0.911^{NS}
1.3	27-29	11.8	0.69			
2.	**Gender**					
2.1	Male	11.4	1.292	6.930	1,155	0.009^{S}
2.2	Female	12.26	1.532			
3.	**Marital Status**					
3.1	Single	12.09	1.556	2.171	1,155	0.143^{NS}
3.2	Married	12.62	1.396			
4.	**Religion**					
4.1	Hindu	12.16	1.539			
4.2	Muslim	11.85	1.405	0.446	3,153	0.720^{NS}
4.3	Sikh	12.17	1.329			
4.4	Christian	12.60	1.955			
5.	**Educational Status**					
5.1	G.N.M	12.10	1.529			
5.2	B.Sc. (N)	12.47	1.645	1,271	2,154	0.283^{NS}
5.3	P.B. B.Sc. (N)	13.50	0.707			
6.	**Year of experience**					
6.1	<1 year	13.09	1.571			
6.2	1-2 year	12.08	1.523			
6.3	2-3 year	12.00	1.495	2.586	5,151	0.28^{NS}
6.4	3-4 year	11.29	0.756			
6.5	4-5 year	11.83	1.722			
6.6	>5 year	13.00	1.732			
7.	**Area of work**					
7.1	Medicine Ward	12.63	1.214			
7.2	Surgery Ward	12.84	1.440			
7.3	Ortho Ward	13.33	0.840	12.313	4,152	0.0001^{S}
7.4	ICU Ward	11.58	1.508			
7.5	Neuro Ward	10.43	0.535			

Analysis of table 3 shows that there was significant difference found in practice with gender and area of work at a 0.05 level of significance.

Discussion

This study assesses the practices of nurses regarding prevention of pressure ulcer. In this study, most frequency performed preventive activities by nurses in relation to prevention of pressure ulcer were: 100% nurses involve family and client in preventive care in assisting, turning, rising and changing position. 99.36% nurses keep the bed sheet wrinkle free and dry. In addition to this level of expressed practice was found to be significant with gender and area of work which is comparable to the study by **Anand R**[2], **Uba.et.al**[31]. The result of the study are not consistent with the study by **Shrestha N.et.al**[32] use of comfort devices 44% and changing position of patients 58%.The result of the study indicates that maximum (92.35%) expressed practices of nurses were fair. This is also comparable to the observations of study by **Nasreen S.et.al**[33] in which level of practice of maximum nurses were poor.

Limitations The main limitation of the study was the inability to assess the actual practices of nurses. As the sample size was small and sample selected from single hospital. Therefore results and findings may not be generalized to all nurses.

Conclusion

Patients with pressure ulcers often suffer from at-rest pain and may develop gangrene. Use of a risk assessment tool is recommended by many international pressure ulcer prevention guidelines for the early identification. Thus, Guidelines be considered effective in prevention of pressure ulcer.

Conflict of Interest: The authors declare that they have no conflict of interest.

Ethical approval & consent to participate: Written consent was taken from nurses working in MMIMS&R Hospital & ethical approval was not applicable.

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An Exploratory Study to Assess the Factors Contributing to Maternal Childbirth Satisfaction with Delivery Services among Postnatal Mothers at Selected Hospital in Mohali, Punjab

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Abstarct

Introduction: Patient satisfaction is considered as one of the desired outcomes of health care and it is directly related with utilization of health services. Satisfaction with childbirth is considered the most important qualitative outcome in assessing childbirth experience. It is also considered as meaningful indicators of mothers experience with the health care services

Aim of the Study: The aim of the study is to identify the factors contributing to maternal childbirth satisfaction with delivery services among postnatal mothers.

Material and Method: A quantitative approach with non experimental exploratory design was adopted. By non probability purposive sampling 180 postnatal mothers were selected. Data was collected by a) 7 point modified positive presence index rating scale to assess maternal childbirth satisfaction among postnatal mothers related with delivery services b) 5 point rating scale to assess the factors contributing to maternal childbirth satisfaction among postnatal mothers related with delivery services. Analysis of the data was done using descriptive and inferential statistics.

Results: Only 34.4% postnatal mothers were satisfied with the delivery services and 65.6% of postnatal mothers were neither satisfied nor dissatisfied with delivery services. The most satisfying factors which contributed to maternal childbirth satisfaction was, 80.6% were satisfied with measures taken to timely monitor fetal heart rate to assess fetal well being and the most dissatisfying factors was; 41.7% were dissatisfied with health care personnel who assisted in their delivery.

Conclusion: The study concludes that only 34.4% postnatal mothers were satisfied with the delivery services.

Keywords: Childbirth, childbirth experience, satisfaction, intra-partum care.

Introduction & Background of the Study

Childbirth is one of the most important events in life which is highly individualized. Childbirth is the culmination of human pregnancy or gestation period with delivery of one or more newborns from mother's uterus. Childbirth is natural and a normal physiological process. It is a new experience for the mother along with anticipatory stress. The mother's childbirth perception is specially influenced by knowledge and expectations.[2] Childbirth can be very frightening experience for many women, but it should be a joyous occasion and every woman should feel valued, respected and appreciated by all those who aid her in the journey of bringing new life into the world[3.]

The midwife's presence with a woman during childbirth is central to the practice of midwifery and the care of women in labour. Literature confirmed that mother during childbirth desired and valued the concept

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of being with woman, which was defined as the provision of emotional, physical, spiritual and psychological presence or support by a midwife as desired by the labouring woman.[4]

Satisfaction is considered as one of the desired outcomes of health care and it is directly related to utilization of health services. It is also considered as meaningful indicators of mothers experience with the health care services. Asking mothers what they think about the care and the treatment they received is an important step towards improving the quality of care, ensuring that the local health services are meeting their needs. Studies have suggested that satisfied mothers are more likely to utilize health services, comply with medical treatment and continue with the treatments. Satisfaction is related to more social conversation, clear communication and information, respectful treatment, cleanliness, drug availability and waiting time. Measurement of patient satisfaction involves multi dimensional aspects of mother's opinions on health care, identifying problems in health care facilities and evaluating them.[5]

Although childbirth typically concludes within a single day, women often remember their experiences vividly, even decades later. Health professionals have long understood that the childbirth process can be unpredictable. However, given a healthy outcome, the extent to which the birth environment supports a woman's medical and psychological needs may have a major role in determining whether she is satisfied with the birth experience. The degree of match between parturing woman and her environment determines satisfaction of needs and subsequent positive adjustment.[6]

An unacceptable inequity exists for birthing women related to where they give birth. The death rates are far higher for women in low income countries than women in more developed countries. Women often choose to avoid facilities because of abuse, coercion or neglect. Recently there has been increasing focus among international and national organizations on examining the quality of care, abuse/neglect of women in facilities during childbirth, and the lack of professional and social accountability among facility-based providers of care.[7]

Giving birth and having a new baby are emotive experiences, and many women are vulnerable to psychological problems during this time. A positive birth experience is associated with an increased mother-child bond and maternal abilities, and contributes to her sense of accomplishment and self-esteem. The quality of intra-partum care is an important determinant of outcomes of pregnancy especially in minimizing intra-partum and post-partum related complications. The birthing experience of women directly and indirectly helps the women to cope in her postnatal period effectively. The researcher has noticed that disrespectful and traumatic birthing experience of women lead her to poor coping strategies in her post natal period and leaving her with traumatic memory of her birthing experience throughout her life. Therefore, the researcher wants to assess the factors which are contributing to maternal childbirth satisfaction during intra-partum period among postnatal mothers which may result in effective utilization of health care delivery services.

Objectives

- To assess maternal childbirth satisfaction with delivery services among postnatal mothers at selected hospital in Mohali.

- To assess the factors contributing to maternal childbirth satisfaction with delivery services among postnatal mothers at selected hospital in Mohali.

- To determine the association between the findings and selected socio-demographic variables.

- To conduct informational programme for the staff nurses based on the findings.

Assumptions

Women may not be fully satisfied with the intra-partum care which they receive at health centers.

There may be certain contributing factors to the maternal childbirth satisfaction with delivery services.

Material and Method

In the present study, a quantitative approach with non experimental exploratory research design was adopted. By non probability purposive sampling 180 postnatal mothers were selected. The study was conducted in the month of February- March 2018. Formal written consent was obtained from the concerned authorities of selected

hospital of Mohali after discussing the purpose and objectives of the study. Data was collected by modified 7- point positive presence index rating scale to assess the maternal childbirth satisfaction with delivery services in which there were 28 statements to assess maternal childbirth satisfaction related with delivery services. The minimum score was 28 and maximum score was 196 and self structured 5-point rating scale to assess the factors contributing to maternal childbirth satisfaction. The factors identified to contribute maternal childbirth satisfaction were admission process, environment, supply and human resource, competence and skills of the health care provider, attitude of the health care provider, communication, support, consent and autonomy, privacy and confidentiality and postnatal care. Analysis of the data was done by using descriptive and inferential statistics.

Ethical Considerartions

With the view of ethical consideration the researcher has taken permission from Principal of Mata Sahib Kaur College of Nursing Mohali. After that the researcher has discussed the type and purpose of the study with the Senior Medical Officer (SMO) of Civil hospital 6-phase, Mohali and written permissions were obtained. Also the postnatal mothers were explained about the purpose of the study and written consent was taken from them for their participation in study. They were explained about the right to refuse from participating in the study. The postnatal mothers were assured that the information given by them will be kept as confidential and will be purely used for research purpose.

Results

Table 1: Level of maternal satisfaction with delivery services among postnatal mothers.   N=180

Level of satisfaction	Score	Frequency (n)	Percentage (%)
Dissatisfied	28-83	0	0
Neutral	84-139	118	65.6
Satisfied	140-196	62	34.4

Table 1 depicts the level of maternal childbirth satisfaction with delivery services. 118 (65.6%) postnatal mothers were neither satisfied nor dissatisfied with delivery services and 62 (34.4%) postnatal mothers were satisfied with the delivery services whereas no mother was dissatisfied with the delivery services.

Table 2: Association between the findings and selected socio-demographic variables.   N=180

Socio demographic variable	Level of satisfaction			χ^2, df,p- value
	Dissatisfied (n)	Neutral (n)	Satisfied (n)	
Age (in years)				
18-21	0	42	15	3.686, 3, 0.297[NS]
22-25	0	41	23	
26-29	0	32	16	
30-34	0	5	6	
Educational status				
No formal education	0	42	27	3.770, 3, 0.287[NS]
Up to primary level	0	41	13	
Up to secondary level	0	36	20	
Graduation and above	0	1	0	
Working status				
Working	0	64	33	0.45, 1, 0.833[NS]
Non-working	0	56	27	

***Cont...* Table 2: Association between the findings and selected socio-demographic variables.   N=180**

Family income per month				
≤10,000	0	53	30	1.191, 2, 0.551[NS]
10,001-20,000	0	48	19	
20,001-30,000	0	19	11	
≥30,001	0	0	0	
i) Parity				
primipara	0	51	16	4.291, 1, 0.038[*]
multipara	0	69	44	
ii)In case of multipara, previous place of delivery				
Government hospital	0	49	25	3.420, 2, 0.181[NS]
Private hospital	0	1	0	
Home	0	19	19	
iii) Were you satisfied with the delivery services you received from previous hospital?				
Yes	0	37	14	0.218, 2, 0.896[NS]
No	0	14	10	
Onset of present labour				
Natural	0	90	56	8.775, 1, 0.003[*]
Labour pain induced by medicines.	0	30	4	
Approximate length of time you were inlabour				
< 6 hours	0	31	23	3.439, 2, 0.179[NS]
6-12 hours	0	67	30	
12-18 hours	0	22	7	
≥18 hours	0	0	0	
Gender of the child born				
Male	0	74	39	0.190, 1, 0.663[NS]
Female	0	46	21	

NS=Non-Significant   ***Significant**
at p<0.05 level

Table 2 depicts that chi square test was used to determine the association between the level of satisfaction and socio-demographic variables. There was association between level of satisfaction with parity (χ^2=4.291, df=1,p-value= 0.038) and with onset of present labour (χ^2=8.775, df=1, p-value= 0.003). Hence there was significant association between levels of maternal childbirth satisfaction with parity of the mother and onset of present labour.

Association between age, educational status, working status, family income per month, place of previous delivery, satisfaction with previous place of delivery, approximate length of labour, and gender of the child born was found statistically non significant at p<0.05

Discussion

Study findings show that majority of postnatal mothers i.e. 35.6% were in the age group of 22-25 years, 38.3% mothers had no formal education, 53.9% mothers were working women, 46.1% mothers were having family income of Rs. ≤10,000 per month, 62.8% mothers were multipara, out of 113 multi para others, 65.5% mothers delivered at government hospital, 68% mothers were satisfied with the delivery services from previous hospital, 81.1% mothers had natural onset of labour, 53.9% mothers spent 6-12 hours in labour, 62.8% mothers delivered male babies.

Also the present study revealed that 65.5% of postnatal mothers were neither satisfied nor dissatisfied with delivery services and only 34.4% postnatal mothers were satisfied with the delivery services.

Out of the factors which contributed to maternal childbirth satisfaction, 57.8% mothers were satisfied with the admission process. 56.1% mothers were satisfied with the hospital environment. Only 49.4% mothers were satisfied with the supply and human resources. 87.2% mothers were satisfied with the competence and skills of health care provider. The noticeable factor was that only 18.9% mothers were satisfied with the attitude of health care provider and the astonishing finding was that no mothers were satisfied with the communication factor of health care provider. Only 28.8% mothers were satisfied with the support they received from the health care provider during delivery. 45% mothers were satisfied with the privacy and confidentiality maintained. Only 27.2% mothers were satisfied with the factor of consent and autonomy. 45% mothers were satisfied with the privacy and confidentiality maintained. Another factor that needs to be emphasized was that only 6.7% mothers were satisfied with the post delivery care.

In the present study, significant association was found between level of maternal childbirth satisfaction with parity of the mother and onset of present labour. And there was no significant association of maternal childbirth satisfaction with delivery services was found with age, educational status, working status, family income per month, place of previous delivery, satisfaction with previous place of delivery, approximate length of labour, and gender of the child born.

Conclusion

The conclusion which is drawn from the present study is that only 34.4% postnatal mothers were satisfied with the delivery services.

The most satisfying factors which contributed to maternal childbirth satisfaction were, 80.6% satisfied with measures taken to timely monitor fetal heart rate to assess fetal well being, 78.3% were satisfied with cleanliness of the labour room, 77.2%were satisfied with availability of staff nurses to attend them, 71.7% were satisfied with waiting time taken for admission process and 70.6% were satisfied with waiting time taken for initial assessment and start of treatment by nursing staff. The most dissatisfying factors were; 41.7% were dissatisfied with health care personnel who assisted in their delivery, 34.5%were dissatisfied with measures taken to reduce their childbirth pain through medicines, 30% were dissatisfied with the information given to them about their baby's gender or condition, 27.7% were dissatisfied in assistance given to them in positioning during procedures and examination and 27.2% were dissatisfied with the assistance given to them in changing their soiled napkins or clothes and no mother was satisfied with the communication factor.

Conflict of Interest – Nil

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Effectiveness of Structured Teaching Program on Knowledge about Anaemia among Tribal Adolescent Children with Anaemia

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Abstract

Introduction: Anemia is a very common problem in pediatric age group in many developing countries with an estimated prevalence of 43% of the World's children. School children constitute 20.25% of total population in India and they are more vulnerable to this disease due to their rapid growth need of high iron.

Method: Quantitative experimental approach with pre-test post-test design was adopted for the study. The main study was conducted among 90 tribal adolescent children, 60 from Govt, Aralam farm high school and 30 from government H.S.S Pala. The samples were selected by purposive sampling technique. The tools used were format for hemoglobin estimation, demographic Performa of the sample, knowledge questionnaire regarding anemia and structured teaching programme on anemia.

Results: This study reveals that majority of tribal adolescent children were anaemic.61.1% of adolescent children had moderately adequate knowledge regarding anemia before the teaching programme and 76.6% had adequate knowledge regarding anemia after the teaching programme. The analysis of the data showed that the pre-test knowledge scores of the tribal adolescent children are significantly higher than that of post test scores (t=13.575, p<0.00).This emphasizes that the structured teaching programme was effective in improving the knowledge regarding anemia. Further, there was no significant association between the pre-test knowledge scores and selected demographic variables.

Conclusion: The study concluded that the structured teaching programme was effective in improving the knowledge of tribal adolescent children regarding anemia.

Keywords: *Anemia, knowledge, effectiveness, tribal adolescent children, structured teaching programme*

Introduction

Adolescence is a period of transition between childhood and adulthood and it is a significant period of human growth and maturation[1]. The health of adolescents attracted global attention in the past decade. Adolescence being rapid growth period, is at risk of developing nutritional deficiencies including anemia[2]. In India adolescent constitute approximately 21% of the population. Anemia gains increased importance among tribal who are already disadvantaged socioeconomically and face a slow pace of growth.

Generally speaking by the term "tribe" means, a group of people who that live at a particular place from time immemorial. Tribals are indigenous people. Original or native inhabitants of a country known as indigenous people. These aborigines in the Indian languages are known as "Adibasi"- Adi standing for original and Basi standing for inhabitants respectively. These human groups or Adibasis are known as 'scheduled tribe (ST)

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Tribals are found in almost all the states of country. Currently there are between 258 and 540 scheduled tribe communities exists in India. India has the second largest concentration of tribal population in the world. Tribal population of 67.8 million distributed in different states and union territories. Tribals are characterized by a distinctive culture, primitive traits, and socio-economic backwardness[3].

Anemia is a very common problem in pediatric age group in many developing countries with an estimated prevalence of 43% of the World's children. School children constitute 20.25% of total population in India and they are more vulnerable to this disease due to their rapid growth need of high iron. Anemia is a condition in which the number of red blood cells or the amount of hemoglobin is low. Red blood cells contain hemoglobin protein that it enables them to carry oxygen from the lungs and deliver it to all parts of the body.[4]. Iron deficiency is the most common nutritional disorder in the developing world and the most common cause of nutritional anemia in young children and women of reproductive age.

Objectives of the Study

1. Identify tribal adolescent children with anemia based on their measured haemoglobin level

2. Assess the knowledge level of tribal adolescent children regarding anemia.

3. Determine the effectiveness of structured teaching program on knowledge of tribal adolescent children regarding anemia.

4. Find out the association between pre-test knowledge score and selected demographic variables like age, sex, education, father's job, mother's job and monthly income per month.

Material and Method

Research Approach

The present study adopted a quantitative experimental approach.

Research Design

The research design selected for this study was Pre-experimental one group pre-test, post-test design.

Variables

· Independent variable was the structured teaching programme.

· Dependent variable was the knowledge of tribal adolescent children regarding iron deficiency anaemia.

· The demographic variables considered in this study were age, sex, educational status, family structure, father's job, mother's job, and monthly income per month

Setting of the Study

Selected Tribal schools of Aralam Panchyath, in Kannur.

Population

All the tribal adolescent boys and girls studying in tribal schools.

SAMPLE

All the tribal adolescent boys and girls studying in selected tribal schools who met the inclusion criteria.

SAMPLE SIZE

90 tribal adolescent children.

SAM PLING TECHNIQUE

Purposive sampling technique

Inclusion Criteria

• Tribal adolescent children studying in selected schools in Aralam

• Tribal adolescent children in the age group of 12-16years

• Tribal adolescent children present in the school during the days of data collection

Exclusion Criteria

Tribal adolescent children who are not willing to participate in the study

Description of the Tool

Tool- 1: Demographic proforma of the sample

Tool -2: Structured knowledge questionnaire regarding anaemia

Tool -3: Format for haemoglobin estimation

Data collection process

Two schools were randomly selected. After obtaining the official permission from the concerned authorities and informed consent from the samples ant their parents. The haemoglobin estimation was done by using Sali's haemoglobin method. A pre test knowledge questionnaire was then distributed among the adolescent children and was collected back after 30 minutes. A 45minutes long structured teaching programme regarding anaemia prepared by the researcher with the help of the guide, was given to all adolescent children. Teaching was given using lecture cum demonstration method. During the teaching programme, the researcher demonstrated the method of preparing raggi porridge. Post test was conducted on the seventh day after pretest by administering using the same questionnaire

Plan for Data Analysis

· Descriptive and inferential statistics used for data analysis, using SPSS version 19.

Descriptive statistic methods

· The sample characteristics would be analyzed using methods like frequency and percentage and will be depicted in frequency tables and graphs.

· The mean score of the pre-tests and post tests conducted would be calculated.

Inferential statistic methods

· The pre test scores would be compared with the post test scores using paired t-test

· The association between the pre test scores and the selected demographic

Variables would be analysed using Chi-Square test.

Findings

Section 1: Description of demographic characteristics

Table I: Frequency and distribution of demographic variables   N=90

Sl.no	Demographic variables	Frequency	Percentage
1	Age of tribal adolescent children		
	12 – 13 years	16	17.8
	13 – 14 years	33	36.7
	14 – 15 years	2	24.7
	15 – 16 years	19	21.1
2	**Sex**		
	Male	42	46.6
	Female	48	53.3
3	**Education**		
	7th std	15	16.70
	8th std	41	45.60
	9th std	34	37.80
	10th std	0	0.00
4	**Type of family**		
	Nuclear family	50	55.60
	Joint family	40	44.40
5	**Father's job**		
	Agriculture	4	4.4
	Cooli worker	79	87.8
	Government job	4	4.4
	Other jobs	3	3.3
6	Mother's job		
	Agriculture	3	3.3
	Cooli worker	79	87.8
	Government job	1	1.1
	Other's job	7	7.8
7	**Monthly income**		
	<1000	28	31.1
	2000 – 3000	38	42.2
	3000 – 4000	18	20
	>5000	6	6.70

Data presented in the table 1 shows that majority of the adolescent children belonged to the age group of 13-14 years. Most of the samples were females, 45.6% of samples were in of 8th standard and majority of the sample belonged to the nuclear family.87.8% of fathers and mothers were collie worker and majority of sample had monthly income between 2000-3000 rupees.

Section II: Analysis of haemoglobin estimation

This section describes the analysis of haemoglobin estimation of tribal adolescent children. The cut off point of haemoglobin level of adolescent children was below 11gm/dl in boys and below 10gm/dl in girls as recommended by WHO.

Table 2:Distribution of sample based on haemoglobin level   N=90

Categorization of haemoglobin level	Frequency		Percentage	
	Boys	**Girls**	**Boys**	**Girls**
7-8	0	0	0	0
8.1 – 9	0	2	0	2.2
9.1-10	0	18	0	20
10.1-11	2	11	2.2	12.2
11.1- 12	16	6	17.7	6.6
>12	24	11	26.6	12.2

Data presented in the table 2 shows that majority (26.6%) of the adolescent boys and girls (12.2%) had haemoglobin level within normal range.20% of the girls and 2.2% of the boys had haemoglobin range less than the cut off point

WHO grading of anemia

Hb – 10 - 12gm/dl – Mild anaemia

Hb – between 7 to 10gm/dl – Moderate anaemia

Hb - <7gm/dl – Severe anaemia

Table 3: Categorisation of anaemia based on WHO grading   N=90

Categorization of anemia	Frequency		Percentage	
	Boys	**girls**	**boys**	**girls**
Mild anaemia	18	17	20	18.8
Moderate anaemia	0	20	0	22.4
Severe anaemia	0	0	0	0

Data presented in the table 3 shows that 22.4% of girls were moderately anaemic.20% adolescent boys and 18.8% girls were with mild anaemia. None of them had severe anaemia. 38.8% of children were not anaemic.

Section III: Analysis of the pre-test knowledge scores of tribal adolescent children regarding knowledge on anaemia.

This section describes the analysis of the pre-test knowledge scores obtained by the tribal adolescent children on anaemia. The scores were rated as inadequate knowledge (0-10marks), moderately adequate knowledge (11-21marks) and adequate knowledge (22-32marks) and mean pre-test scores are calculated.

Table 4: Description of pre-test knowledge scores of adolescent children regarding anaemia   N=90

Categorisation of knowledge	Frequency (f)	Percentage
Inadequate knowledge (0-10 marks)	31	34.4
Moderately adequate knowledge(11-21marks)	55	61.1
Adequate knowledge (22-32 marks)	4	4.4

Data presented in table 4 indicate that the majority (61.1%) of the adolescent children had moderately adequate knowledge regarding anaemia before the teaching programme.

Section IV: Analysis of the post knowledge scores of tribal adolescent children regarding knowledge on anemia.

Table 5: Description of post-test knowledge scores of tribal adolescent children regarding anaemia.

N=90

Categorization of knowledge	Frequency	Percentage
Inadequate knowledge (0-10 marks)	0	0
Moderately adequate knowledge (11-21 marks)	21	23.3
Adequate knowledge (22-32marks)	69	76.6

Table 5, shows that majority (76.6%) of the adolescent children had moderately adequate knowledge regarding anaemia after the teaching programme.

Table 6: Comparison of pre-test with post-test knowledge scores of tribal adolescent children regarding anaemia. N=90

	Mean	SD	df	t	p
Pre test scores	12.64	4.455	89	13.575	0.00 *
Post test scores	19.14	3.885			

*significant at 0.05 level

The data presented in the table 6, indicate that there was significant difference in the mean pre-test and post-test knowledge scores of adolescent children regarding anemia. An examination of 't' value and 'p' value shows that the difference in mean pre test and post test knowledge scores of adolescent children regarding anemia was statistically significant. Hence the research hypothesis was accepted and it is inferred that the teaching programme was effective in improving the knowledge of adolescent children regarding anemia.

Section VI: Analysis of association between pre test knowledge scores with selected demographic variables of adolescent children

Section V: Effectiveness of structured teaching programme on knowledge of tribal adolescent children regarding anemia

This section compares the pre-test and post-test knowledge scores of the adolescent children in the tribal school to identify whether there is any significant difference between the pre-test scores and post test scores. For this paired 't 'test is used with a confidence interval of 95%.

H01: There is no significant difference between the mean pre -test and post -test knowledge of the tribal adolescent children regarding anaemia.

In this section analysis of association of pre test knowledge scores of adolescent children of tribal areas with selected demographic variables such as age, sex, educational status, family structure,occupation and monthly income per month was done. The statistical method used is Chi-Square at 0.05 level.

H02: There is no statically significant association between the pre-test knowledge scores with selected demographic factors

Table 7: Association between pre test scores of adolescent children with selected demographic variables   N=90

Demographic Variables	χ^2	Df	P
Age	11.048	9	0.272
Sex	2.103	3	0.551
Education	3.042	6	0.804
Family structure	1.869	3	0.600
Father's occupation	9.741	9	0.372
Mother's occupation	1.617	9	0.996
Monthly income	12.053	9	0.210

*0.05 level of significance

Data presented in the table 7, shows that there is no significant association between the pre test knowledge of adolescent children and selected demographic variables such as age, sex, education, father's job, mother's job and monthly income

Discussion

The present study revealed that 61.2% of adolescent children were anaemic.22.4% of the adolescent girls were moderate anemia. 20% adolescent boys and 18.8%girls were mild anaemia.38.8% of children are not anaemic. Similar studies have done among adolescent girls in Tribal area of Visakhapatnam district .The result showed that, About 88.9% of adolescent girls were anemic and among them 17.8% were severely anemic. Highest prevalence was seen in the age group of 12-13years and 14-15 years of age group that is 85% and 86.5% respectively[5].

In the present study, 61.1% of adolescent children in pre-test had moderately adequate knowledge, where as in post-test majority 76.6% of the adolescent children exhibited adequate knowledge after the structured teaching programme. Similar studies done in Karnataka, Hassan and Bangalore reviewed by the researcher had shown the same results[46] .Another study was conducted in Belgaum among adolescent girls, the result revealed that 100% of adolescent girls in pre-test had average knowledge, where as in post –test majority 73.33% of the adolescent girls had good knowledge[6].

The present study revealed that there is no association between the knowledge level of adolescent children and the selected demographic variables such as age, sex, education status, father's job mother's job and monthly income. A similar study conducted to determine the prevalence of anemia in adolescent Nepalese girls in a semi urban setting, concluded that the prevalence of anemia was not related to girls age, body mass index, menarcheal status, and socio-demographic factors including parental education or occupation[7].

Conclusion

The study concluded that 61.2% of sample were anaemic. More than 61.1% of the adolescent children had a moderately adequate knowledge regarding anaemia [before] the teaching programme and majority (76.6%) of the adolescent children's knowledge become adequate after the structured teaching programme. Also, there was no association between the knowledge level and selected demographic variables such as age, sex, education, type of family, father's job, mother's job and monthly income.

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A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Universal Precaution among Basic B.sc Nursing First Year Student of State College of Nursing, Dehradun, Uttarakhand

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Abstract

Introduction : Changing technologies & expanding knowledge are increasing the responsibilities of nurses in complex health care environment. Nursing students take maximum responsibility of providing care in the inpatient department of any nursing college across the world in their professional career and express the most vulnerable group to exposure to all types of blood borne pathogens.

Methodology: A pre experimental one group pre test post test design was used for the study. The subjects were 5o basic b.sc nursing students selected by non probability conveniences sampling technique. Structured teaching programme (STP) was administered after the assessment of pre test knowledge on universal precaution. Post intervention knowledge was assessed on the 7 day of the administration of STP through the same structured knowledge questionnaire.

Result: The study shows that the out of 50 samples most of the students 32(64%) was having average knowledge, 15(30%) of samples were having poor knowledge and 3(6%) of the samples were having good knowledge. Pre test mean score was 19.46 with 3.53 of SD. After administering structured teaching programme 45 (90%) samples were having good knowledge, 5(10%) of the samples were having average knowledge and none of the samples were having poor knowledge. The post test mean score was 28.96 with 2.51 SD with a mean difference of 9.5 as evidence from 't' value of 15.57 at 49 df at < 0.05 level of significance. The independent 't' test depicts that only gender is associated with the pre test knowledge score, else no demographic variable show any significant association with their knowledge regarding universal precaution.

Conclusion: The study concluded that structured teaching programme was effective in increasing the knowledge regarding universal precaution among Basic B.sc Nursing students. Findings of the study focuses that there should be such type of teaching programme for all the health care workers so that they can practise according to the knowledge and prevent the risk from infectious materials.

Keyword:- *Universal precaution, effectiveness, knowledge, association, structured teaching programme, B.sc Nursing First year students.*

Introduction

Nursing has always been at the forefront of preventing the spread of infection among patient and personnel in the health care setting. [1]

Nurses are considered as the important and largest group in health care delivery system. Due to their numerous job responsibilities and the nature of their

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work, they are frequently exposed to the blood and body fluids of the patients.[2]

Nursing students plays a very important role in delivering care to the patients in the hospitals and are potentially exposed to blood and body fluids in the time of their clinical posting; therefore they are at the risk of getting infection with blood borne pathogens. The activities that basically put the students at a risk of blood borne infections are percutaneous injury (e.g. Needle stick or cut with a sharp instruments), contact with mucous membrane of eyes or mouth, contact with non intact skin (particularly when exposed skin is chapped, abraded or afflicted with dermatitis), contact with intact skin when the duration of infected blood or body fluid is prolonged (several minutes to hours). [3]

Nursing students take maximum responsibilities to provide nursing care in the inpatient and outpatient department of any nursing college across the world in their early period of professional career and express the most vulnerable group to the exposure to all types of blood borne pathogens including human immunodeficiency virus (HIV) and hepatitis B virus (HBV). [4]

Nursing students are accidentally exposed to blood borne pathogens and body fluids because of many reasons i.e. nature of their work, extensive contact with the sick patients, lack of experience and curiosity in learning new things. The nursing students require the knowledge about the policies and procedures of the hospital and the institute to avoid these exposures i.e. universal precautions and others. [5]

Universal precautions are a set of effective practices that are designed to protect the health care workers and patients from getting infection with a wide range of the pathogens including blood borne pathogens. These practices are used when a health care worker is caring for all the patients regardless of their respective diagnosis, these were applied universally. It is not feasible, effective or even cost effective to test all the patients for all the pathogens before providing the care to identify that who are infected and for whom these precautions should be taken.[6]

The statement given by the centre of disease control is the concept of universal precaution stresses that the entire patient should be treated as though they have potential blood borne infection & can infect the caring health care workers. The aim of universal precaution is to protect both the health care workers from being infected & the uninfected patients from getting infected by the health workers. [7]

Universal precautions involves good hand hygiene habits, such as hand washing and the use of personal protective equipments(PPE) such as gloves, gown , mask, caps and other barriers, correct handling of sharps and aseptic techniques. [8]

Method

Design, Sample and Setting: A quantitative evaluative approach with pre experimental design (one group pre test post test design) was used for the study to assess the knowledge of basic b.sc nursing first year students. The study was conducted in basic b.sc nursing first year students of State college of nursing, chander nagar Dehradun. The total numbers of 50 students were selected by the non probability convenient sampling techniques who were fulfilling the selection criteria. The tool used for conducting the study was a set of demographic variables and self structured inventory on universal precaution. Structured teaching programme on universal precaution was prepared . Pre test was conducted by administering the structured questionnaire then structured teaching programme was given and after 7 days post test was conducted. Data was analysed with the help of descriptive and inferential statistics.

Description of tool : the tool consist of two part. **Section I: Socio- demographic variables :** it was developed to collect information regarding sample characterstics such as age, gender, educational qualification, family background, previous knowledge regarding universal precaution and source of information.

Section II : this section consist of structured question regarding universal precaution which was divided into following categories-

General question about universal precaution

Questions regarding knowledge about blood borne pathogens

Questions regarding knowledge about hand washing

Questions regarding knowledge about personal protective equipments.

Questions regarding knowledge about safe handling and disposal of sharps.

Questions regarding knowledge about post exposure prophylaxis (PEP)

The structured questionnaire is of multiple choices consisting of four options for each question. Only one option is correct. For each correct answer, the score of 1 was given. The highest score was 34. Based on percentage gained by the basic b.sc nursing first year students, the knowledge of respondents was grouped into following categories.

Score Interpretation

SCORING	INTERPRETATION
Below 50%	Poor knowledge
51% – 75%	Average knowledge
76 %– 100%	Good knowledge

Reliability : Reliability coefficient of the tool was 0.87 (p<0.05)

Data collection procedure : The formal permission was obtained from the principal of State College of Nursing. The researcher informed the sample about purpose of the study, informed consent was taken from the samples and confidentiality was assured. Pre test was given to the sample to know the prior knowledge regarding universal precaution. After pre test structured teaching programme was administered to the samples. After 7 days the post test was collected by administering the same tool.

Results and Discussion

SECTION I – Description of demographic variables samples.

Table 1. – Frequency and percentage distribution of socio- demographic characteristics of basic b.sc nursing first year students. N = 50

S.no.	Demographic Variable		Freq-uency(F)	Percen-tage (%)
1.	Age	Below 20 years 21- 25 years 26 – 30 years 31 – 35 years	40 8 2 0	80% 16% 4% 0%
2.	Gender	Male Female	7 43	14% 86%
3.	Educational qualification	Intermediate Graduate	47 3	94% 6%
4.	Family background	Medical Non – medical	3 54	6% 94%
5.	Previous knowledge related to universal precaution	Yes No	42 8	84% 16%
6.	Source of information	Class teaching Clinical area Mass media Workshop Others	35 5 2 0 0	83.3% 11.9% 4.7% 0% 0%

The present table reveals the frequency and percentage distribution of demographic variables of basic b.sc nursing first year students.

According to age the table reveals that 40 (80%) basic b.sc nursing first year students belongs to age group of below 20 years. 8 (16%) belongs to the age group of 21 to 25 years, 2 (4%) belongs to the age group of 26 to 30 years and 0% of the basic b.sc nursing first year students belong to 31 to 35 years of age.

According to the gender the table depicts that 7(14%) of the basic b.sc nursing first year students were male and 43 (86%) of the students were female

According to the educational qualification the table shows that the 47(94%) of the basic b.sc nursing first year students possess intermediate, while 3 (6%) of the students completed their graduation before joining the nursing course

According to the family background the table reveals that 3 (6%) of the basic b.sc nursing first year students belongs to medical family and rest of the students i.e. 47 (94%) belongs to non medical family

According to the previous knowledge regarding universal precaution the table depicts that 42(84%) of the basic b.sc nursing first year student states that they are having prior knowledge related to the topic of the study but 8(16%) of the student does not possess any prior knowledge regarding universal precaution.

According to the source of information the table shows that 35(83.3%) gain knowledge by attending the class teaching, 5 (11.9%) states that they gained the knowledge while working in the clinical area, 2(4.7%) of the students received the knowledge from mass media and none of the students reported of having knowledge through workshop.

SECTION II- Findings related to the pre test and post test knowledge score regarding universal precaution among Basic B.sc Nursing students.

Table No.2 – Frequency and percentage distribution of pre test and post test knowledge score.   N= 50

KNOWLEDGE SCORE	POOR (0- 17)		AVERAGE (18 - 25)		GOOD (26 - 30)	
	FREQUENCY	%	FREQUENCY	%	FREQUENCY	%
Pre test	15	30%	32	64%	3	6%
Post test	0	0%	5	10%	45	90%

The above table shows the frequency and distribution of pre test and post test knowledge score of basic b.sc nursing first year students regarding universal precautions. The table depicts that in pre test 15 (30%) of the students had poor knowledge, 32(64%) of the students had average knowledge and only 3 (6%) of the students possess good knowledge.

Table No . 3 Frequency distribution of mean and Standard deviation (SD) of pre test and post test knowledge score.   N=50

KNOWLEDGE SCORE	MINIMUM SCORE	MAXIMUM SCORE	MEAN	SD
Pre test	12	27	19.46	3.53
Post test	23	33	28.96	2.51

The table shows the mean and SD distribution of pre test and post test knowledge score of the sample.

The table reveals that in pre test the minimum score of the basic b.sc nursing first year student was 12 and maximum score was 27. The pre test mean was 19.46 with 3.53 SD

In post test the minimum score was 23 and the maximum score was 33. The post test mean was 28.96 with 2.51 SD.

SECTION –III.   This section deals with the effectiveness of the structured teaching programme.

Table No.4 – Analysis of pre test and post test knowledge score of basic b.sc nursing first year student regarding universal precaution.

N=50

KNOWLEDGE SCORE	MEAN	SD	MEAN DIFFERENCE	df	't' value
Pre test	19.46	3.53	9.5	49	15.57*
Post test	28.96	2.51			

*Significant association at p<0.05

The table shows the comparison of the pre test and post test knowledge score. The paired't' test was used to find out the comparison between pre test and post test knowledge score. The mean difference was 9.5. The't' value was 15.57 at df 49.

H1- There will be a significant difference between the pre test and post test knowledge score of basic b.sc nursing first year students regarding universal precautions.

The calculated value "t" value was 15.57 at df 49, the tabulated value at 0.05 level was 2.00, hence the calculated value was greater than tabulated value, so the research hypothesis is accepted. This shows that there was statistically significant difference between pre test knowledge and post tests knowledge score.

SECTION IV- This section deals with the association of data with socio demographic variables.

Table No.5 Distribution of basic b.sc nursing I year students based on association between demographic variables (Age) and the pre test knowledge score regarding universal precaution.

DEMOGRAPHIC VARIABLES		N	KNOWLEDGE SCORE			df	f value	P value
		Poor (0-50%)	Average (51-75%)	Good (76-100%)				
Age	Below 20	40	10	24	6	2, 47	0.71	0.49
	21 - 25	8	5	2	1			
	26 - 30	2	1	1	0			

According to the age, the above table shows that in below 20 years there was 10 students having poor knowledge, 24 students had average knowledge and 6 students were above median, in age group 21 – 25 years 5 students were having poor knowledge, 2 students were having average knowledge and 1 student were having good knowledge and in age group 26 – 30 years 1 student were having poor knowledge, 1 student were having average knowledge and none of the student possess good knowledge. ANOVA calculated was 0.71 at df 2, 47, tabulated value at 0.05 level was 3.15. Tabulated value was greater than calculated value so null hypothesis was accepted, p value was 0.49 it was greater than 0.05, so it inferred that the knowledge regarding universal precaution was not associated with the age of the samples.

Table 6 Distribution of basic b.sc nursing I year students based on association between demographic variables and the pre test knowledge score regarding universal precaution.   **N = 50**

S.NO.	DEMOGRAPHIC VARIABLES		N Poor (0-50%)	KNOWLEDGE SCORE			Df	"t" VALUE	P VALUE
				Average (51-75%)	Good (76-100%)				
1.	Gender	Male	7	4	3	0	48	2.28*	0.013
		Female	43	11	29	3			
2.	Educational qualification	Intermediate	47	33	7	7	48	1.12	0.134
		Graduate	3	1	2	0			
3.	Family background	Medical	3	3	0	0	48	1.98	0.026
		Non medical	47	12	28	7			
4.	Previous knowledge	Yes	42	12	23	7	48	1.01	0.158
		No	8	3	5	0			

*Significant at p<0.05 level.

Table No.6 Revealed the association of pre test score with the demographic variable making use of independent "t" test and shows that only gender has association with pre test knowledge score.

Conclusion

The study shows that the out of 50 samples most of the students 32(64%) was having average knowledge, 15(30%) of samples were having poor knowledge and 3(6%) of the samples were having good knowledge. Pre test mean score was 19.46 with 3.53 of SD. After administering structured teaching programme 45 (90%) samples were having good knowledge, 5(10%) of the samples were having average knowledge and none of the samples were having poor knowledge. This indicate that the structured teaching programme had improved the knowledge of the students regarding universal precaution .

Ethical Clearance: ethical clearance was obtained from the ethical committee of state college of nursing, Dehradun Uttarakhand.

Source of Funding: Self

Conflict of Interest: Nil

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Evaluation of Study Skills in Nursing Students

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Abstract

Introduction:- There are large number of modification in students study style specifically when they begin college life. On some occasion students found that technique they used for studying in schooling which not every time productive in college. Many time Students may face difficulties to learn the content which is delivered, not because they aren't studying, but because there is requirement to understand in different way to gain.[1] The purpose of this research is to explain information which handled effective contribution of study skills to academic competence, and to identify better strategies that are effective in helping students to improve their study skills**. Method:** in this descriptive cross-sectional study questionnaires were distributed among all B.sc. Nursing students. Total 51 questionnaire containing to assess study skills. A questionnaire was assessed in six critical study skills which considering text book reading, note taking, memory, test preparation, concentration, and time management. At the conclusion of the inventory, each of these skills assessed based on the manner in which the questions were answered. The permission taken from South Central College Chicago to use "Study Skills Inventory.[2]

Result - The highest need for change in the study skills was found in the area of time management skills with 59.5% followed by 43% in note taking skills, 34% in text book reading skills, 23.5% in concentration skills, 20% in memory skills and 15.5% in test preparation skills. Whereas statistically The p value 0.35 is greater than the 0.05 it shows there is no significant relationship between study skills and percentage obtained among nursing students, $r(198) = 0.067$, $p=0.35$.

Conclusion: This study finds some empirical evidence to the body of knowledge of study skills of Nursing students. It appears that students possess better status in test preparation. The results of this research may be useful for college and university nursing program administrators, educators, tutors, and students.

Keyword –(Study skill Inventory, Nursing Students ,Nursing college, Study skills and Academic performance)

Background and Purpose - There are many changes in student study style specifically when they start college life. Sometimes students find that the methods they used for studying in high school don't always work in college. In some classes, students might find that they are struggling to learn the material, not because they aren't studying, but because they need to study a different way. The time commitment for studying outside of class increases for college students. Students should be studying 1 – 3 hours outside of class for every hour that they are in class. Time management is one of the keys to be successful at college.[1] Study skills is one important factor influencing academic achievement of students.[4] One important component of learning activities is study skills. Various students have various study practices based on their study habits and their interest in subject.[5]

Statement of the problem:

A descriptive study to assess the study skills among nursing students of selected nursing college at Anand district, Gujarat

Objectives of the study:

To assess the study skills of nursing students

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To find out the relationship between study skills and Percentage

Assumptions

The researcher assumed that:-Students completed the study questionnaire accurately and honestly.

Material and Method

Methodology: This research was designed to examine via questionnaire the study skills of nursing students. After completion of the literature review, the researcher identified a gap in the literature in nursing students. very few prior researchers had examined this topic. in this **descriptive cross-sectional study questionnaires** were distributed among all the B.sc Nursing students .

Total 51 questionnaire containing to assess study skills. A questionnaire was assessed in six critical study skills which considering text book reading, note taking, memory, test preparation, concentration, and time management.[2] At the conclusion of the inventory, each of these skills assessed based on the manner in which the questions were answered. The permission taken from South Central College Chicago to use "Study Skills Inventory.

Again, the researcher was interested in the following research questions, Are there significant differences in study behavior between nursing students who differ by age, gender, Family type, number of family member, Family income, stay, Academic score, Any back log?

Data collection An 51-item standardized questionnaire study skill inventory of South Central College Chicago by the researcher was used. The first eight questions were textbook reading in nature .another 9-13 number of questioners were on the base of note taking ,14-21 number of questioners were on memory score ,22 -35 number of questioners were on the base of test preparation score ,36 – 45 number of questioners were on the base of concentration and 46 -51on time management . Questions were carefully administered in all first to final year B.SC. Nursing student. Advice to student that read carefully about each statement and responds as truthfully. By using the five point rating scale, circle the number that best describes their behavior for that particular study skill.

The questions from the study skill questionnaire that were included in the total self-regulated learning score are found. Respondents were asked to respond to each study question using a scale from five to one, stating their almost always or almost never with each statement, with five being "almost always," and one being "almost never ."

The length of time it took students to complete the questionnaire was recorded. It is reported that the range of time to complete the questionnaire was five to 20 minutes.

SAMPLE: Samples were B.sc. Nursing students

SAMPLING TECHNIQUE: Non Probability convenient

SAMPLE SIZE: 200

INCLUSION CRITERIA -Students who have taken admission for B.SC. Nursing programme

EXCLUSION CRITERIA –

Students who are not willing to participate in this study.

Students who have taken admission for M.SC. &G.N.M.Nursing programme

SOURCE OF DATA

The data was collected from the Nursing students

METHODS OF COLLECTING DATA

Study Skills Inventory which is 51 items scale were used to collect the data. Permission was be taken from samples and an inform consent was obtained from the samples.

ANALYSING THE DATA –

The data were analysed using descriptive and inferential statistics.

Descriptive statistics like mean, frequency, percentages and standard deviation were used.

Statistical procedures - Descriptive statistics were used to report demographic data. Frequencies and Percents were used for age, gender, Family type, number of family member, Family income, stay, Academic score,

Any back log?

SECTION A: FINDINGS RELATED TO SOCIO DEMOGRAPHIC VARIABLES

Finding ;- In Demographic Variable 38.5% in Majority of students were in between age group 18-19 years. Similarly 88.5% female Students participant which was highest .In Family type of students where nuclear family 57.5% . Number of members in the family 66% was come under classification of 4-5 members which was Highest.

Family monthly income of students come under 10001 – 30000 Rs which is 37.5%. Students stay regarding 63% stay at home which is majority of percentage. Any back log in exam 97% Students do not have any back log in exam.

SECTION B: FINDINGS RELATED TO STUDY SKILLS EFFECTIVENESS SCORE OF NURSING STUDENTS

This section includes the findings related study skill effectiveness in six areas namely

Text book reading skills, note taking skills, Memory skills, test preparation skills, concentration skills and time management skills

Section B-1: Text book reading skills

Table 01: Text book reading skills assessment scores

	Frequency	Percentage	Mean	Mean %	Median	SD
Score less than 30	68	34	30.58	76.45	31	4.43
Score 30 and above	132	66				

Note: Total number of items iseight and maximum score is 40. Score of less than 30 suggests changes in textbook reading skills

Section B-2: Note taking skills

Table 02: Note taking skills assessment scores

	Frequency	Percentage	Mean	Mean %	Median	SD
Score less than 20	86	43	19.31	77.24	20	3.43
Score 20 and above	114	57				

Note: Total number of items is five and maximum score is 25. Score of less than 20 suggests changes in note taking skills.

Section B-3: Memory skills

Table 03: Memory skills assessment scores

	Frequency	Percentage	Mean	Mean %	Median	SD
Score less than 30	40	20	33.95	75.44	34	5.12
Score 30 and above	160	80				

Note: Total number of items is nine and maximum score is 45. Score of less than 30 suggests changes in memory

skills.

Section B-4: Test preparation skills

Table 04: Test preparation skills assessment scores

	Frequency	Percentage	Mean	Mean %	Median	SD
Score less than 40	31	15.5	47	72.30	47	7.11
Score 40 and above	153	84.5				

Note: Total number of items is thirteen and maximum score is 65. Score of less than 40 suggests changes in test preparation skills.

Section B-5: Concentration skills

Table 05: Concentration skills assessment scores

	Frequency	Percentage	Mean	Mean %	Median	SD
Score less than 35	47	23.5	38.31	76.62	39	5.19
Score 35 and above	153	76.5				

Note: Total number of items is ten and maximum score is 50. Score of less than 35 suggests changes in concentration skills.

Section B-6: Time management skills

Table 06: Time management skills assessment scores

	Frequency	Percentage	Mean	Mean %	Median	SD
Score less than 20	119	59.5	17.94	59.8	18	5.43
Score 20 and above	81	40.5				

Note: Total number of items is six and maximum score is 30. Score of less than 20 suggests changes in time management skills.
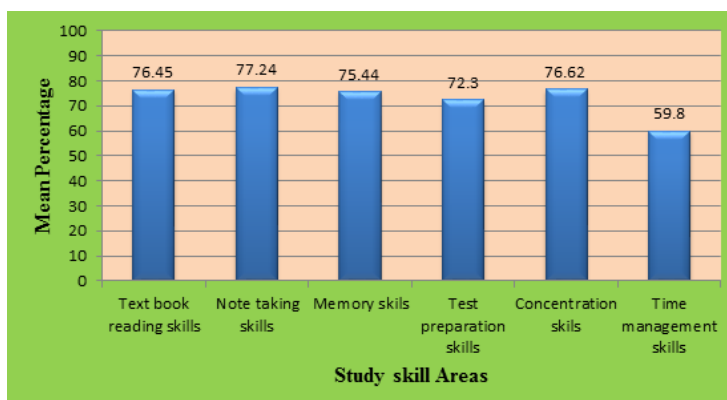
Fig: 1.0: Figure representing the mean percentage of study skills score in different areas

Figure1.0 reveals that the highest mean percentage (77.24%) is found in the area of note taking skills following by 76.62% in concentration sills, 76.455 in text book reading skills, 75.44% in memory skills, 72.3% in test preparation skills and the least mean percentage was observed in the area of time management skills with 59.8%.
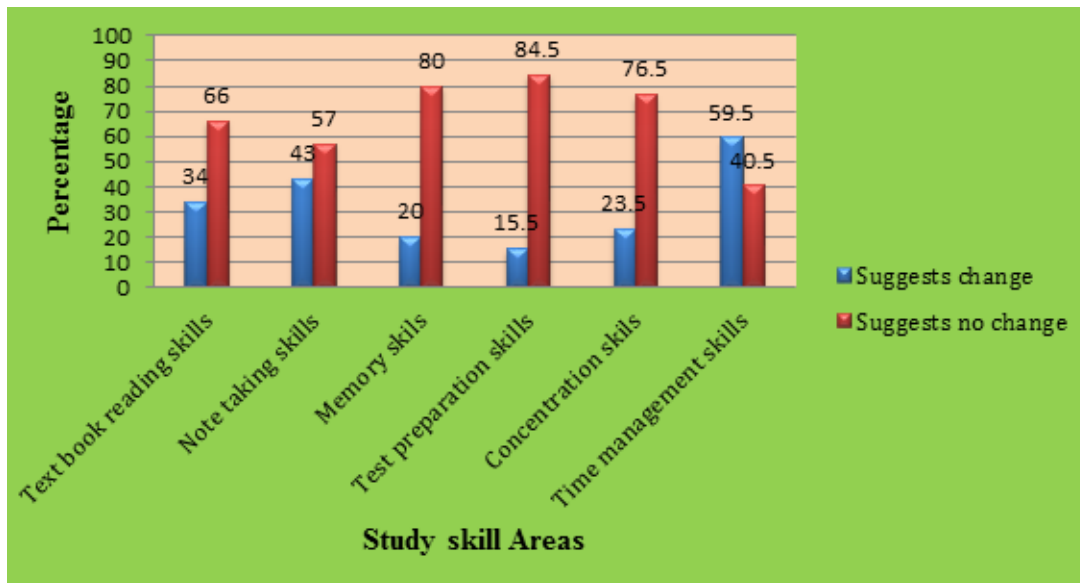
Fig: 2.0: Figure representing the need of change in study skills behaviour of students in different areas

Figure2.0 reveals that the highest need for change in the study skills behaviour was found in the area of time management skills with 59.5% followed by 43% in note taking skills, 34% in text book reading skills, 23.5% in concentration skills, 20% in memory skills and 15.5% in test preparation skills

Section C: Correlation between study skills of nursing students and percentage obtained in pevious exam

Karl Pearson's correlation coefficient method was used to find out the relationship.
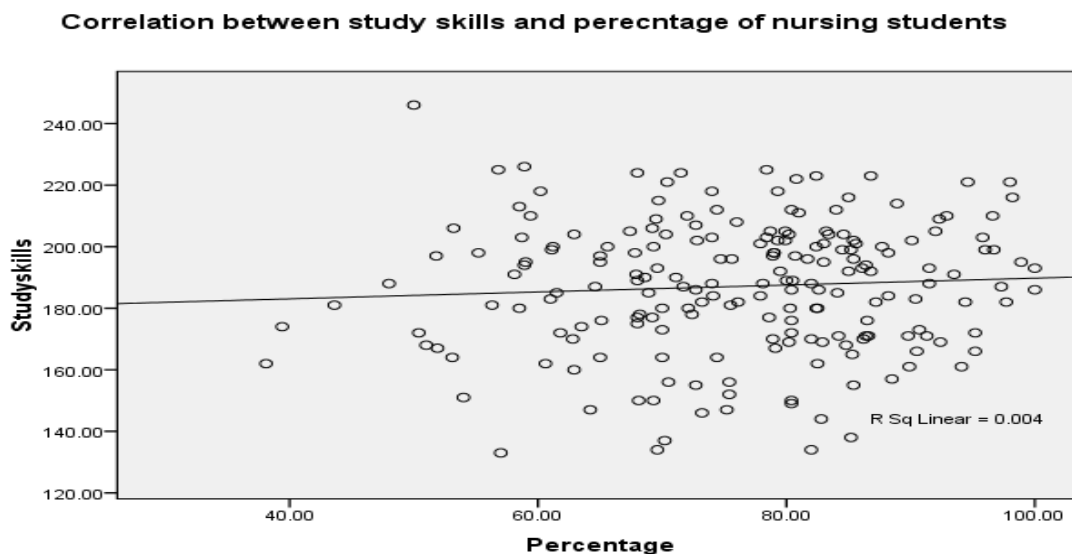
Fig: 3.0: Linear scatter diagram showing correlation between knowledg

The findings shows ($0 < r <1$) the moderately positive correlation between study skills and percentage. Means as the study skills increases the percentage also increases. Whereas statistically The p value 0.35 is greater than the 0.05 it shows there is no significant relationship between study skills and percentage obtained among nursing students, r(198) = 0.067, p=0.35

Result

The highest need for change in the study skills was found in the area of time management skills with 59.5% followed by 43% in note taking skills, 34% in text book reading skills, 23.5% in concentration skills, 20% in memory skills and 15.5% in test preparation skills. Whereas statistically The p value 0.35 is greater than the 0.05 it shows there is no significant relationship between study skills and percentage obtained among nursing students, r(198) = 0.067, p=0.35.

Conclusion

This study finds some empirical evidence to the body of knowledge of study skills of Nursing students. It appears that students possess better status in test preparation. The results of this research may be useful for college and university nursing program administrators, educators, tutors, and students.

Study skills are fundamental to academic competence. Good study skills minimize failure and enable students to take advantage of learning opportunities.[6] Nursing programs are known to be difficult since several science, math, and nursing courses are required of the students. Added to this is the rising cost of postsecondary education which may force many nursing students to work in addition to attending college. Also, many nursing students are non traditional students with family responsibilities. Attrition rates are often high as nursing students struggle with a difficult curriculum and outside pressures.[7]

As knowledge about nursing students and their study skills expands, students may very well benefit not only in their nursing course success, but in college success in general. Institutions may also reap the benefits as retention rates potentially increase. This may also have the added benefit of increasing the pool of qualified nurses entering the profession in a time of a dire nursing shortage.

Conflict of Interest – None of conflict of interest by researcher

Source of Funding- self

Ethical Clearance- Taken from Institutional ethical committee.

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Nursing Students' Awareness and Occurrence of Needle Stick Injury

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Abstract

Needle stick injuries caused by needles or sharps are one of the common accidental health hazards for the health care professionals. The present study is aimed to assess the awareness and occurrence of needle stick injuries among the nursing students. The research approach used was quantitative and the research design used was non experimental descriptive design to achieve the objectives of the study. The study participants were 134 students studying B.Sc Nursing in a selected college, Perinthalmanna. Structured questionnaire to assess the awareness regarding NSI and determine the occurrence of NSI was used to collect the data. The findings of the study indicate that majority of the students (61%) had inadequate awareness. Out of 134 nursing students, 44 students (33%) had experienced NSI; the most common device involved was the needle on the disposable syringe. The findings of the study indicate the need to enhance the awareness of the student nurses regarding NSI, safe practices, post exposure prophylaxis, protocols and guidelines of the institution, universal safety precautions and safe disposal of sharp items through educational interventions at their entry level of clinical practice.

Keywords: *Needle stick injuries, Post exposure prophylaxis, Universal precautions, and Safe disposal of sharps*

Introduction

Needle stick injuries are injuries caused by needles or any sharps that can occur at any time unexpectedly. Needle stick injury is one of the common accidental health hazards for health care professionals and the student nurses are at increased risk due to various factors. Anxiety, fear, increased workload, lack of experience in handling the various tasks in the clinical area, and lack of timely training regarding needle stick injuries and safety practices contributes to the proneness of student nurses to needle stick injuries.

The prevalence of needle stick and sharp injuries are highest among the nurses as 38.4% when compared to other health care workers and needle on the disposable syringe was the most common cause of injury[1]. Avoidable practices like recapping of needles were contributing to the injuries[2]. Injury occurrence was more likely to occur in places such as patient rooms and operating rooms[3]. Due to NSI, Health care workers are at risk of occupational acquisition of blood borne pathogens such as HIV, hepatitis B and C, and other diseases[2]. Knowledge regarding NSI and safe practices at work is essential to protect oneself from untoward consequences of NSI. Hence, the present study is undertaken to assess the awareness and occurrence of needle stick injuries among the nursing students.

Material and Method

Objectives: Assess the nursing students' awareness regarding needle stick injuries

Determine the occurrence of needle stick injuries among the nursing students'

Research approach: Quantitative approach was used to assess the awareness and occurrence of needle stick injuries among the nursing students'.

Research design: Non experimental descriptive research design was used to achieve the objectives of the study.

Population: The target population of the study was the students studying B.Sc Nursing in a selected college of nursing, Malappuram.

Setting: The study was conducted in a selected college of nursing, Perinthalmanna. The annual intake of students for B.Sc Nursing programme was 50.

Sample and sampling technique: The study participants comprised of 134 students studying B.Sc Nursing in a selected college of nursing, Perinthalmanna, Kerala. They were included by complete enumeration method.

Description of the tool:

Section A: Sample characteristics

It consisted of 6 items for obtaining information as their age in years, gender, year studying, Hepatitis B vaccination status, and the number of doses taken.

Section B: Structured questionnaire to assess the awareness regarding needle stick injuries.

It consisted of 20 multiple choice questions regarding needle stick injuries. Each statement had four choices, and among the four choices one was the right option. The total score was 20. The level of awareness was classified as excellent, average and inadequate.

Section C: Structured questionnaire to determine the occurrence of needle stick injuries among nursing students'.

It consisted of 8 items for obtaining informations as experience of needle stick injury, when and how it happened, whether and to whom they reported, device involved with injury, and any post exposure investigations were carried out.

Data collection procedure:

The data was collected after obtaining official permission from the principal, college of nursing. Informed consent was obtained from each study participant after discussing the details of the study and assuring the confidentiality of information. It took about 30 minutes to complete the questionnaire by each participant.

Findings

Table 1: Distribution of Nursing Students according to their characteristics

Characteristics	Categories	Frequency n(134)	Percentage (%)
Age in years	<19	46	35
	20-22	86	64
	>23	02	01
Gender	Female	134	100
Year studying	1st	37	28
	2nd	37	28
	3rd	32	24
	4th	28	20
Course	B.Sc Nursing	134	100
Vaccination	Hepatitis B Vaccine	134	100

Table 1 show that majority of the nursing students 64% n (86) were between 20-22 years of age, and all the nursing students (100%) participated in the study were females. Out of 134 students, 37 (28%) each belonged to first and second year of studies, 32 (24%) in the third year, and 28 (20%) in the fourth year. All the students were doing B.Sc Nursing and had their three doses of Hepatitis vaccination in the beginning of the course itself.

Table 2: Distribution of Nursing Students based on their level of awareness

Parameter	Categories	Frequency n(134)	Percentage (%)
Level of awareness	Excellent	01	01
	Average	51	38
	Inadequate	82	61

Table 2 indicates that majority of the students 61% n (82) has inadequate awareness regarding NSI and 38% n(51) has adequate awareness about NSI.

Table 3: Distribution of Nursing Students based on the occurrence of NSI

Occurrence of NSI	Categories	Frequency n(134)	Percentage (%)
	Yes	44	33
	No	90	67

Table 3 reveals that the out of 134 nursing students, 44 (33%) had experienced NSI and 90 of them (67%) had not experienced NSI.

Table 4: Distribution of Nursing Students (who experienced NSI), according to the characteristics of occurrence of NSI

Characteristics	Categories	Frequency n(44)	Percentage (%)
Year of occurrence	1st	18	41
	2nd	22	50
	3rd	04	09
	4th	-	-
When happened	During recapping	12	27
	Non co-operation of the patient	04	09
	While Preparation of medicine	08	18
	Checking blood glucose	14	32
	During blood sample collection	02	05
	While discarding the biomedical waste	04	09
Whether it was reported	Yes	33	75
	No	11	25
To whom did you report	Teacher	01	02
	Friends	08	18
	Staff nurse on duty	22	50
	Supervisor	02	05
	I did not report	11	25
Posting area in which the incident occurred	Ward	35	80
	ICU	04	09
	Emergency room	03	07
	Labour room	01	02
	OT	01	02

Cont... **Table 4: Distribution of Nursing Students (who experienced NSI), according to the characteristics of occurrence of NSI**

Device involved	Needle on disposable syringe	37	84
	Prefilled syringe	04	09
	Disposable scalpel	01	02
	Other needle	02	05
Blood investigation	Yes	02	05
	No	42	95

Table 4 reveals that out of 44 nursing students with NSI, majority of them 50% n (22) had NSI during their 2nd year of studies, 32% had NSI while checking blood glucose, 75% n (33) stated that they had reported the incident immediately after occurrence, in which 50% had reported to the staff nurse on duty, and the remaining 25% reported to teacher, friends and supervisor. 80% n (35) stated that the incident took place in the ward, 84% n (37) stated that the device involved was the needle on the disposable syringe and only 5% n (2) underwent blood investigation immediately after the incident.

Conclusion

Findings of the study reveal that the awareness regarding needle stick injuries among the student nurses are inadequate. As a health care professional, the student nurses are at increased risk of NSI and its related complications. Hence, it is essential to enhance their awareness regarding NSI, safe practices, post exposure prophylaxis, protocols and guidelines followed in the institution, universal safety precautions, and safe disposal of sharp items. As a preventive strategy, it is essential to provide the educational training at their entry level of clinical practice itself to avoid occurrence of NSI and its associated risks in future.

Conflict of Interest: None.

Source of Funding: None.

Ethical Clearance: Obtained from institutional human ethical committee.

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Effectiveness of Video Assisted Teaching Module Regarding Knowledge of Breast Self-Examination among Girls

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Abstract

Breast cancer is the most common cause of death among women worldwide. Breast self-exam (BSE) is considered an important public health procedure; primary prevention should be given the highest priority in the fight against cancer. Pre-experimental one group pre-test post-test research design was adopted. The knowledge score of ANM 1st year Students in post-test shows majority i.e., 95.8 percent acquired above average knowledge while, 4.2 percent had average knowledge and none of them had below average knowledge. The calculated value of paired t-test is 25.846 is greater than the tabulated value of paired t-test with 69 degree of freedom i.e.2. It shows that the VATM was effective.

Key word: *Breast self exam, Video-assisted teaching module, effectiveness, Knowledge*

Introduction

The concept of breast self-examination (BSE) was promoted in the 1950s by Cushman Haagensen, a breast surgeon from the United States of America (USA) at the time when mammography was yet to be developed, and many women were diagnosed when the tumor had become large and inoperable. Haagensen hoped that encouraging breast self-examination would help catch tumors earlier when they were still treatable, and when amenable to surgical excision without the need for the more disfiguring operation of mastectomy.[1] Globally, about 10 million people are diagnosed with cancer and more than 6 million die of cancer every year[2].

The incidence, morality and survival rate in different part of the world vary from 4 to 10 fold. Global caner statistics indicate that breast cancer incidence is rising at a faster rate in populations of developing countries [3].

A study was conducted by Saurabh Rambiharilal Shrivastava et. al in 2013 for early detection of breast cancer. After two month of self detection and diagnostic test, 0.27% diagnosed as carcinoma of breast and 1.3% as fibroademona[4].

Arundhati and Sarita conducted a survey in Nainital and adjoining districts of Uttarakhand resulted that breast cancer was most prevalent i.e. 22.29% after cervical cancer i.e. 14.86[5].

Material and Method

The study was conducted in state nursing school and combined institute of medical sciences and research, Uttarakhand. The sample size is 70 ANM students and convenient sampling technique was adopted to select the study sample. The investigator collected data within stipulated time; a brief explanation was given explaining the purpose of the study with their consent so as to gain their co operation during the process of data collection. Using the structured questionnaire, [section –A demographic data of student were collected and section-B structured knowledge questionnaire was used to assess the knowledge related to breast self examination. Pretest and post test method was used and posttest was done after 7 days of intervention. The findings were analyzed using the descriptive and inferential statistics.

Findings

Finding related to effectiveness of video assisted

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teaching module on knowledge regarding breast self examination among ANM students.

Table 1: Finding on knowledge score of ANM students regarding BSE

Knowledge score (%)	Pre-test		Post-test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Below average (<35%)	18	25.7	0	0
Average (35-60%)	47	67.1	03	4.2
Above average (>60%)	5	7.1	67	95.8

The above data indicates that 25.7 percentages had below average and 67.1 percentages had average knowledge. In post test majority 95.8 percentage acquired above average knowledge while 4.2 percentage had average knowledge.

Table 2: The mean and standard deviation of pre-test and post-test knowledge score among ANM students on BSE

Test	Minimum	Maximum	Mean	SD
Pre-test knowledge scores	6	18	12.43	2.867
Post-test knowledge scores	17	27	22.39	2.241

Difference between total pre-test and total post-test knowledge score

Mean	SD	t-Value	df	p-Value
9.957	3.223	25.846*	69	.001*

The above data indicates that pretest knowledge score is 12.43 with a standard deviation 2.863 has increased to 22.39 with standard deviation of 2.241. the calculated value of 't' is 25.846 which is greater than tabulated value at the level of 0.05 with df of 6 i.e. 2 and 'p' value i.e. .001 is less than 0.05. it shows VATM was highly effective.

Discussion

This chapter deals with the discussion in accordance with the objectives of the study and hypothesis. The present study findings indicate that VATM is an effective method to teach BSE. In post test result 95.8 percent acquired above average knowledge while 4.2 percent had average knowledge and none of them had below average knowledge.

Conclusion

Globally breast cancer is a big health issue among women. BSE plays a major role in early detection and prevention or treatment of breast cancer. Video assisted teaching module regarding breast self examination to ANM 1st year student was found effective as their knowledge level were improved significantly. It is therefore recommended that measures should be taken to promote awareness about breast self examination and develop a thought of regular breast self examination.

Ethical Clearance: Formal permission was obtained from Ethical committee.

Source of Funding: Self

Conflict of Interest: Nil

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Effectiveness of Green Cabbage Leaves (GCL) Vs Hot water bag (HWB) application on Breast Engorgement in Postnatal Mothers

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Abstract

"A Quasi Experimental study to compare the effectiveness of GCL and HWB application on Breast Engorgement in Postnatal Mothers in a selected Hospital of Dehradun, Uttarakhand".

Methodology: Quasi Experimental approach with Time Series Design was used as research design for the study. Sixty three postnatal mothers (32 in experimental group and 31 in control group) who fulfilled inclusion criteria were selected as sample consecutively and they were assigned randomly to experimental group and control group respectively. The data were collected by using Six point Engorgement scale and Numeric Pain scale. Intervention was given in the form of Green cabbage leave application in experimental group whereas, Hot water bag application in control group for 20 minutes in six interval of time.

Results: Majority of Postnatal mothers (94%) in GCL group and (97%) in Hot Water Bag group were initiated breast feeding after 24 hour of delivery. Majority of the mothers (94 %) had undergone LSCS in GCLand (97%) in the HWB group. The homogeneity was checked in both the group by using chi square test, fisher's exact test and 't' test. It was found that except the educational status, the group were homogeneous in term of Age, Parity, Type of Delivery, Initiation of Breast Feeding, Frequency of Feeding, Duration of Breast Feeding, and Postnatal Day of engorgement. ANOVA was used for analysis. It was showed that from baseline to 20 minutes, mean engorgement and pain score in both the groups were same and then after six hours to 36 hours the mean and SD was decreased in both groups.

Conclusion: Findings Concluded that GCL are more effective than HWB in reducing breast engorgement whereas in Pain, there was reduction in both the groups gradually.

Keywords: *Breast engorgement, Pain, Postnatal mothers, Green Cabbage Leaves (GCL), Hot water bag (HWB).*

Introduction

Childbirth is a life changing event which is wonderful and gives joyful experience but it can also be difficult period bringing with it, new problems for suffering. In the most extreme case the mother, or the baby or both may have health problem either major or minor laid down in the postnatal period. The sufferings related to childbirth is a significant portion of the world's overall tally of ill and death.[1]The Best gift that a mother can give to her newborn child is breast milk. Perfectly formulated for the baby and full of wonderful antibodies, it is far superior to any other formula feeding. This has great benefits for the baby not only it is healthier but the action of feeding the child is a moment of love in which the baby learns to bond, smell, and cares with mother as she gives nourishment and affection.[2]

A newborn baby has only three demands: they are warmth in the hands of its mother, food from her breasts, and security in the knowledge of her presence.

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Breast feeding satisfies all three demands.[3] Though breastfeeding is a natural way to bond with and nourish babies; it often doesn't come without challenges. Mothers who are interested in breastfeeding or who are having trouble with establishing a solid breastfeeding relationship with their newborns often wonder where to turn for help and even contemplate giving up on nursing their babies out of frustration or fear[4].

In July 2010, WHO had reported that every infant and child has the right to good nutrition according to the Convention on the Rights of the Child. Globally, 30% (or 186 million) of under five children are estimated to be stunted and 18% (or 115 million) have low weight-for-height, mostly as a consequence of poor feeding and repeated infections, while 43 million are overweight. WHO and UNICEF recommended However many infants and children do not receive optimal feeding; for example, on average only around 35% infants of 0 to 6 months old are exclusively breastfed. Early initiation of breastfeeding, within one hour of birth, protects the newborn from acquiring infections and reduces newborn mortality. The risk of mortality due to diarrhoea and other infections can increase in infants who are either partially breastfed or not breastfed at all.[5]

Warm compress is a very safe and provide pain relief and easy express the milk without medication and don't have to be concerned about side-effects. Heat therapy is the application of either moist or dry heat to the skin. Heat can be either superficial or deep. Superficial heat can be applied using a warm shower, hot packs, hot moist suppress or warm wax (paraffin) or hot water bottle. [6]

A study was conducted in New Delhi to compare the effect of cabbage leaves and hot and cold compress in the treatment of breast engorgement. A sample of 60 mothers participated in the study, 30 in the experimental group and 30 in the control group. The control group received alternate hot and cold compress and the experimental group received cold cabbage leaves application. The pre and post-treatment scores of breast engorgement and pain were recorded. The study result revealed that, both treatments were effective in decreasing breast engorgement whereas, hot and cold compresses were found to be more effective than cold cabbage leaves [7]

Methodology

The study was conducted in a Postnatal ward of obstetric and gynaecological department. 63 mothers who were having breast engorgement as sample which were selected through consecutive sampling technique by assessing Six point Engorgement scale, Numeric Pain scale.

Investigator taken 63postnatal mothers, thirty two in experimental group and thirty one in control group were selected as the subject of the study. The data was collected from 28th Jan to 10th March 2012 at selected Hospital. In the first phase, subjects who fulfilled inclusion criteria were selected consecutively and randomly assigned to either Experimental or Control group. Informed written consent was obtained from participants of the study after explaining the purpose of the study.

Mother in experimental group was asses with Engorgement scale, Numeric Pain scale. The mother who were in experimental group the room temperature Green cabbage leaves was applied for 15 mints in six time for the six hour gap interval for two days duration .Affter each intervention of room temperature Green cabbage leave post assessment was done with Engorgement scale, Numeric Pain scale after each intervention

Mother in control group were also assed with Engorgement scale, Numeric Pain scale . The mother who were in Control group the hot water bag was applied for 15 mints in six time for the six hour gap interval for two days duration .After each intervention hot water bag of post assessment was done with Engorgement scale, Numeric Pain scale after each intervention.

Data Analysis

Sociodemographic characteristics were described using frequency and percentage. Trial version of Statistical Package for social science 16.0 was used to analyze the data. Inferential statistics involved comparison of both group by independent t test , ANOVA, Chi–square test and Spearman co-relation test.

Results

Sociodemographic characteristic of study participants are described in Table 1. There was no significant difference between control group and experimental group in terms of sociodemographic characteristics.

Table 1. Sociodemographic characteristics of study participants (N=63)

Characteristic	Experimental Group		Control Group		Total		Chi Square &'t' Value	p value
	f	%	f	%	f	%		
Age in years 20-30 31-40	30 02	94 06	27 04	87 13	57 06	90 10	1.98	0.056
Parity Primipara Multi para Grandmultipara	19 12 01	59 38 03	15 16 0	48 52 0	34 28 01	54 44 02	2.027	0.363
Type of delivery NVD LSCS	02 30	06 94	01 30	03 97	03 60	05 95	2.027	0.363
Educational status No formal education Primary Secondary Above secondary	07 10 09 06	22 31 28 19	02 08 04 17	06 26 13 55	09 18 13 23	14 29 21 36	11.31	0.003
Initiation of breast feeding Within half an hour After 24 hour	02 30	06 94	01 30	03 97	03 60	05 95	0.001	0.974
Duration of breast feeding 15-20minutes on both breast 15-20minutes on one breast less than 15 minutes	22 04 06	69 12 19	22 06 03	71 19 10	44 10 09	70 16 14	1.384	0.50
Frequency of breast feeding On demand Every two hourly Specific time(within 1 hr)	17 09 06	53 28 19	18 08 05	58 26 16	35 17 11	56 27 17	0.162	0.92
Postnatal day of engorgement 2- 4 days 5-7days	28 04	87 13	27 04	87 13	55 08	87 13	0.002	0.96

Analysis of effectiveness of GCL Vs HWB in relieving breast engorgement and Pain in Experimental and Control group.

Table No.2: Analysis of effectiveness of GCL Vs HWB in relieving breast engorgement in Experimental and Control group.

N=63

GROUPS	Engorgement score (Mean ± SD)							p value (within the group)
	Baseline	After 20 min	After 6hrs	After 12hrs	After 24hrs	After 30hrs	After 36hrs	
Experimental Group (GCL)	5.59 ± 0.49	5.59 ± 0.49	5.31 ± 0.64	4.44 ± 0.56	3.78 ± 0.65	3.13 ± 0.33	3.03 ± 0.18	0.000
Control Group (HWB)	5.65 ± 0.48	5.65 ± 0.48	5.64 ± 0.48	5.06 ± 0.62	4.64 ± 0.48	4.51 ± 0.50	4.19 ± 0.54	0.000

Table No.2 shows the baseline and after 20 minutes mean Engorgement score in both the groups were same i.e 5.59 ±0.49 in GCL group and 5.65±0.48 in HWB group. After 6 hrs, the mean and SD was 5.31± 0.64 in GCL Group and in HWB group 5.64 ± 0.48. After 12hrs hrs, 24hrs 30hrs, 36hrs the mean and SD was decreasing in both the GCL Group and in HWB group.

It shows that there was decrease after each interval and there was significant difference between the mean breast engorgement score in GCL and HWB group and also shows that there was significant difference within the groups. Hence the researcher rejects the null hypothesis and accepts alternative hypothesis.
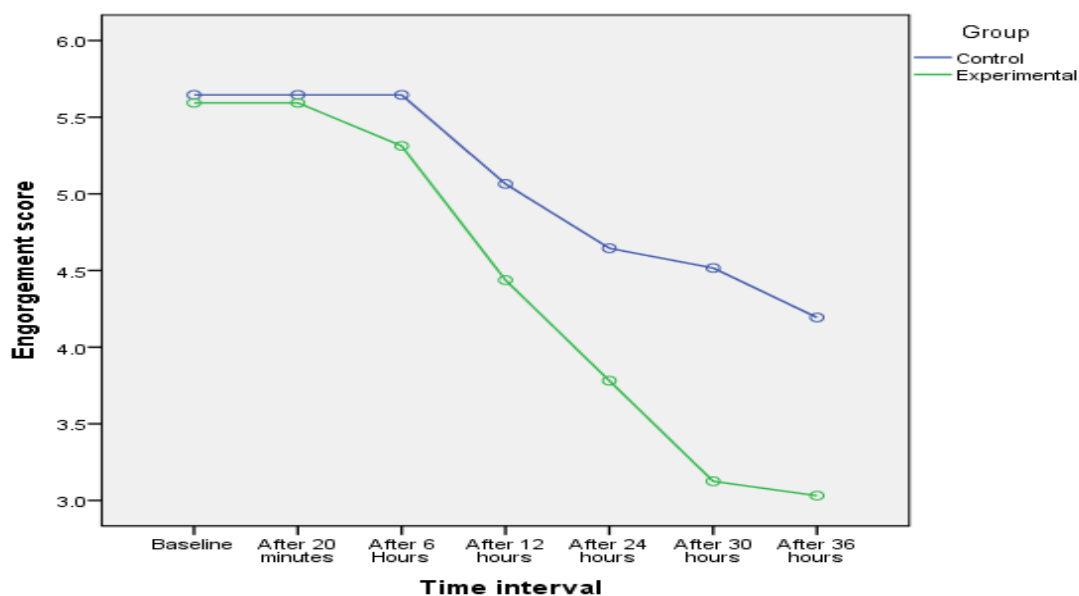
Figure No.1: Line graph representation of estimated marginal mean of engorgement score of GCL and HWB group
N=63

Figure No.1 shows line diagram showed that the mean initial engorgement score for both the groups from baseline to after 20 minutes were same. Then there was steadily decline in both the groups throughout six intervals of time. The decline of engorgement score of GCL group were from Score 6 to3 whereas, the decline in HWB group were score 6-4. The result showed that there was rapid decrease in engorgement level in the GCL group than the HWB group.

Table No.3: Analysis of effectiveness of GCL Vs HWB on relieving Pain in Experimental and Control group. N=63

GROUPS	Pain score (Mean ± SD)							p value (within the group)
	Baseline	After 20min	After 6hrs	After 12hrs	After 24hrs	After 30hrs	After 36hrs	
Experimental Group (GCL)	6.218 ± 1.03	6.218 ± 1.03	5.37 ± 1.00	4.53 ± 0.94	3.75 ± 0.74	2.78 ± 0.65	2.25 ± 0.43	0.000
Control Group (HWB)	6.19 ± 0.90	6.19 ± 0.90	5.38 ± 0.80	4.61 ± 0.71	3.87 ± 0.71	3.06 ± 0.62	2.41 ± 0.50	0.000

Table 3 shows the baseline and after 20 minutes mean pain score in both the groups were same i.e 6.218±1.03 in GCL group and 6.19±0.90 in HWB group. After 6 hrs, the mean and SD was 5.37±1.00 in GCL Group and in HWB group 5.38±0.80. After 12hrs hrs, 24hrs 30hrs, 36hrs the mean and SD was decreasing in both the GCL Group and in HWB group. Hence the researcher accepted alternative hypothesis which indicates that the reduction in engorgement was not by chance but because of the intervention.

N=63
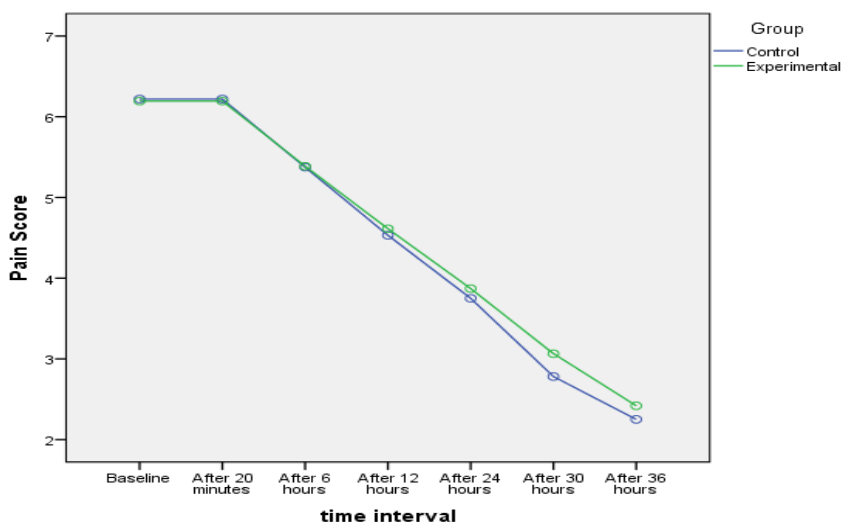
Figure No.2: Line graph representation of estimated marginal mean of pain between experimental and control group in the pain scale.

Figure No.2 shows line diagram showed that the mean initial pain score for both the groups from baseline to after 20 minutes were same. Then there was steadily decline in both the groups throughout six intervals of time. The result showed that there was equal reduction in pain score in the GCL group and the HWB group.

Discussion

Beast engorgement after delivery is the common breast problem in this era due to maternal and child ill health . The implication of Green cabbage leaves helps in quick relieve of engorgement without any side effect to mother and newborn.

Conclusion

This study showed that GCL are more effective than HWB in relieving breast engorgement among the postnatal mothers. GCL as well as HWB application both can be used in relieving pain due to breast engorgement**.** The Green cabbage leaves can be offered to every mother who have engorged breast as treatment until and unless they have allergy to cabbage leaves.

Conflict of Interest –Nil

Source of Funding- Self

Ethical Clearance –Himaliyan College of nursing

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Assessment of Psychological Distress among B.Sc Nursing Students at SRM College of Nursing

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Abstract

Introduction: Psychological distress has been widely used as an indicator of mental health. Psychological distress is a term used, both by some mental health practitioners and users of mental health services, to describe a range of symptoms and experiences of a person̈'s internal life that are commonly held to be troubling, confusing or out of the ordinary.

Objectives : The objectives were (i) to assess the level of psychological distress among the nursing students ii) to find out the association between level of psychological distress among the nursing students with their socio demographic variables.

Methodology: The quantitative research approach and Non-Experimental descriptive design was adopted. The study was conducted with 181 samples of nursing students using Non probability convenient sampling technique. The study was conducted at SRM College of Nursing, Kattankulathur, Kancheepuram district. The data was analysed and interpreted based on the objectives using descriptive and inferential statistics.

Results: The results revealed that In B.Sc (N) I year, majority 27 (61%) of then had evidence of moderate psychological distress 14 (32%) of them had better mental health and 3 (7%) of them had severe problems with psychological distress. Among B.Sc (N) II year students, majority 29 (61%) of them had better mental health and 18 (39%) of then had evidence of moderate psychological distress. Among B.Sc (N) III year students, the majority 34 (77%) of them had better mental health and 10 (23%) had evidence of moderate psychological distress. Among B.Sc (N) IV year students, majority 40 (87%) of them had better mental health and only 6 (13%) had evidence of moderate psychological distress .

Conclusion: The results of the study concluded that psychological distress was increased in first year nursing students which was greatly reduced in final year nursing students. This study shows results that the imperative need to understand about level of psychological distress among nursing students.

Keywords: psychological distress, mental health

Introduction

Health is understood to be not just the absence of illness; its definition implies a comprehensive and

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integrative understanding of people that includes many interrelated social, psychological and physical factors. Likewise, the World Health Organization proposes that "the promotion of mental health and the prevention of mental disorders can help to maintain or improve health, have a positive effect on quality of life and can be economically beneficial". The availability of mental health records and information systems is necessary for conducting research and studies on mental health promotion and prevention in college students, and institutions of higher education have made a commitment

to this process for some time[1].

During the academic year, nursing students face many risk situations that can alter their academic achievement and cause them psychological distress. The most common sources of this distress are their workload and problems associated with their studies, fear of unknown situations and difficulties during their clinical practices. In addition, students must embody certain personal factors (assertiveness, being able to say no, confrontation, self-esteem and social relationships) that involve multiple and significant adaptations that they must adequately and immediately make during their training period. If these risks are not recognized, they can negatively affect the student''s health, learning or academic self-efficacy, satisfaction with their studies and, consequently, the quality of the attention they offer patients during clinical practice[2].

Psychological distress has been widely used as an indicator of mental health. Researchers such as **Horwitz** consider it a transient emotional response to stress, which if untreated is pathological resulting in depression. Others such as **Wheaton** argue that psychological distress is a relatively stable condition which impacts on social functioning and day-to-day living. There is general consensus in the literature that psychological distress is an emotional state characterised by symptoms of depression and anxiety. The authors concur with Horowitz that psychological distress if left untreated can have deleterious impact upon mental health and wellbeing[3].

Psychological distress is important from a health promotion/illness prevention perspective because of its links with risk behaviours and physical illness in higher education students and its propensity to precede more serious mental health disorders .It is also of concern to education providers because of its negative impact on student learning[4].

The existence of psychological distress has been recognized for thousands of years. For example, the book of job illustrates a classic case of psychologically distressed mam, he lost interest in things he used to like doing, became hopeless, withdrawn, self-blaming, self-depreciating and had sleep disturbance**, Kovacs** and **Beck (1978)** states that even 3,900 years old Egyptian manuscript provides an accurate picture of the distressed person as pessimistic, his losing faith in others, unable

to carry out the everyday tasks of life and his serious consideration of suicide. These historical descriptions are congruent with some of the present accounts of the phenomenon of psychological distress[5].

Understanding of psychological distress has been controversial for many years. The major dispute among students of psychological distress has been over the meaning of the concept, and about what actually is meant by the assertion that a person is psychologically distressed **(Torkington, 1991)** [6].

DivyaMerciline and O.S. Ravindran (2013) conducted a study on personality characteristics and psychological distress among nursing students in Sri Ramachandra University, chennai to find out the personality characteristics and to identify the presence of depression, anxiety and stress among undergraduate nursing students of both first and final year. The sample for the study consisted of 100 subjects (16 males and 84 females). They were assessed by the following tools: General Health Questionnaire (GHQ-12), NEO Five Factor Inventory (NEO-FFI), and Depression Anxiety and Stress Questionnaire (DASS). Results were discussed using percentages and t-test. Results indicated that the first year students have experienced higher level of distress than the final year students[7].

Materials and Method

The study was conducted in SRM college of Nursing, Kattankulathur. The sample size was 181 students and Non probability convenient sampling technique was adopted. The investigator collected the data within the stipulated time; a brief explanation was given explaining the purpose of the study with their consent so as to gain their co operation during the process of data collection. Demographic data of the students were collected by Using the structured questionnaire and General Health Questionnaire (GHQ) was used to assess psychological distress among nursing students. The findings were analyzed using the descriptive and inferential statistics.

Ethical Considerations

The research was approved by research committee of SRM College of Nursing, SRM University, Kattankulathur. Permission was obtained from the Dean, SRM College of Nursing. Informed consent was obtained from the study participants, after explaining the

nature and duration of the study. Assurance was given to the individual that report will be kept confidential.

Results

Table: 1: Frequency and percentage distribution of demographic variables of B.Sc Nursing students

(N=181)

S.No.	Demographic Variables		No. of respondents (n)	Percentage distribution (%)
1	Age	< 20 Years	100	55.2
		21-23 Years	58	32.0
		> 23 Years	23	12.7
2	Gender	Male	10	5.5
		Female	171	94.5
3	Year of Study	B.Sc N I year	44	24.3
		B.Sc N II year	47	26.0
		B.Sc N III year	44	24.3
		B.Sc N IV year	46	25.4
4	Educational Status of Parents	Primary School	34	18.8
		High School	70	38.7
		College	45	24.9
		No Formal Education	18	9.9
		Others	14	7.7
5	Occupation of Parents	Social Worker	41	22.7
		Business	46	25.4
		Painter	6	3.3
		Government Worker	20	11.0
		Private Worker	68	37.6

The data indicates that, with respect to the age group ,majority of nursing students 100 (55%) were below 20 years and 23 (13%) of them were more than 23 years. With respect to gender, majority of them 171 (95%) were female and only 10 (6%) were male. With respect to year of study, the majority of them 47 (26%) were studying B.Sc Nursing II year and 44 (24%) were studying B.Sc Nursing I year & B.Sc Nursing III year. With respect to educational status of parents, majority of them 70 (39%) has studied up to High school. Considering the occupational status, majority of them 68 (38%) were private workers and 6 (3%) of them were painter.

Table 2: Frequency and percentage distribution of level of psychological distress among B.Sc Nursing I year students   (N=44)

S.No	Level of Psychological Distress	No.of Respondents (n)	Percentage distribution (%)
1	Better mental health	14	32
2	Evidence of moderate psychological distress	27	61
3	Severe problems with psychological distress	3	7

Table 2 revealed that the majority 27 (61%) of them had evidence of moderate level of psychological distress 14 (32%) of them had better mental health and 3 (7%) of them had severe problems with psychological distress.

Table 3: Frequency and percentage distribution of level of psychological distress among B.Sc Nursing II year students   (N=47)

S.No	Level of Psychological Distress	No.of Respondents (n)	Percentage distribution (%)
1	Better mental health	29	61
2	Evidence of moderate psychological distress	18	39
3	Severe problems with psychological distress	-	-

Table 3 revealed that the majority 29 (61%) of them had evidence of Better mental health 18 (39%) of them had Evidence of moderate psychological distress.

Table: 4 Frequency and percentage distribution of level of psychological distress among B.Sc Nursing III year students   (N=44)

S.No	Level of Psychological Distress	No.of Respondents (n)	Percentage %
1	Better mental health	34	77
2	Evidence of moderate psychological distress	10	23
3	Severe problems with psychological distress	-	-

Table 4 showed that the majority 34 (77%) of them had evidence of Better mental health only 10 (23%) of them had Evidence of moderate psychological distress.

Table: 5 Frequency and percentage distribution of level of psychological distress among B.Sc Nursing IV year students　　　　　　　　　　　　**(N=46)**

S.No	Level of Psychological Distress	No.of Respondents (n)	Percentage %
1	Better mental health	40	87
2	Evidence of moderate psychological distress	6	13
3	Severe problems with psychological distress	-	-

Table 5 depicted that the majority 40 (87%) of them had evidence of Better mental health only 6 (13%) of them had Evidence of moderate psychological distress.

Discussion

Psychological distress is a major problem of present era especially for adolescence. It is true to emphasize that with advancement of science and technology everyone wants to move forward and reach on the peak of his/her success, complete others and live more luxurious life for which they struggle round „o‟ clock. As a result they experienced high level of stress which may have adverse impact on their emotional, physiological, cognitive, and behavioural state. Individuals want to grow or develop and want to become perfect, they set goals about their future, and face a number of problems like academic, financial, interpersonal, and parental pressure etc. in fulfilling their goals. Therefore there is a need to increase level of self-efficacy, enhance perfection in work and develop positive attitudes for better fulfilment of goal and achievement. When individuals fail to achieve their goals due to low level of self-efficacy, maladaptive perfectionism or pessimistic attribution style, and or either curb by family or society, they experience high level of stress which lead to psychological distress and play an important role in development of different types of psychological disorders, such as anxiety, depression, mood disorders or various physical problems like cancer, heart attack, and migraines etc. Therefore, the present research is aimed to assess the psychological distress among adolescents students.[8]

The present study results showed that , In B.Sc(N) I year, majority of 27 (61%) of them had evidence of moderate level of psychological distress 14 (32%) of them had better mental health and 3 (7%) of them had severe problems with psychological distress. In B.Sc(N) II Year, majority 29 (61%) of them had evidence of Better mental health , 18 (39%) of them had Evidence of moderate psychological distress. In B.Sc(N) III Year, majority 34 (77%) of them had evidence of Better mental health only 10 (23%) of them had Evidence of moderate psychological distress. In final year, majority 40 (87%) of them had evidence of Better mental health only 6 (13%) of them had Evidence of moderate psychological distress.

This study finding was supported by the study done by **Ana Maria Vazuez-Casares(2014)** a conducted study on psychological distress health sciences college students and its relationship with academic engagement. To determine the prevalence of psychological distress and its relationship with academic engagement (absorption, dedication and vigor), sex and degree among students from four public universities A non-experimental, comparative correlational, quantitative investigation without intervention. Study population: 1840 Nursing and physical therapy students. The data collection tool used was a questionnaire A prevalence of psychological distress was found to be 32.2%.[9]

Conclusion

The present study assessed the psychological distress among nursing students in SRM College of nursing, Kattankulathur. The results of the study concluded that psychological distress was increased in first year nursing students which was greatly reduced in final year nursing students. This study shows results that the imperative need to understand about level of psychological distress among nursing students.

Implications

Nurses can provide more consideration to the First year nursing students and give more care and support for them.

As a nurse researcher, promote more research on psychological distress among nursing students.

Disseminate the findings of the research through conferences and seminars and publishing those researches in nursing journals.

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Nursing Students' Perception and Practices Related to Academic Integrity

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Abstract

Background: Academic Integrity is considered as a core value in any educational system. Research on academic integrity has identified that the essential knowledge not gained in the classroom can negatively reflect in patient care.

Objectives*: The purpose of the study was to explore the perceptions, practices and factors facilitating and inhibiting academic integrity among undergraduate nursing students.

Design: A qualitative method was adopted to explore the perception and practices related to academic integrity using anonymous survey.

Results: The students were knowledgeable about academic integrity and its impact on clinical practice. The students had disclosed various types of academic dishonesty they have witnessed and listed the possible factors which had contributed to it.

Conclusion*: Recommendations for nurse educators include creating a culture of academic integrity among students and providing an academic atmosphere to attenuate opportunities for academic dishonesty.

***Keywords:** Academic Integrity, Academic Dishonesty, Perceptions, Practices and Factors.*

Introduction

The International Center for Academic Integrity (1992) defines Academic Integrity as a commitment to five fundamental values: Honesty, trust, fairness, respect and responsibility [1].The founding father of the term "Academic Integrity" and "The International Center for Academic Integrity" is Professor Donald L McCabe. Academic Integrity should form the essence of any education environment. Nursing, a reputed profession, upholds high moral standards. Lack of integrity in the classroom can compromise acquisition of professional knowledge and skills. Ethical professionalism in practice is possible only if integrity is practiced in academia.

Exploring student perceptions can help nursing faculty to facilitate Academic Integrity and prevent academic dishonesty.In a study exploring the perceptions of Academic Integrity on nursing students, students pinpointed the central characteristic of someone with Academic Integrity as trustworthiness. They also expressed thatAcademic Integrity enhanced professionalism; lack of knowledge resulting from low integrity put patients' livesat risk[2].

Students generally have an understanding about Academic Integrity. A study on medical students and interns on Academic Integrity revealed that majority (93.2%) considered educational misconduct is wrong and 88.6% answered that they would not engage in it[3].

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However, studies show that many students invariably engage in dishonest activities in academia. A study on Academic dishonesty among undergraduates from selected private medical schools in India found that all participants (166) were involved in atleast one act of academic dishonesty[4].

Academically dishonest nursing students are more likely to commit dishonest acts in clinical practice. A study conducted on 336 nursing students' engagement in academic dishonesty, revealed a significant positive relationship between the engagement in academic dishonesty in the class room setting and the engagement in academic dishonesty in the clinical setting [5].

There are several factors which can lead students to commit academic dishonesty. A literature review on academic dishonesty in schools of nursing has mentioned that there are individual factors, contextual factors and students' attitudes which contribute towards students' decision to cheat[6].

Another study exploring academic integrity among 550 nursing students revealed that majority (88%) admitted tohave committed at least one form of academic dishonesty. In the same study they discovered the factors that influenced academic dishonesty, which included gender, pressure to succeed academically (84%),limited time available to study(74%),fear of losing status among peers(71%) and the impact of successful cheating (71%) [7].

The current study findings will increase awareness of academic dishonesty andfoster a learning environment where academic integrity is highly valued.

Materials and Method

A qualitative method was adopted to explore the perception and practices related to academic integrity among undergraduate nursing students. Data was collected through an URL survey link in the students' e-learning site.

Participants and Recruitment

Undergraduate (UG) nursing students from a private Nursing College in India participated in the anonymous survey. Ten students from the2nd, 3rd&4th year of BSc nursing and 2nd& 3rd of GNM nursing programs,who were interested to participate, were included in the survey. First year students were excluded since their exposure to academic assignments and clinical postings were lesser. The total sample size was 50 students. Due to the sensitive nature of the topic, anonymous open-ended questionnaire survey which asked for narrative writing from students was chosen, which allowed the students to express their honest responses freely.

Tools and Procedures

After obtaining Institutional Review Board approval, an URL link was created in the student's e-learning site which had open-ended trigger questions related to Academic Integrity. The questions were carefully reviewed and approved by research experts. 50 students participated in the survey. These students received their log-in ID from the e-learning co-ordinators who were not part of the study and created their own passwords to participate in the survey. An information sheet with the study details, including aim of the study, participant's role and confidentiality was provided and explained to each student. After they agreed to participate, written consent was obtained. The students used the survey link to access the open-ended questions. After filling information about their class and programme of study, students were led to a page with nine open-ended trigger questions which aimed to gather data about their perception of Academic Integrity, examples of Academic Integrity and dishonesty, influence of Academic Integrity on patient care, any witnessed behaviours of academic dishonesty, factors inhibiting and contributing to Academic Integrity and importance of Academic Integrity among classmates.Complete anonymity was maintained throughout the study.

Data Analysis

Content analysis was done for the retrieved survey data using coding, categorizing and memoing.

Results

The responses of the 50 UG students who participated were critically analysed and three broad themes were identified:

Discernment of students about Academic Integrity

Academic Integrity and Patient care outcomes.

Facilitating and Inhibiting factors of Academic Integrity

Discernment of students about Academic integrity

This theme was identified from the responses of trigger questions 1, 2, 3 and 5.

The most common descriptions of academic integrity by students were "being honest and truthful in every aspect of academics", "being faithful to academic activities" and " follow ethics of education".

The students grouped the examples of academic integrity as related to classroom and clinical practice. The most commonclassroom related examples were "not copying and being truthful in examinations" "writing assignments with one's own effort and with full dedication". The common clinical related examples were "following principles and no shortcuts in care of patients even in the absence of supervisor" and "truthful documentation". Few students mentioned "doing procedures and getting signatures" asexamples.

The students' response for examples of academic dishonesty included both classroom and clinical related behaviours. The most common academic dishonesty behaviour at classroom were "copying in exams", "copying assignments", "plagiarism" and "helping friends during tests". One student mentioned "taking sick leave on a test date while faking sickness". The common examples related to clinicalpractice were "documenting without giving care", "faking patient details in assignments and care studies" and "in front of madam gives good patient care to get appreciation and high internal marks".

Students also revealed the various academic dishonesty behaviours they had witnessed in classroom and clinical areas. Commonest disclosures were copying in exams, copying assignments, helping others during tests/examinations, revealing questions of OSCE practicals to other students who were yet to take the examination, faking details of patient's data in assignments, forging tutors' signature and plagiarism. Academic dishonesty observed in clinical setting were documenting withoutproviding care, not using aseptic techniques, short-cuts in clinical procedures and reporting false patient history.

Academic Integrity and Patient care outcomes

This theme was identified from the responses of trigger questions 4 and 6.

Students recognized thatabsence of Academic Integrity can impact patient care. They explained the impact of Academic Integrity on patient care as "Academic Integrity helps in providing sincere and dedicated care" and that "it brings out professionally and ethically sound individuals to provide quality nursing care". They also said "to practice safe nursing care without harming the life of patients". They expressed "honesty and being truthful in academics will enable to provide holistic care", "lack of knowledge leads to poor patient care" and "academic dishonesty in learning process can lead to incorrect concepts, error and malpractices in patient care".

Students highlighted that Academic Integrity among classmates also had paramount importance with the following responses "Academic Integrity is the basic need of every student of this profession", "everybody should put equal effort and should be justly rewarded", "for smooth functioning and equal distribution of marks based on efforts alone", "Academic Integrity saves classmates from getting into trouble" and"when Academic Integrity not maintained by classmates then that learning is lost; it affects the clinical practice also". Students believed that it will help them to "be a good nurse and give standard care to patients".

Facilitating and Inhibiting factors of Academic Integrity

This theme was identified using responses of trigger questions 7, 8 and 9.

Students accounted manifold factors which enhanced them to uphold their Academic Integrity. They were categorized as follows: 1. **Personal** – following the inner voice or conscience, one should have self- integrity 2. **Family** – Parents upbringing 3. **Social** – Good friends, peers and teachers 4. **Spiritual** – Fear of God, obedience to God, pleasing God 5. **Educational** – Strict vigilance during tests, providing adequate time for preparation of tests and assignments.

Students recognized the following as the most common factors contributingtowardscommittingan academic dishonesty:

1.Lack of time

2.Excessive workload

3.Laziness to prepare for tests

4.Fear of failure

5.Fear of punishments

6.Lack of interest and

7.Inadequate supervision or vigilance during tests.

In addition, the students were asked to share if they had any other opinions or suggestions in relation to Academic Integrity. Some of the students quoted their personal experiences where they had reported mistakes but were not appreciated for their honesty. They believe recognizing their honesty would encouragethem and not allow them to commit such behaviours in future. They also expressed thatthe teachersshould motivate and give polite corrections, evaluate without bias, plan tests and assignments to avoid overload and follow strict supervision during tests. Few students mentioned that the institution has helped them to maintain Academic Integrity and the faculty's contribution towards it as commendable.

Discussion

In this study, students were able to define Academic Integrity in general as "being honest and truthful in every aspect of academics". This finding is consistent with those reported in the literature [9, 10].They also quoted examples for Academic Integrity specific to classroom and clinical practice. This highlights that studentsvalue integrity as an essential component in academics and also when they care for the patients at their most vulnerable times.

Academic dishonest behaviours happen both in classrooms and in clinical practice. Copying & helping others in examinations and documenting care that is not provided werethe most commonly mentioned examples of academic dishonesty. These were congruent to findings from other studies revealing that globally, not all, but some students in every group are engaged in dishonest behaviours [2, 8, 11, 12]. A study conducted on academic dishonesty among nursing students, mentioned the prominent academic dishonest behaviours as obtaining examination answers from someone who already took the examination and documenting findings not observed or assessed in the clinical setting [5].

Examples of academic dishonesty witnessed by the students included plagiarism, receiving answers from previous class, cheating in tests, and working in groups for individual assignments. In the clinical area students witnessed their counterparts not using sterile techniques and documenting assessments without doing it[13]. These findings were similar to the current study.

Patient safety was clearly noted to be an important responsibility of nurses. Similar to this study finding, students in another study said "I think it's really important because our careers are a life-death situation" and "It is crucial to nursing practice" [2].

The essential knowledge not gained in the classroom can negatively reflect in patient care. Similar to the findings of this study, participants in a study remarked about the importance of applying the classroom knowledge during patient care in the clinical setting. They also said that engaging in academically dishonest behaviours in the classroom will have a negative effect on the clinical environment [13].However it is clear that many situational factors like overload of assignments, unplanned tests and personal factors like fear of failure and a drive to impress teachers seem to motivate dishonest behaviour.

A study on clinical misconduct among students mentioned reasons for dishonest behaviour as fear of failure, pressure to succeed, fear of making mistake and competitive environment [15].In another study on undergraduate cheating behaviours, the students cited inadequate time to study as a primary motivator for engaging in dishonest behaviour[16].Some of the above factors concurred with the current study findings.

It is generally known that Nurse Educators use more techniques to discourage cheating in examinations than faculty in other disciplines[11].Therefore teachers can easily assist in modifying such factors, not only examination-related but also other factors which will reduce dishonesty.

Academic institutions also play a vital role in emphasizing Academic Integrity as an essence of education. McCabe& Trevino (1993) in their study done in 31 colleges and universities have revealed that academic dishonesty was lower at institutions that have strong academic honour code[17].

In this study the students have stressed that Academic Integrity among classmates also is important because it is the basic need of every student and this would prevent them from getting into trouble. They also mentioned that every student should practice Academic Integrity to receive genuine rewards from the faculty. Further, some students had expressed disappointment in not being rewarded/ appreciated for being truthful. This is a vital point to be noted by faculty. Positive reinforcement for truthfulness and integrity is directly proportional to practice of Academic Integrity and can be achieved with minimal effort. All academic institutions should emphasize positive reinforcements as part of feedback to students.

The most important outcome of this study is that almost all the students knew the meaning of Academic Integrity and were able to give examples for Academic Integrity and lack of Academic Integrity. This highlights that they consider it as an important nursing ethical value. They were also able to relate Academic Integrity toits impact on clinical practice.

The findings of this study serve as an impetus to implement more stringent measures to avoid occurrences of any academic dishonesty.Educators can introduce lively interactive sessions to emphasize on the importance of Academic Integrity and ethical clinical practice [5]. They should also plan effectively to avoid overload of tests and assignments.Educators can help students to manage time and other academic pressures which can prevent them getting involved in any academic dishonest behaviours and promote a culture of integrityalways.

It is important for faculty to serve as role models and make every effort to model high standards of Academic Integrity in all their teaching activities [18].

Conclusion

This study assessed the perceptions and practices related to Academic Integrity. The students were knowledgeable about Academic Integrity and its impact on clinical practice. They also listed various factors contributing and inhibiting Academic Integrity. Their disclosures on witnessed academic dishonesty behaviours among their peers necessitate inclusion of more vigilant measures to avoid such occurrences. As nurse educators, it is our responsibility to provide an academic atmosphere that minimizes opportunities for academic dishonesty. We need to create a culture of Academic Integrity among students by organizing lively sessions to discuss about ethical values in their course and to produce ethically sound nurses.

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Assessment of the Level of Internet Addiction among Nursing Students at Selected College, Kancheepuram District

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Abstract

Introduction :The explosive growth of internet in the last decade has had a huge impact on communication and interpersonal behavior. Addictive use of the internet is a new phenomenon that threatens to develop into a major public health issue in the near future in India. It is influencing the life style and behavior of common people especially students. **Objectives:** To assess the level of internet addiction among nursing students at selected college and to associate the level of internet addiction among nursing students at selected college with their demographic variables. **Materials and Method:** Research approach was quantitative and research design was descriptive research design.231 samples who fulfilled the inclusion criteria were selected by non-probability convenient sampling technique. The tools of the study were: Section A - Demographic variables; Section B - A standardized Internet Addiction Test (IAT) scale to assess the level of internet addiction among nursing students, formulated by Dr. Kimberly Young. It comprises of 20 items that measures mild, moderate and severe internet addiction and Data collected were analyzed by using descriptive and inferential statistics. **Results:** The result reveals that in Demographic variable "Gender" is significantly associated with "Level of Internet Addiction" and "No. of Hours Spent on Internet/Day" is highly significant with "Level of Internet Addiction" and there was no significant association between the other demographic variables. **Conclusion:** The analysis reveals that 48 (20.8%) nursing students do not have internet addiction; Majority 150 (64.9%) have mild internet addiction; 33 (14.3%) have moderate internet addiction and none of them have severe internet addiction.

Keywords: Internet, Internet addiction and nursing students.

Introduction

The explosive growth of internet in the last decade has had a huge impact on communication and interpersonal behavior[1]. Healthy use of the internet is defined as the use of the internet to achieve a desired goal within an appropriate period of time without intellectual or behavioral discomfort[2]. College students are more vulnerable to develop dependence on the Internet, more than most other segments of the society. This can be attributed to several factors including the following : semicolon Availability of time, ease of use, unlimited access to the Internet, the psychological and developmental characteristics of young adulthood, limited or no parental supervision and as some courses are Internet-dependent[3].

Internet addiction can lead to various psychological, physical and social problems including impaired function at work, impaired academic performance, sleep deprivation, poor dietary habits, headache, eye strain, social isolation, and relationship problems[4, 5, & 6]. Internet addiction has also been found to be significantly associated with some psychiatric disorders such as

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alcohol abuse, attention deficit and hyperactivity, depression, and anxiety[7].

There is a greater likelihood that the adolescent will behave aggressively and even commit a crime if he or she is addicted to the Internet[8, 9]. There was an estimate of 3.5 billion internet users worldwide in 2016. This means about 45 percent of the global population accessed the internet that year[10].53% of Indians are connected to the internet every waking hour which is higher than the global average of 51%, a new international study has found[11].

Hence, it was found necessary to study pattern of internet usage in nursing students. With this, we undertook the present study to take a close look on this issue.

Materials and Method

Quantitative approach and descriptive research design was adopted for the present study. The study variable was level of internet addiction among nursing students and the demographic variables were age, Gender, Course, Year of the study, Place of Residence, Sim Card, Type of Social Network and Number of hours spent on the internet / Day. The nursing students who fulfilled the inclusion criteria were selected as sample. The sample size for the present study was 231. Non-probability convenient sampling technique was adopted to select the samples for the study. The tool used for the data collection comprises of 2 sections: Section A - Demographic variables; Section B- A standardized Internet addiction Test (IAT) scale to assess the level of internet addition, formulated by Dr. Kimberly Young. It comprises of 20 items that measures No, mild, moderate and severe internet addiction. The content of the tools were established on the basis of opinions of nursing experts. Suggestions were incorporated in the tool. In order to assess the reliability of the questionnaire, the test – retest method was done on the samples. On statistical analysis the reliability of the tool was found to be 0.82.

Ethical Considerations : Permission was obtained from the Head of the Institution and informed consent was obtained from each participant for the study before starting data collection. Assurance was given to the subjects that anonymity of each individual would be maintained and they are free to withdraw from the study at any time. The investigators explained the objectives

and methods of data collection. The data collection was done during the day time. Self-introduction about the Investigators and details about the study was explained to the samples and their consent was obtained. The confidentiality about the data and finding were assured to the participants. Data collected were analyzed by using descriptive and inferential statistics.

Results

Table 1: Level of Internet Addiction among Nursing students

S. No.	Level of Internet Addiction	No. of Students	Percentage
1	No Addiction	48	20.8%
2	Mild Addiction	150	64.9%
3	Moderate Addiction	33	14.3%
4	Severe Addiction	0	0.0%
Total		231	

The above table 1 analysis reveals that 48 (20.8%) nursing students have no internet addiction; 150 (64.9%) nursing students have mild internet addiction; 33 (14.3%) nursing students have moderate addiction to internet and none of them have severe internet addiction.

Discussion

IA has become a progressively more dominant public health issue for out-and-out research concerns from abundant scientific arenas including psychology, psychiatry, and neuroscience[12] . The analysis reveals that 48 (20.8%) of nursing students do not have internet addiction; Majority 150 (64.9%) have mild internet addiction; 33 (14.3%) have moderate internet addiction and none of them have severe internet addiction. There is significant association between the level of Internet Addiction among nursing students with their demographic variable Gender and Number of Hours Spent on Internet/Day. There is no association with respect to other demographic variables. Hence the NH1 stated that there is no significant association between the level of internet addiction among nursing students at selected college with their demographic variables such as gender and Number of Hours Spent on Internet/ Day was not accepted and was accepted with other

demographic variables.

Conclusion

The analysis reveals that 48 (20.8%) of nursing students do not have internet addiction; Majority 150 (64.9%) have mild internet addiction; 33 (14.3%) have moderate internet addiction and none of them have severe internet addiction. There is significant association between the level of Internet Addiction among nursing students with their demographic variable Gender and Number of Hours Spent on Internet/Day. There is no association with respect to other demographic variables. So the investigators created awareness on hazards of internet addiction for the students, in order to prevent from compulsive behavior and a preoccupation with being online.

Statement of Informed Consent: Informed consent was obtained from all the samples for being included in the study**.**

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Effectiveness of Patterned Breathing Technique on Pain During First Stage of Labour-A Narrative Review

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Abstract

Introduction: Labour pain is a complex, personal, subjective, multifactorial phenomenon which is influenced by psychological, biological, socio-cultural and economic factors. The result of breathing and relaxation techniques on labour pain was were found to be the most helpful means for helping the mother during labour to reduce pain and discomfort. **Aim:** The aim of this narrative review is to find information on the effectiveness of Patterned Breathing Technique on labour to reduce the painful experience of the mothers. **Methodology: Intervention-**Patterned Breathing Technique. **Types of studies-** Quasi experimental, Pre experimental, True Experimental study. **Types of participants-** Primigravida mothers. **Setting-** Labour room of maternity hospital. **Outcome-** This narrative review result has appeared that Patterned Breathing Technique will be effective on labour.

Keywords: *Patterned Breathing Technique, Primigravida mothers.*

Introduction or Background

Pregnancy and childbirth is one of the graceful time in every woman's life which bring physical and emotional changes in the body. Pregnancy is one of the biggest imagination and it changes into a worse dream when labour pain progress.

Pain is observed to be both a physical and behavioral approach, and also it was a response from injury or physical changes as the effect in behavioral changes in our body. Pain is described as a combination of event that is very special for the human being. From the last 20 years, the approach of pain was esteemed as being what an individual understand about it (Montes-SL, 1999)

Childbirth is never the same and it may clash between women and between labour. It's said that considerable pain that mother nature delivers to a human, is during labour. Studies have shown that around 70% of women experience awful labour and around 10% of them experience an almost painless labour. The remaining women experience labour, which is no more shocking nor painless. There are many non- pharmacological methods for relieving labour pain. The suitable method is surely the one that is successful and safe. (Bobak IM, Jensen MD, 1993)

Breathing exercise is one of the nonpharmacological methods for reducing pain during pregnancy and labour. Research has appeared that simple breathing exercises can help to reduce labour pain and level of anxiety.

A relaxation technique is the non-pharmacological method of pain control during labor (Steer, 1997). Relaxation has been of the cornerstones of prepared childbirth which enhance comfort and decrease the number of pain impulses that are recognized by the brain

A quasi experimental study has conducted to find out the effectiveness of Pattern Breathing Technique among primigravida mother during 1ˢᵗ stage of labour and finding revealed that in experimental group primigravida mothers before practicing of Patterned Breathing Technique mean pre-test score is 2.6 of pain level was less than control group which is 2.8 with a mean difference of 0.2 with a z value of 1.68 which is less than 0.05 level of significance which reply it's not significant. But in post-test overall mean post-test score of pain level after practicing Pattern Breathing

Technique among primigravida women in experimental and control group has p-value of 0.000 which is less than 0.05 level of significance. So the study concluded there is a significance reduction in pain level after practicing Pattern Breathing Technique[6] **(Dr. V Indra, 2017).**

Another quasi-experimental study was directed to evaluate the effectiveness of Pattern Breathing Technique in reduction of pain during first stage of labour among primigravida mother. In experimental group the mean pre-test score (on admission) and overall mean post-test scores (at 1st, 2nd, 3rd, 4th and 5th hour) of pain level before and after practicing Patterned Breathing Technique among primigravida women was assessed and p-value 0.00, which is less than 0.05 level of significance. The pre-test score (on admission) and overall mean post test scores (at 1st, 2nd, 3rd, 4th and 5th hour) of pain level without practicing Patterned Breathing Technique during the first stage of labor, among primigravida women in control group, has p-value 0.00, which is less than 0.05 level of significance. Both result shows that Pattern Breathing Technique is effective in reduction of pain in first stage of labour[1] **(Ms. Elizabeth Thomas, Ms. Savita Dhiwar, 2011)**

[2]J. Jayabharathi, R. Sridevi (2017) conducted a pre-experimental study aim was to find effectiveness of breathing exercise, done among 20 primipartuent mother. After implementing Breathing exercise 11 (55%) mother had mild pain, 8 (40%) had moderate pain and 1 (5%) had severe pain with mean 3.25+/- 1.61 and t value of 5.070. Hence the study intended value was greater than the table value so practicing Breathing exercise is highly effective for reduction of labour pain perception in primigravida women at first stage of labour.

[5]Gupta B, Raddi SA.et al (2017) conducted an another true experimental study to found out effectiveness of slow Paced Breathing on labour pain perception among primigravida in first stage of labour. Study finding indicate that the mean difference in pre-test and post-test scores in experimental group was 10.40 with paired t test value of 15.16 which suggest there is significant difference at p< 0.005.While obtaining independent t test value of post-test pain score in between experimental and control group was t=17.467 was greater than the table value. Hence the study concluded that slow Paced breathing is effective in reducing pain perception among primigravida women.

The outcome of another experimental study was to find out the effectiveness of selected aspect of Lamaze method on pain and anxiety in labor. Mean score of labour pain in intervention group was 4.55 and in control group was 7.55 with a standard deviation of 1.234 and 0.944 respectively. Computed paired t test value is 3.96 which is highly significance at p<0.001. This proves that the intervention of selected Lamaze technique on pain, anxiety and labor outcome during the first stage of labor are highly effective.[3] **(Akashaykumari Jhala, 2017)**

[4]Fawziya Mohammed Nattah, Wafa Abdul Kariam Abbas (2015) conducted a study to find out level of pain on breathing exercise in first stage of labour among primimothers. Three types of breathing exercise were intervening and level of pain was assessed. Different type of breathing protocol was assessed by ANOVA and p value is 0.001 thus signifies there is a mean pain score difference in three group and low mean score in slow Deep Breathing exercise, mean= 2.82+/-0.60. Study concluded that slow breathing is effective in reduction of pain perception.

Findings

The systematic search was conducted by formulating the terms separately and in integration with all synonyms, also according to the database. Likewise, a manual Google scholar search was undertaken using the keywords and search synonyms from already articles. An addition of 6 articles was found in the database. Initial search recovers 1170 articles over which 270 articles were selected manually.150 articles were rejected as a result of replication in the database. Replication was removed and reviewed 120 articles for acceptability.114 more studies were rejected because of unreachable of the full text. Hence 6 articles were screened which includes quantitative study.

Discussion

These findings are supported by a study conducted by an experimental study conducted by L Sruthi reported that mean labour pain score in group I (Experimental) is 3.750 and in group II (Control) is 5.0950. The mean difference in group I was less than of group II with t value of 5.174 (P=<0.05) which suggest a significant reduction on pain score in group I and group II.

Conclusion

There was a significant depletion in labour pain on the first stage of labour regarding primigravida mothers after practicing the patterned breathing technique, thus it has demonstrated to be an effective technique for reducing labour pain. Therefore, this intervention should be encouraged as hospital policy and implemented as routine care for all the primigravida mothers in first stage of labour for reducing labour pain.

Sourse of Funding: Self-Funding

Ethical Clearance: Prior permission was obtained from the Medical superintendent of District Women Hospital.

Informed written consent was taken from each participant under the study. Objective of the study was maintained with honesty, privacy confidentiality and anonymity.

Conflict of Interest: Nil

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Anxiety as Predictor of Negative Psychological Well-Being on Chemotherapy Patients of Breast Cancer

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Abstract

Breast cancer is the second highest cause of death in women after cervical cancer. The most commonly used therapy for breast cancer is chemotherapy. Chemotherapy has side effects on physical and psychological that may affect the psychological well-being of patient. Anxiety is psychological side effect that is most felt by chemotherapy patients. This study aimed to understand correlation between anxiety and psychological well-being of chemotherapy patients of breast cancer.

This study used observational analytic method with cross sectional approach. Population in this research was chemotherapy patients of breast cancer in 2-6 session in Army Hospital Lv.II of dr.Soepraoen Malang. Total sample in this study was 62 people that taken by using stratified random sampling technique based on chemotherapy session of patients. Data collection was conducted by using questionnaires. Data were analyzed by using univariate and bivariate analysis.

The bivariate analysis result by using lambda correlation test shown that there was negative correlation between anxiety and psychological well-being with a value of p=0.050 and r=-0.200. The conclusion of this study stated that the higher the anxiety, the higher probability of negative psychological well-being.

Keywords: anxiety, psychological well-being, chemotherapy, breast cancer.

Introduction

Breast cancer cases in the world positioned in the second rank after cervical cancer and became one of the main causes of mortality for women in the world. This disease resulted in the increasing of burden that should be borne by patients and their family[1]. The prevalence of breast cancer is expected to increase from 14 million cases in 2012 to 20 million cases in the next two decades[2]. *North American Association of Central Cancer Registries* in 2017 stated that the occurrence of breast cancer in Asia was about 907 events per 100,000 people[3.]

Breast cancer treatment is carried out based on the stage.Treatment that carried out on stage I and II

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is a combination of surgery and radiotherapy of breast surgery had percentage of 34%, the combination of breast surgery, radiotherapy and chemotherapy is 17%. Treatment of stage III is a combination of the most widely carried out treatment, that is mastectomy and chemotherapy (48%). While stage IV is the most preferred treatment is a combination of radiotherapy and chemotherapy, or one of them (48%). According to several treatment above, chemotherapy is the most effective therapy and the most widely used[4].

Chemotherapy can affect the condition of patients in physically and psychologically.The physical impact that caused by chemotherapy is very various. There are 80% of chemotherapy patients who experience gastrointestinal disorders such as diarrhea, constipation, nausea, vomiting[5], there are 50% of patients that get alopecia[6], weight loss (86.4%),malnutrition (37.9%), weakness (15.7%)[7] and sensory neuropathy (35%)[8], while the psychological impact that caused by chemotherapy

such as anxiety and depression experienced by 41.4% of patients[9], anxiety that felt by patient related to physical changes and costs used[10], 90% of patients are afraid of disease recurrence,anger and guilty,[11] low self esteem experienced by 34.5% of patients, body image disturbance due to the occurrence of alopecia is felt as much as 61% of patients[6,9]. The therapy impact above will impact on the psychological well-being of the patient[11].

Psychological well-being is the image of psychological health of individuals based on the fulfillment of positive psychological functioning criteria of individual[12]. Breast cancer patients who have positive psychological wellbeing will show self-acceptance, self-sufficient, able to interact with the environment, having a purpose in life, able to demonstrate personal growth and able to foster positive relationships with others. While negative psychological well-being impacts on the self-acceptance of individual against the physical changes, feel lost, changed roles, difficult to achieve life goals, and awareness of family suffering[13]. Additionally, individual with negative psychological well-being will feel burden others or family since their independence reduced. This makes a problem for breast cancer patients who have a negative psychological well-being, they get difficultly in undergoing chemotherapy[14].

The visitation of chemotherapy therapy of breast cancer on chemotherapy unit in Army Hospital Lv.II of dr.Soepraoen Malang was 95 people in each month, and 20 of them are new patients. Preliminary study through interviews in 10 chemotherapy patients shown that 8 patients (80%) have negative psychological well-being, some of them said that during chemotherapy process, their activity is limited, the patients also said that patient no longer able to do things that are desirable because they feel has limitations and dependence on others. 5 patients (50%) said that they can not accept the current condition and have limitations in building interpersonal relationships. 9 patients (90%) said having desire to not continue chemotherapy because of the difficulties experienced during chemotherapy

Anxiety is a related factor to psychological well-being. Anxiety is fear with no apparent cause, feel isolated, feelings of uncertainty, helplessness and insecurity[15]. Anxiety in breast cancer patients are very noticeable in the initial diagnosis[16]. Breast cancer patients typically experience anxiety because of the disruption of functional status, health declining, and financial difficulties[17]. Cancer patients shown higher levels of anxiety, thus they are vulnerable to negative psychological well-being[18]. Based on the description above, the researcher wanted to analyze the correlation between anxiety and psychological well-being of chemotherapy patients of breast cancer in Army Hospital Lv.II of dr.Soepraoen Malang.

Method

This study used observational analytic survey design with cross sectional approach. The population in this study was chemotherapy breast cancer patient in chemotherapy unit of Army Hospital Lv.II of dr.Soepraoen Malang. Total sample in this study was 62 people that taken through stratified random sampling technique based chemotherapy session that was 2-6 session. The sample selection was based on inclusion criteria, that was breast cancer patients on the stage of 2,3 and 4 who had one session of chemotherapy, aged 18-65 years old, willing to become respondents by signing the informed consent sheet, and also being able to read and write. Data collection conducted through questionnaire of *State-Trait Anxiety Inventory* (STAI) to measure anxiety and questionnaire of *Ryff's Psychological well-being scale* (PWB) to measure the psychological well-being of respondents. Data were analyzed by univariate and bivariate analysis (correlation lambda).

Results

The Result of Univariate Analysis

The results of bivariate analysis consisted of demographic data, anxiety and psychological well-being distribution of respondents based on chemotherapy session that were studied (2-4 session).

Table 1. Demographic Data of Respondents

No.	Characteristics of respondents	n	%
	Last education		
	Elementary School or equivalent	29	46.8
	Junior High School or equivalent	18	29.0
	Senior High School or equivalent	10	16.1
	College	5	8.1
	Total	62	100
	Marital status		
	Married	55	88.7
	Single	2	3.2
	Ever been married	5	8.1
	Total	62	100

Table 2. Distribution of respondents based on age and illness duration.

No.	Characteristics of respondents	N	Mean ± SD	Min-Max
1.	Age	62	48.90 ± 8.11	30-62
2.	Illness duration	62	12.29 ± 8.67	2-37

The table above described that the average respondent was 49 years old with illness duration for 12 months.

Table 3. Distribution of respondents based on the level of anxiety

Anxiety	Session II		Session III		Session IV		Session V		Session VI		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
High	9	52.9	6	46.2	3	25.0	3	27.3	4	44.4	25	40.3
Moderate	4	23.5	5	38.5	8	66.7	7	63.6	3	33.3	27	43.5
Low	4	23.5	2	15.4	1	8.3	1	9.1	2	22.2	10	16.1
Total	17	100	13	100	12	100	11	100	9	100	62	100

The table above shown the percentage of high anxiety that was more experienced by respondents who undergo chemotherapy in sessions 2.

Table 4 Distribution of respondents based on psychological well-being level

Psychological well-being	Session II		Session III		Session IV		Session V		Session VI		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Negative	6	35.3	8	61.5	7	58.3	7	63.6	4	44.4	32	51.6
Positive	11	64.7	5	38.5	5	41.7	4	36.4	5	55.6	30	48.4
Total	17	100	13	100	12	100	11	100	9	100	62	100

Table 4 shown that at least respondents percentage with negative psychological well-being experienced by respondents in sessions 2 and fluctuating in the next session.

The results of bivariate analysis

Table 5. The results of correlation analysis of anxiety and psychological well-being

Positive		Psychological well-being		Total		r	p
		Negative					
Anxiety	High	9	16	25			
	Moderate	13	14	27			
	Low	8	2	10			
Total		30	32	62		-0.200	0,050

Table 5 shown that the value of p=0.050, if p <0.05 could be concluded that H0 was rejected, it meant there was correlation between anxiety with psychological well-being. The value of r=-0.200 shown negative correlation with the weak strength, it meant that the higher the anxiety, the higher negative psychological well-being of patients.

Discussion

Anxiety was defined as a response to a threat or potential that was definitely, thus the surveillance against the threat was increased. Anxiety consisted of two forms based on its character, that were temporary anxiety (state anxiety) and settled anxiety (trait anxiety)[19]. This study shown state anxiety, respondents experienced tension against chemotherapy procedure that would be undertaken. Anxiety may arise in pre therapy of breast cancer chemotherapy because of the procedures that would be passed to be considered as a painful thing[20]. Furthermore, this study shown the trait anxiety, respondents had concerns about the side effects after chemotherapy. Concerns raised due to physical burden after chemotherapy and change in patient's life that made patients feel anxious. Habituation or repeated therapy create anxiety in facing chemotherapy procedure would decrease, besides the development of therapeutic outcomes would reduce trait anxiety[21].

Anxiety in chemotherapy patients caused the burden and high side effects of chemotherapy, stressors before initiation of chemotherapy was the trigger of anxiety[22]. High Anxiety was often accompanied by poor health status, self-perception and negative expectations for the future. This was what cause the individual feel unable to accept the changes that happened, reduced independence, got the difficulty in achieving the desire goals[21].

There were several other factors that affected the anxiety, such as age and education level. The average age of respondents in this study was 49 years old (elderly early). The elderly was more prone to anxiety, because the elderly susceptible to decrease quality of life[23]. The mostly of respondents had education level in elementary school. The education level affected the anxiety, it was because education patterning one's perceptions and attitudes. Besides of that, low education level was difficult to manage rational mind[24].

This study shown patients with high anxiety, in this case, strained before the procedure of chemotherapy begun and concerned over the side effects of chemotherapy tend to have negative psychological well-being. Patients feel worried and afraid of the side effects of chemotherapy such as nausea, vomiting, fatigue, etc. [25]. Anxiety and worries moderating the change in the destination domain of life and autonomy or independence of patient. Restlessness and worry as a form of anxiety is a threat that could change the person's behavior to achieve his goal which resulted in negative effect on positive relations with others[26]. Anxiety was the most influence factor on positive relationships with others that could affect the interaction with the environment, it also increased the psychological pressure[27], positive relationships with others was a domain that most affected by anxiety[28]. Patients who experienced anxiety could affect the control domain environment. This happened because people do not have full control over the lives and environment. In addition, the individual was unable to make positive changes during sick[29].

Anxiety would make people did not accept them-self, not independent, unable to maintain good relations with others and unable to cope the problem and the environment. Anxiety might reflect the difficulties of

individual's life, if people were able to pass through these difficulties, they would have positive psychological well-being. This was because of the efforts to maintain the objectives to be achieved, the mastery of the environment or personal development in facing difficulties[30].

Conclusion

High anxiety experienced by respondents in the initial session of chemotherapy and decreased in the next session. There was significant correlation between anxiety and psychological well-being. The higher the anxiety, the higher probablility of negative psychological wellbeing.

Conflict of Interest: There was no conflict of interest in research.

Sources of Funding: This study used private funds researchers and did not get funding from any party.

Etichal Clearance: This research had been declared worthy of ethics by Health Research Ethics Commission of Faculty of Medicine, University of Brawijaya.

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The Support System and Hope of Women Inmate of Human Trafficking Perpetrators (A Phenomenology Study at Women Correctional Institution Class III of Kupang)

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Abstract

East Nusa Tenggara Province is a province with the highest human trafficking cases in Indonesia. There were 137 cases of human trafficking in 2017 which were successfully revealed to public that caused human trafficking perpetrators were caught and prisoned including women. Correctional institute is stressful place that can affect the physical and psychological health of inmates, and it is a place that can cause various problems, especially for psychological problems of women inmate. Various stressors received can cause inmates to lose realistic expectations about their future life. Support is needed to help inmatesfaces the stress in prison. This study aimed to explore the support system and hope of women inmates of human trafficking perpetrators. The research method used was qualitative research with interpretive phenomenology approach. Participants were selected using purposive sampling technique assisted by wardens. Data was obtained through in-depth interviews with five participants. Data was analyzed by using Interpretative Phenomenological Analysis (IPA) and found the results that women inmates of human trafficking perpetrators obtained support system, that was social support and moral support while in prison. Finally, the inmates had good hope, they would not want to be involved again in the activity of sending Indonesian workers illegally. Support received by inmates was motivation for serving the punishment in prison and made the inmates had realistic hope for their future life.

Keywords: *Women Inmates of Human Trafficking Perpetrators, Social Support, Moral Support, Hope*

Introduction

Nowadays, crimes which committed by women is becoming a social phenomenon that is interesting to be studied in depth. The quantity of women who commit crimes is increasing, which ultimately lead women to experience punishment in prison.

According to the data base system of directorate-general of correctional year of 2018, the number of women inmatein Indonesia since March 2018 are 9322 people, and East Nusa Tenggara province is one of provinces with the number of women inmatesthat quite a lot that numbered of 128 people with the most cases is human trafficking case.[1]

East Nusa Tenggara is a province that includes in 3T area category, that areunderdeveloped, frontier, and outermost area with low economic growth and very high life needed. It became one of factors that affects the crime rates, especially human trafficking that carried out by society including women.[2] According to data of Criminal Investigation Police, East Nusa Tenggara is the province with the highest cases of human trafficking in Indonesia. In 2015, there were 1,667 migrant workers from East Nusa Tenggara who were victims of human trafficking.[3] In 2017 there were 137 cases of human trafficking that were successfully revealed to the public. [4] According to these victims, many human trafficking perpetrators arrested and got the punishment in the

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prison. This is in accordance with the Law of Crime of Human Trafficking contained in Law No. 21 year of 2017 about Eradication of Human Trafficking.[5]

Prison is a place with stressfull that affects the physical and mental of inmates, prison is also place that causes various problems, especially psychiatric problems on women inmate.[6] Prisoned and has the status of inmate is condition that causes stress on women inmates. Stress does not just come from the inmates themselves, but also from the family and the environment of prison.[7]

Some problems that cause stress (stressors) experienced by women inmates during serving their punishment are separated from their families, loss of role as wife and mother, loss of job, loss of support, loss of the right to own property, loss of relationship. In addition, the rules and conditions of prison also caused the inmates loss the autonomy and freedom to the outside world because of limited space and isolated from the society because of all the activities carried out in the Correctional Institution. The factors that cause mental problems in which the density prisoners in a detention room, inter-prisoner violence, loneliness, lack of meaningful activity, lack of privacy, and insecurity future prospects such as work, relationships, and health services are inadequate, especially mental health services. In addition, the stigma of society about women inmates is also being stressor for women inmates.[8]

Problems and difficulties that faced by inmates as form of stress in prison is an event that should be faced during their prison terms. Support from various parties, both the relatives, wardens, and friends of inmates in prison would have implications during inmates serving their punishment in prison. Sarafino & Smith (2011) explained that the appropriate support would greatly help individuals to meet current needs in difficult condition, the individual can find an effective way to get out of problems, feeling appreciated and loved that will encourage their confidence to be able to live life better. But when the individual doesn't see the assistance as support, and theprovided support is not appropriate, it is unlikely that individuals can reduce the stress.[9]

Research Purposes

The purpose of this study was to explore the support system and hope of women inmates of human trafficking perpetrators.

Materials and Method

The method used was qualitative research with interpretive phenomenological approach. In this study, researcher explored how women inmates of human trafficking perpetrators coped their stress and then interpreted the meaning to find a deep essence.

The participant selection in this study usedsampling purposive technique assisted by wardens in accordance with the inclusion criteria: (1) already married, (2) first entered prison, (3) has been living a life in prison for ≥ 6 months, (4) willing to be participant by signing an agreement as participant, (5) willing to be interviewed and recorded during the research process.

Data was obtained through in-depth interviewswith based on semi-structured interview guidelines. During the interview process, all conversations were recorded using recorders(HP). The recording process using HP hadobtained approval from Correctional Institution and hadbeen giving licenses to record the sound recording from the Women Correctional Institution Class III of Kupang,Regional Office of East Nusa Tenggara.

Data analysis process was using Interpretative Phenomenological Analysis (IPA). The process started with reading and re-reading the verbatim transcript of interview results, finding the keywords, classifying the categories, establishing the theme for each participant, and then combining all the themes found on each participants into three (3) themes.

Results

The results of this study were themes that would be interpreted according to what was expressed by participantsto find the meaning of words and speech of women inmateof human traffickingperpetratorsin prison. The themes were social support, moral support, and hope not to involve in illegal work.

Theme 1. Social Support

In the prison, participants felt the support of the wardens, ministers, friends, their families and relatives. That supports made the participant being strong in facing the life in prison, realizing the mistake and wishing to be better after getting out of prison. The theme was taken from several sub-themes as follows:

Getting coaching from wardens. Participants told that they received guidance from the wardens. The meaning of coaching in this term was an effort, action, and activitythat carried out by the wardens efficiently and effectively for life changeof participants into better direction. The following were an interview quote from participants:.

"Here, the officers guide us for the best. Giving lessons and feedback for us. The study of Bible provided by the Religion Office of City, Province, to guide us in coaching."(P2)

"... They also guide us in incredible way..." (P3)

The guidance of the wardens was a kind of support received by inmates to change to be better.

Getting the attention of the family

Participants mentioned that, despite of being in prison, they still got the attention and cared for by family who always visited participants. The following were an interview quote from participants:.

".... Thank God, my family still cares for me, my friends, too.Maybe because of they are busy, sometimes they visit me. (P4)

2. Moral Support

Moral support obtained by participants wasassistance in the form of inner support that madeparticipant became strong in serving punishment in prison, in continuingthe life to survive. The support was in the form of counseling, deepening of faith, served by the minister, spiritual guidance from former inmates who had been acquitted, encouragement among friends in prison, and also their families and relatives who frequently visit. The following were an interview quote from participants:.

"... But there is encouragement in the block. The friends give support, encouragement, even though we are from different ethnic and religion but we are encourage each other"(P2)

"The God servants come to guide us, give me strength, give me way out, so I can face this." (P2)

"... a lot of coaching. There is counseling time every day, there is deepening of faith ... Because there is a former inmates that come to give the serve. She serves, *she went into the prisons to give spiritual guidance,there is a worship once a month with the inmates."*(P4)

3. Hope not to be involved in the work related to illegal Indonesian worker

All the participants told that they "do not want to be involved again in the work of illegal Indonesian worker". This is shown that participant did not want to participate, and also get carried away in sending workers to the procedure unlawful or unauthorized. The theme came from several sub-themes as follows:

The desire to quit from the work of illegal Indonesian workers. Two participants stated that they did not want to do anymore or did not want to continue anymore the work of illegal Indonesian worker that had been hailed by the participants. Participants sworn they no longer wanted to work in sending Indonesian workers illegally. The following were an interview quote from participants:.

"Well ... due to this condition, in the deepest of my heart for next stop illegal Indonesian worker."(P1)

""... And I've promised, Kupang people said titi batu., Ha'ah. The outsider said it as oath, when Kupang people said titibatu it means do not want to work that thingsagain. Wants to bargain how much Billion, I'm enough." (P3)

Discussion

Social Support and Moral Support

Prison was a place for inmates to receive guidance from the correctional officer/wardens. Inmates were controlled to be discipline person through all the guidance and regulations whichwere applied in prison. Moreover, the prison made in circular shape that allowed the wardens to observe and supervise inmates constantly and continuously[10], Purnomo (1985) explained that coaching aimed to change inmates into good person, developinga sense of responsibility to adapt themselves in society life with peace and prosperity, and also being human who were virtuous and moral.[7]

The inmates as prisoners were expected to change to be better person with assistance of wardens/ correctional officers through coaching and education. Coaching received by inmates was not only coaching the independence and skills but also spiritual and personality.

This had become a support that motivatedthe inmates to change for the better. Moreover, family and relatives often visited inmates, thus, inmates still felt to be cared for and meaningful.

Most of inmates expressed that friends of inmates in prison always gave support each other and providedencouragement and motivation in serving their punishment in prison. According to Yanita (2001), social support included emotional support (care and concern, expressions of empathy, positive tribute to build the feeling), informative support (advice, information, guidance, suggestions), and instrumental support in the form of direct assistance such as the provision of money or belongings items needed.[11] Individuals with high social support had lower stress levels, more successfully in coping their stress and experienced the positive things in life more positively.[12]Social support was the ability/ social skills that involved others in solving problems, improving the ability to work together and get support from others such as families or people nearby[13] This was consistent with the previous study by Pratt, et al (2017) in his research shown that environment could be motivation for person to remain the healthy.[14]

Nur & Santi (2010) proved that social support helpedthe inmates to felt being cared for and loved, thus, inmates felt calmer and more confident.[11]Social support obtained from the surrounding environment would affect the way inmates facing stressors in prison life. Moreover, a person with high level of social support possessed a lower stress levels and solved many things happen in life more positively.

In addition to social support, inmates also got moral support that encourage the inmates in order to withstand various problems in prison life. This wasstrengthened by the research result that conducted by Wiseno, et al (2017) found moral support from family, friends and the environmental affected the inmates to change for the better. Azani (2012) argued that moral support could increase feelings of self-esteem, self-identity, and control of environmental influential person in a better health condition.[15]

Social support and moral support received by other inmates inmates resilient in serving punishment in prison. Moreover, it was becoming one of the driving factors for inmates to have realistic hope about their future.

Hope not to be involved in the work related to illegal Indonesian worker

Every human being naturally hadhopes to do and achieve in the future. Carr (2004) defined hope as the ability to plan a way out as an effort to achieve the goal.[16] Inmates serving punishment in prison would have a hope that listed in the list of life plans that wished to be realized after getting out of the prison.

Research conducted by Andriany (2008) found plans of women inmates after getting out of the prison, which included a plan to apply the skills obtained from Correctional Institutional, plans to keep reporting to the Correctional Institutional, a plan to restore the physical condition, plan for social interaction, fulfilled the life needs, mental, spiritual, namely worship, and live life the same way.[17] But in this study, inmates expressed the hope not to be involved in the work related to illegal Indonesian worker that was defined as human trafficking.

The hopes could be used by inmates as an effort to decrease the risk to do the same crime.[18]It affectedthe confidence of inmates in carrying the life while in prison and after they getting out of prison. The hope associated with happiness, energy for positive action and self-confidence that had positive effect on inmates. Assessment of hope and opportunity to make someone staring at their world better, felt to be treated fairly and reduced the frustrationpotential.[16]

The hopes could be positive motivation for inmates to follow each guideline in prison, changed theinmates' thoughts and behavior, and preparedinmates to get better, and did not do crimes after leaving prison.

Conclusion

The women inmate of human trafficking perpetratorsin Women Correctional Institution Class III of Kupang got good support, both social support and moral support from the prison party, in this case, the wardens, inmates' friends, family and relatives. This support made the prisoners were able to cope various stress conditions in prison and madeinmatesto had a hope in the future that inmates did not want to carry out human trafficking actions.

funding independently.

Ethical Clearance: This research has received ethical approval from the Medical Faculty of Brawijaya University with Number. 257 / EC / KEPK-S2 / 10/2018.

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Readiness of Health Science Students Towards Interprofessional Learning

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Abstract

Patient-centered care is a complex activity that requires a collaborative approach within the healthcare team. This study assessed the level of readiness in interprofessional learning among health science students and determined which demographic profile predicted the level of readiness in interprofessional learning. Descriptive comparative research was used as the design of the study and utilized purposive sampling. The Readiness for Interprofessional Learning Scale (RIPLS) was used to gather the data in order to determine the level of readiness in IPE among health science students. A total of 412 students completed the survey which consists of nursing (n=119), medical technology (n=138) and pharmacy (n=155). Overall, the study revealed a high degree of readiness and positive attitude regarding the value of teamwork and interprofessional learning. Specifically, pharmacy students have more positive attitudes towards IPE as compared to other health disciplines.

Keywords: Health science students, interprofessional learning, RIPLS,

Introduction

It is widely known that patient-centered care fosters engagement to patients in providing collaborative approach. However, numerous health systems are fragmented to manage unmet needs predominantly due to lack of human resources. There is an implied expectancy that healthcare professionals will function efficiently once in a healthcare setting. Thus, it is presumed that interprofessional learning environment is a vital part of every healthcare discipline to have their own unique specialized set of technical skills. While the impact of interprofessional education (IPE) serves as a basis and influence students to increase readiness, having health sciences students learn together may promote improved collaboration leading to enhanced quality of care and health outcomes. Thus, highlighting the importance of IPE.

IPE is defined as the means by which healthcare professionals work together and learn from each other to further improve the healthcare discipline collaborations and the quality of care for individuals, households, and communities[1]. To understand the core principles of healthcare discipline and be familiar to such, health science students must incorporate essential knowledge in terms of their own profession to establish collaborative competencies in a healthcare setting. It enhances the potential of health science students to interact with their future healthcare colleagues in a collaborative manner to improve quality of care to patients. In addition, IPE occurs when students from two or more professional backgrounds work together with patients, families, and care givers to render the highest quality of care[2]. The benefits of collaboration allow healthcare professionals to work effectively as a team, and serve as direct goal of IPE that starts with the readiness of health science students[3]. In view of that, it is also a factor that refines patient safety and quality of patient-centered care. It yields better health outcomes and improved healthcare collaborations to satisfy and meet the healthcare needs of patient.

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Patient care is a complicated activity yet it is the most essential part of the healthcare discipline. Effective and quality patient care needs health and social care professions to worktogether effectively in order to contribute to an improved healthcare discipline. As the need for healthcare delivery becomes more complex, a thorough collaboration and teamwork from the different healthcare disciplines are needed. However, evidence suggests that certain health professions do not work well together[4]. The healthcare team is comprised of individuals who have different professional backgrounds hence their proficiency is limited to only one healthcare discipline. Thus, the diverging of professions could evidently inhibit effective collaboration between healthcare professionals[4]. IPE serves as a way in enhancing health science students' teamwork and collaboration that will result in an improved quality of patient care.

Purpose

The aim of the study was to:

1. Determine the demographic profile of the participants such as age, gender, and healthcare discipline

2. Assess the level of readiness in interprofessional learning among health science students in selected universities in Manila.

Method

Research design and sampling technique

A descriptive comparative research was used as the design of the study and utilized purposive sampling in selecting participants in the study.

Setting of the study

The researchers conducted the study in selected universities in Manila where there are varied health science courses specifically, medical technology, nursing and pharmacy.

Instrumentation

The researchers adapted and used the Readiness for Interprofessional Learning Scale (RIPLS) Questionnaire to gather the data needed. This examined the readiness of healthcare disciplines towards interprofessional learning. The first page of the survey questionnaire includes the demographic profile connoting the age,

gender and healthcare discipline and the next part is the RIPLS Questionnaire.

RIPLS Questionnaire

RIPLS Questionnaire is a 19-item tool that is divided into four subscales. This includes Teamwork and Collaboration that examines healthcare discipline's attitude towards IPE (Items 1-9). Positive Professional Identity which analyzes one healthcare discipline's role comparing to the other role of healthcare discipline members (Items 10-12). The third subscale is the negative professional identity which will also analyze one healthcare's discipline (Items 13-16). Lastly, Roles and Responsibilities subscale evaluates the attitude of a healthcare discipline towards patient-centered care (Items 17-19).

RIPLS Questionnaire is answerable and graded on a 5-point scale wherein it is specified as strongly disagree, agree, undecided, disagree and strongly disagree for each statement. According to McFadyen et al.[5] Cronbach's alpha.

Data Collection Procedures

Prior to the data collection, an ethical clearance was secured Arrellano university, Ethics review board Arrellano university, Ethics review board. Afterwards, a letter of permission was sent to the Deans of the respective departments in the selected universities. It was administered to the selected respondents of the study. The data gathered from the respondents was encoded in Microsoft Excel and was analyzed using IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp.

Findings

Demographic Profiles of the Respondents

A total of 412 individuals were surveyed from different disciplines in the health science courses which includes 138 nursing students (33.5%), 119 medical technology students (28.9%) and 155 pharmacy students (37.6%). On the other hand, there were a total of 79 male respondents (19.2%) and 333 female respondents (80.8%) surveyed

Level of Readiness in IPE among health science students

Table 1 shows the overall RIPLS score and subscale scores of the respondents based on health disciplines which is measured based on four subscales namely: Teamwork and Collaboration, Positive Professional Identity, Negative Professional Identity and Roles and Responsibilities.

Table 1. Level of Readiness in IPE among health science students

RIPLS subscales	All students (n=412)	Nursing (n=119)	Medtech (n=138)	Pharmacy (n=155)
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Overall RIPLS	57.93 ± 5.62	57.64 ± 4.87	55.51 ± 3.67	60.32 ± 6.56
Teamwork and Collaboration	41.29 ± 4.16	41.27 ± 3.51	41.43 ± 4.15	41.17 ± 4.63
Positive Professional Identity	8.20 ± 3.48	8.36 ± 3.39	6.52 ± 2.58	9.57 ± 3.64
Negative Professional Identity	17.88 ± 2.28	17.96 ± 2.04	17.85 ± 2.40	17.86 ± 2.37
Roles and Responsibilities	11.30 ± 3.30	10.74 ± 2.11	10.42 ± 1.85	12.50 ± 4.51

Comparison of the RIPLS score among health disciplines

A one-way ANOVA was utilized to compare the RIPLS score among health disciplines. Significant differences were noted in the overall RIPLS score (F=30.861, p=0.000), positive professional identity (F=0.151, p=0.000), and roles and responsibilities (F=18.31, p=0.000) while no significant differences were noted in the teamwork and collaboration (F=0.151, p=0.860) and negative professional identity (F=0.089, p=0.915).

Table 2. Comparison of RIPLS score among health science disciplines

RIPLS subscales	ANOVA	
	F	*p*
Overall RIPLS	30.861	0.000*
Teamwork and Collaboration	0.151	0.860
Positive Professional Identity	32.36	0.000*
Negative Professional Identity	0.089	0.915
Roles and Responsibilities	18.31	0.000*

*The level of significance is set at <0.05

Subsequently, post-hoc tests were done to determine the specific subscales in RIPLS where significant differences were found as shown in Table 3.

Table 3. Mean differences in subscales and total RIPLS between student disciplines

Discipline	Overall RIPLS		Positive Professional Identity		Roles & Responsibilities	
	Mean	p	Mean	p	Mean	p
Pharmacy vs. Nursing	60.32 vs. 57.64	0.000*	9.57 vs. 8.36	0.007*	12.50 vs. 10.74	0.000*
Pharmacy vs. Medical Technology	60.32 vs. 55.51`	0.000*	9.57 vs. 6.52	0.000*	12.50 vs. 10.42	0.000*
Nursing vs. Medical Technology	57.64 vs. 55.51	0.004*	8.36 vs. 6.52	0.000*	10.74 vs. 10.42	0.701

*The level of significance is set at <0.05

Discussion

The study revealed that health science students have a high level of readiness in interprofessional learning. This can be correlated with the study done by Cant et al.[6] who mentioned that a "training ward" program or a learning environment for teamwork and collaboration helped engage the students in a collaborative manner of care and provides additional knowledge on how interprofessional patient care is applied in the area. Guraya and Barr[7] also identified positive outcomes of educational intervention by implementing IPE courses in several disciplines of healthcare.

In terms of overall readiness in interprofessional learning, pharmacy has a higher score as compared to nursing and medical technology students. This finding is supported by the study conducted by Umland et al.[8] wherein there has also been a significantly higher score among pharmacy students than medical students, nursing, occupational therapy, and physical therapy. Pharmacy students also showed a significant difference in the factors of perception of actual cooperation and resource sharing within and across the profession. This shows that they have more positive attitudes and a higher level of readiness compared to other health disciplines. In addition, pharmacy students also showed higher mean scores in roles and responsibilities. However, this was contradicted by Frankel and Austin[9], where they mentioned that pharmacists anecdotally reported that they do not feel responsible for their patients. The study identified possible barriers as to why pharmacists developed little confidence and responsibility which includes *role definitions*. Furthermore, the results revealed that pharmacists feel the public looks up to them as a business person behind a pharmacy and views their job as a service provider rather than a healthcare discipline.

Pharmacy students also got a higher mean score in positive professional identity. Van Huyssteen and Bheekie[10] stated that pharmacy students perceived themselves as a pharmacist who are only dispensing medicines and advices people how to take their medication properly. With this information regarding the appreciation of pharmacy students, they tend to underestimate their job as a pharmacist leading to higher level of professional identity because of the level of simplicity based on their appreciation towards being a pharmacist.

In the results of teamwork and collaboration, medical technology students had the highest score among other health discipline. Students who have already collaborated with colleagues from other departments in the clinical setting have a more positive attitude towards teamwork and collaboration[11]. Medical technology students are known to have more interaction with other health discipline assuming complementary roles and cooperatively working together to carry out plans for an optimum patient care. Furthermore, another study suggested that a significant score regarding teamwork and collaboration implies that there is a generally positive attitude regarding shared learning and an acceptable degree of readiness towards IPE[12].

When it comes to the negative professional identity subscale, nursing scored the highest. They have been reported to be more receptive in the idea of collaborating with other health care discipline. In contrary to our findings, the study of Talkwakar et al.[13] revealed nursing as the highest in the overall RIPLS and positive professional identity. This suggested that nursing students think more collaboratively, in contrast to other health disciplines who participated. Health disciplines attitudes regarding IPE known to have an effect on their acceptance of this approach to education. It was also suggested that this disparate finding which implies the differences in a specific health discipline may be attributable to cultural or educational background. Changing of these attitudes will be difficult but is one of the challenges that needs to be overcome in order to introduce effective IPE for health care disciplines[14].

The results of the study were unanticipated because as pharmacy students are concerned, they work in diverse and evolving health care environment. Hence, pharmacy students need to learn competencies required to practice in collaborative approach. But based on the overall RIPLS score, they are the health discipline that has the highest level of readiness. My perception is based on the understanding that they are more prepared on a form of education that can provide a number of positive outcomes for other health care discipline including enhancing their awareness, improving their skills, understanding on how to function in an interprofessional team, reducing negative patient care outcome, and strengthening their communication and collaboration skills. As the need for

quality patient care becomes more complex, a thorough collaboration and teamwork from the different healthcare disciplines are needed. Further studies that could assess the effectiveness of educational intervention of IPE in healthcare disciplines may elucidate the importance of interprofessional learning to enhance patient care.

The study was reflected as a pioneering research as no local studies or literatures have been found similar to it.

Conclusions

The study revealed a high degree of readiness and positive attitude regarding the value of teamwork and interprofessional learning. Specifically, pharmacy students have more positive attitudes towards IPE as compared to other health disciplines.

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Analyzes of Nurse Work Load and Teamwork with the Service Quality of Pre-Hospital Emergency in Kupang, East Nusa Tenggara, Indonesia

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Abstract

Pre-hospital emergency serviceis a complex service system and realized by sending care assistance to the location of incidence to prevent death or disability. Pre-hospital emergency service providers consist of individuals and groups in an organization that provides services in accordance with patient needs. The purpose of the study was to analyze the correlation between the factors of nurse workload and teamwork with the service quality of pre-hospital emergency. This study used survey analysis design with cross sectional approach. The population in this study were nurses at the Healthy Brigade of Kupang (BKS) and family of patients who received services from the BKS. The total sample of study was 20 of BKS nurses who selected with the total sampling technique and 80 people of patients' families who selected by accidental sampling technique. The instrument used was the work sampling form and the Nurse Practitioner Primary Care Organizational Climate Questionnaire (NPPCOCQ). The bivariate analyzes result with the contingency coefficient test shown significant correlation between nurse workload and service quality (p=0.008) and teamwork with service quality (p=0.009). Thus could be concluded that there was a significant correlation between nurse workload and teamwork with the service quality of pre-hospital emergency in Kupang. The lighter the nurse's workload and good teamwork would improve the assessment of service quality.

Keywords: *Pre-Hospital Emergency Care, Nurse, Quality Services.*

Background

Services on pre-hospital emergency department is part of the framework for emergency care service system established by the World Health Organization [1]. The main focus of the emergency services on pre-hospital is to prevent death and disability in the victim in the pre-hospital environment and during the referral process. An emergency services on pre-hospital successfully determined from the empowerment rescuers at the incidence location (bystander), submission of the right report to the recipient of operator call (dispatcher), length of waiting time, accuracy evacuation of patients and health care that received at the incidence location or during the process reference.

Therefore, the emergency services on pre-hospital is critical, thus the Republic of Indonesia Government has set up the implementation of the emergency services in the rule of Ministry of Health of RI Year of 2016. The Indonesian Ministry of Health (MoH RI) stated that the emergency services on pre-hospital included in the System Integrated Emergency services (SPGDT). SPGDT is a mechanism for victims emergency aid implemented in an integrated manner, utilizing a call center, communications systems and engaging the community. Implementation can be national and local levels in every county or city in Indonesia[2].

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Kupang is the capital of East Nusa Tenggara (NTT), which is one of the provinces in Indonesia. There is an increasing trend of traffic accidents during the past three years in Kupang. Based on data obtained from the Regional Police of East Nusa Tenggara Resort Kupang in 2018 has occurred 199 traffic accidents, in 2015 occurred 280 cases of traffic accidents with 60 occurrences died on the spot and in 2016 occurred 385 traffic accidents with 51 cases died on the spot. In 2017 there has been 356 cases of traffic accidents with 58 occurrences died on the spot, 7 incident major injuries and 611 minor injuries incident[3].

The Municipal Government of Kupang responses to serious health problems of its citizens. Therefore, it has formed a technical and operational units, namely Healthy Brigade of Kupang (BKS) under the auspices of the City Health Office conducted specifically by Kupang health care for 24 hours to emergency state for Kupang. BKS duties and functions with the availability of 8 doctors, 20 nurses, 6 midwives, 8 drivers and 2 janitors and equipped with 2 units of ambulances[4].

BKS presence has helped in the health services in Kupang and help in access to health facilities. However, if the review is based on quantity, it is necessary to increase human resources and tools for health services should be available 24 hours given to 412.708 residents of Kupang scattered in locations 180.27 km^2 and risk of emergency conditions at any time[4].

Health care provided in emergency conditions both in the hospital and pre-hospital is a kind of dynamic services. Nurses or other health personnel on duty can not predict the number, and severity of condition of patients who need help[5], In general, the role of the nurse is to provide a more focused nursing care for life-threatening circumstances at the time. However, keep in mind that for the creation of an emergency services on pre-hospital maximum will not be separated from the various interruptions, either by doctors, preparing tools and materials for the service process, ensuring a working environment in a condition conducive and ready to receive calls emergency anytime[5][6].

A number of targets nurses work performed during the working hours referred to the workload of nurses[7]. There are four types of activities nurses, namelydirectly and indirectly productive activity, personal activity and non-productive activity[8].

Nurses in carrying out their activities for the emergency services on pre-hospital should work in a team due to handle patients in unpredictable conditions required collaboration with a team of medical and other health personnel. The familiar team working will reduce the risk of injury to any member of the team. Teams that have good cooperation has mutual trust, always shared and supported by good communication. Good teamwork will improve the quality of service provided[9][10][11].

Pre emergency care hospital in Kupang expected a quality service. Quality of service can be reviewed on the determinants indicator of the service quality in the form of services, according to Parasuraman, Zeithaml, and Berry (1994), they are reliability (health services that can be trusted), responsiveness (the responsible health services), assurance (health services which ensure given), empathy (empathy health services) and tangibles (health services which have a good look). As a health service, the pre-hospital emergency services are also formed from the expectations of health workers in this case the nurse as one of the service providers perceived to be in accordance with the needs of patients and the satisfaction of patients or their families as recipients of the service itself[12].

The purpose of this study was to analyze the correlation between the factors of nurses workload and teamwork against service quality pre-hospital emergency in Kupang.

Method

This research used the survey analysis design and cross sectional approach. The population in this study is nurses in Healthy Brigade of Kupang (BKS) and families of patients who receive services from BKS. The number of samples is 20 of BKS nurses who selected by total sampling technique and 80 of patient's family who selected by accidental sampling technique. Nurses are asked to write down all the activities conducted for 3 times the duty schedule in the work sampling form for the assessment of the workload of nurses[8]. Nurses also filled out questionnaires Primary Care Nurse Practitioner Organizational Climate Questionnaire (NPPCOCQ) which consists of 34 questions for the assessment of teamwork [13]. Families patients are asked to fill out questionnaires of Service Quality which consists of 22 questions[14].

Results

Univariate analysis result can be seen in Table 1, 2 and 3 below

Table 1. Distribution of Nurses based on Workload and Teamwork.

		n	%
The nurses workload	Light	13	65
	Weight	7	35
Total		20	100
Teamwork	Good	15	75
	Poor	5	25
Total		20	100

According to Table 1 note that as many as 13 nurses (65%) had a light workload and 15 nurses (75%) had good teamwork.

Table 2. Distribution of Working Group on Duty Schedule

	Morning	Noon	Evening	Off Duty
Doctor	2	2	2	2
Nurse	5	5	5	5
Midwife	1	2	2	1
Driver	2	2	2	2
Total	10	11	11	10

According to Table 2 that in duty schedule, the morning, noon and evening always provide a working group consisting of doctors, nurses, midwives and driver.

Table 3. Distribution of Patients' Familybased on Services Quality Assessment

		n	%
Service quality	Satisfy	44	55
	Very satisfy	36	45
Total		80	100

According to Table 3 is known that as many as 44 families of patients (55%) considered that the service quality is satisfy and 36 families of patients (45%) rate the quality of service is very satisfy.

Bivariate analysis using contingency coefficient test was conducted to see the correlation between the workload of nurses and teamwork agaits service quality of pre-hospital emergency in Kupang. The results of analysis are shown in Table 4 below.

Table 4. Analysis Result of Correlation Between Nurses Workload and Teamwork with Emergency Services Quality of Pre Hospital in Kupang.

Satisfy n (%)		Service quality		r value r	p-value
		Very satisfy n (%)			
The nurses workload	Light	23 (44.2)	29 (55.8)		
	Weight	21 (75)	7 (25)	0.283	0,008
Total		44 (55)	36 (45)		
Teamwork	Good	16 (80)	4 (20)		
	Poor	28 (46.7)	32 (53.3)	0.279	0.009
Total		44 (55)	36 (45)		

According to Table 4 can be understand that there is significant correlation between the factors of nurses workload and teamwork with the quality of emergency services on pre-hospital in Kupang that conducted by Healthy Brigade of Kupang with p valuesare 0.008 and 0.009, respectively.

Discussion

Correlation Between Nurses Workload With Services Quality of Pre Hospital Emergency in Kupang.

At each duty schedule of BKS in morning, noon and evening always assigned one working group composed of two working teams. Each working group is composed of 2 doctors, 5 nurses, 1 or 2 midwives and 2 drivers. Each working group will be composed of 1 doctor, 2 or 3 nurses and 1 person without a midwife or midwife that are tailored to the type of cases that will be handled, and 1 driver. Work placement at each scheduled team guard causing the service can be implemented at any time so that patients and families can access the services of BKS.

The results shown that most nurses have a light workload, but this does not mean that nurses are not productive at work. It should be understood that the emergency services were conducted in the pre hospital is a dynamic service system. This means service providers can not predict the amount and severity of patients in need of emergency assistance during working hours[5]. The nurse said to have a heavy workload for the total amount of time the most used three times schedule watch is for productive activities directly and indirectly, while having light workload for a total time of the most used during working hours is for personal activities and the activities of non-productive more[8].

Their placement work teams and various categories of activities that can be conducted by a nurse and her team at the BKS with service quality pre-hospital emergency perceived by the patient's family. The workload of nurses in this study relates to the dimensions of trust or reliability, responsibility or responsiveness, assurance or assurance and reality or tangibles.

Placement of the number of nurses in each health service area greatly affect the success of treatment for patients [15]. Another study conducted by Aiken et al (2014) also states that the better patient outcomes and is directly proportional to the ratio of the number of placements is also good nurse[16]. There are also studies that conducted by Brecher & Graves (2018) which explain about the quality of emergency services on pre-hospital for pediatric patients can not be separated from the involvement of nurses since the preparation phase until the end of service[17].

Nurses are human resources that was the most in a health care at the hospital, which is in the 55% to 65% of the overall human resources [18]. The same fact is also happening in the organization of BKS, i.e the number of nurses are more than the number of doctors and nurses with the type of service that can not be predicted, dynamic and exhausting. Matejic et al (2015) also explained that the staffing portion is activity among nurses working team can affect the quality of service perceived by the patient as the recipient of the service, especially in emergency conditions[19].

Correlation Between Teamwork with Services Quality of Pre Hospital Emergency in Kupang.

Good team work will provide good service as well as every member of the team give their best ability to serve patients. Teamwork in this study relates to the dimension of reliability, responsibility, assurance and empathy on the quality of service perceived by the patient's family as the recipient of the service pre-hospital emergency department. Through good teamwork among nurses of BKS and his team created the emergency care service that looked and felt better overall by patients' families. The patient's family also felt that nurses provide professional skills when providing care. Received treatment appropriate to the patient and family expectations. Patient's family also assess the nurses of BKS is responsible for fast and responsive in responding to patient complaints. Nursing care provided by nurses in BKS trustworthy for assessing the patient's family that has been a professional nurse working in a team for every patient who needs help.

Their team work in the emergency services both in pre-hospital and hospital is needed because no one can predict the type and number of cases requiring immediate treatment. Nurses need to perform the role of collaboration with the medical team and other medical personnel when carrying out emergency services for a number of comprehensive case[6][20].

Teamwork both within the emergency services pre hospital can lead to several things, namely familiarity between officers, better communication, arises a sense of mutual trust and respect opinions, reduced risk of injury at work, the performance of services delivered better, and each of the team members influence each other both in terms of attitudes and responses given to patients [9][10], Hwang & Ahn (2015) also states that the quality of service will be increased if their good cooperation between team members because it can affect the safety of donor and recipient of the service[19].

Conclusion

There is a significant correlation between the workload of nurses and teamwork to service quality pre-hospital emergency in Kupang, East Nusa Tenggara, Indonesia. Nurses who work in the service of pre-hospital emergency department has the most light workload and teamwork are good. This led to the assessment of the quality of service perceived by the patient's family is satisfactory to very satisfactory.

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Family Atmosphere Make Family Resilience Which Have Adolescent with Mental Disorder (According to "Resilience" Theory of Haase & Peterson)

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Abstract

Mental disorder that experienced by the adolescents have impact on the patients and their family. Various stressors can make family get a distress. Resilience can help family to respond to stressors. According to "Resilience" theory of Haase & Peterson, family atmosphere that can relate to family resilience is emotional attachment and communication of family. The purpose of the study was to analyze the relationship between the emotional attachment and communication with family resilience which had adolescents with mental disorders.

This study used observational analytic method with cross sectional approach. Samples were 60 people of family which had adolescents with mental disorder that selected by using purposive sampling technique. The study was conducted at Psychiatric Hospital of Dr. Radjiman Wediodiningrat, Lawang. Data collection was conducted by using questionnaire. Data was analyzed by using univariate and bivariate.

Bivariate test result shown the significant positive relationship between the emotional attachment and communication with family resilience, with p value and r value sequentially (p=0,000, r=0,660), (p=0,000, r=677).

The conclusion of this study shown that family resilience could be encouraged with the emotional attachment and communication in family.

***Keywords:** Resilience, Family Atmosphere, Adolescent with mental disorder*

Background

The health problem which often experienced by the human is not limited to physical disorder, but also psychological disorder, that known as mental disorder. Mental disorder condition which experienced by the people not only affect to the concerned person, but also to their family. It cannot be denied that people with mental disorder cannot recover completely and will even hamper their productivity.[1]

Nowadays, mental disorder is not found only in adult age or older but also in adolescence. Mental disorder in children and adolescents is often difficult to be detected by parents because the parents often consider the behavior changes of children and adolescents are common. As the result, this situation is left until adulthood without any handling, so the child's condition is getting worsen and more difficult to be cured.[2]

The causes of mental disorder in children and adolescent are the lack of moral and religious education that obtained children in family, unhealthy family dynamic and dysfunction of family system such as child abuse, bad parenting, lack of open communication within the family, bad role model of parents and lack of boundaries between generations.[3] Besides those factors,

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social environmental factors also affect the mental health of children such as poverty and problems with peers. The other causes are globalization that identic with the inappropriate news, pictures and movies for children that can affect children's behavior changes.[4]

Currently, the mental disorder is being concern due to its high prevalence. WHO states that in the world there is 1 of 4 people who experience mental disorder. In Indonesia, according to the data of Indonesian Basic Health Research there were 294.959 household that analyzed, there were 1655 household which have family member with mental disorder.[5] Prevalence of mental disorder in 2018 is 7%, this rate is increased compared to the year 2013 which was only 1.7%. Similarly, the prevalence of mental emotional disorder. Mental emotional disorder that experienced by group of age >15 years in the year 2013 was only 6.0%, while in 2018 increased to 9.8%.[6] There are about 60 adolescents per month in Dr. Radjiman Wediodiningrat Lawang Psychiatric Hospital, who have mental disorder in 2018.

Mental health problems are one of five health priorities in the year 2015 to 2019 contained in the general guidelines for healthy Indonesian program with a family approach in 2016.[7] The family is the spearhead of mental health services that should help the healing process of adolescent with mental disorder and minimizing the incidence of recurrence, but due to factors such as financial problem, lack of family knowledge related to mental disorder and life problem that triggered stressful, this made family is unable to maintain the stability of the health of patients and family.[8] Families will be able to fight any stressors that come and turn it into a challenge to be solved if the family has a resiliency. Resilience is the family toughness in facing the problems under difficult conditions. Resilience is not only ability to survive but also to revive from the crisis. Family who have family member with mental disorder is said to have resilience if the family is able to adapt successfully and achieving balance in the family.[9]

Family resilience can be encouraged if there is a positive atmosphere in family. Nursing theory on resilience is triggered by Haase & Peterson with the theory of "Resilience". Resilience is described as a positive adjustment in facing the difficulty in with a primary focus on protective factors that can impede the risk factors. The protective factors include a positive atmosphere in family that formed of emotional attachment and communication in family.[10]

There was significant relationship between the emotional attachment in family and the increment of depression through encouraging the resilience. The emotional attachment in a family gives emotional support, hopes, and optimism in facing the stressors.[11]

Resilience score is higher on the conversation communication pattern than conformity communication pattern, because the conversation communication pattern gives the family member to participate and interact spontaneously about various topics, while the conformity communication pattern is more emphasize the participation in communication that should give attention to the suitability of attitudes, values and beliefs and obey parents or people who are more mature.[12] The importance of family resilience for the life quality of adolescents with mental disorder because the family is fundamental factor for the development and growth of adolescents, where the role of family is not only limited to financial support but also to keep emotions and behavior of adolescents to remain stable, provide treatment and prevent relapse.[13] The aim of this study was to analyze the relationship of emotional attachment and communication with family resilience of adolescents with mental disorders.

Methodology

This study was the quantitative research that used analytic design and cross sectional approach. Study was conducted to 60 people that consisted of family member of adolescent with mental disorder that selected by using purposive sampling technique with inclusion criteria, that were family member who visited to adolescent psychiatry polyclinic at Psyschiatry Hospital of Dr. Radjiman Wediodiningrat Lawang, had blood relationship and live with adolescent with mental disorder, the age of family member was more than 18 years old, and willing to be respondent of research evidenced by signing the agreement letter as respondent. Data was collected by using questionnaire of Family adaptability and cohesion scale by David H. Olson, Dean M. Goral & Judy W. Tiesel, Family communication scale by David H. Olshon & Howard Barnes, and Walsh Family Resilience Questionnaire by Froma Walsh. Data was processed and analyzed by univariate and bivariate using pearson correlation test. This study based on ethical principles

such as respect for person, justice, beneficence and non maleficence. The researcher respects the respondent's right. The researcher gave an explanation related to the research to all respondent without exception and got approval to participate in the research by using informed consent

Result

Univariate Analyzes Result

Univariate analyzes result consisted of demographic data of respondent that shown in table 1.1 and univariate data of research variable shown in table 1.2.

Tabel 1.1 The univariate result of demographic data of respondent.

Characteristic of respondents	Frequency (n)	Percentage (%)
Gender		
Male	28	46,7
Female	32	53,3
Last education		
Elementary School	23	38,3
Junior High School	8	13,3
Senior High School	23	38,3
College	6	10,1
Occupation		
Work	34	56,7
Do not work	26	43,3
Relation with the adolescent		
Father	22	36,7
Mother	22	36,7
Older brother	12	20,0
Grandfather	1	1,6
Grandmother	0	0
Uncle	3	5,0
Aunt	0	0

Table 1.1 shown that the majority of respondent were female, the frequency of the same education level between Elementary School and Junior High School, the frequency of the same relationship between adolescent

and father and mother, the majority of respondents were working.

Table 1.2 The univariate result of research variable

Variable	Mean±SD	Min-Max
Emotional attachment	26±3,6	15-30
Communication	54±5,0	35-60
Family resilience	131±12,0	90-145

Table 1.2 shown that average score of emotional attachment was 26, average score of communication was 54 and average score of family resilience was 131.

Bivariate Analyzes Result

Bivariate analyzes result would be shown at table 2.1

Table 2. 1 Bivariate analyzes result

	Resilience
Emotional attachment	r = 0,660, p = 0,000
Communication	r = 0,677, p = 0,000

Table 2.1 shown that there was significant positive relationship between the emotional attachment and family resilience with strong relation. The better the emotional attachment, the better family resilience. Relationship between communication and family resilience also shown the significant positive relationship with strong relation. The better communication, the better family resilience.

Discussion

Relationship between the emotional attachment and family resilience.

The study result shown that there was significant positive relationship between the emotional attachment and family resilience of adolescent with mental disorder.

The emotional attachment is a strong affection relationship between two individuals. Everyone is equipped with an innate psychobiological that made people formed a attachment with each other. The

attachment at the first obtained from parents or family. The emotional attachment was associated with the mental health of person. Poor closeness of emotional among family member, made the person didn't get love and attention, thus made the person's mental health was unstable.[14] The person who had a emotional attachment to the others in family and social environment would show an open attitude, warmth, responsiveness and trust to each other. While person who didn't have the emotional attachment would ignore others, had a negative thinking and always giving negative emotional.[15]

Adolescence is transition period where adolescents experienced various changes, such as physically, psychologically, environment, that made the adolescent should be able to adapt. At this time, parents should be a figure that wasclose to the adolescent in order to become a good support system. Through a strong emotional connection, adolescent would feel the support of parents. Especially for children who had problems in adolescence, the emotional attachment with parents was very important in helping the children through the problem. The emotional attachment made the adolescent didn't stay away from their family when having problems.[16]

The closeness of parents with their children would greatly affect the psychology welfare of children. This would lead the trust of children to their parents and also established the effective communication between the children with their family. The trust and communication were two importance indicators in the emotional attachment. Both of that greatly affected the children's emotional, so it would be able to help to form the moral, mental and social of children. The trust and communication that formed through the closeness of emotional in family was also become the determinant of resilience.[17]

Emotional attachment affected against the family resilience. The presence of closeness of emotional in family would provide harmonious relationship, made a sense of belonging and care to each other.[18] The emotional attachment become protective factor of family resilience. Family who was vulnerable against distress such as family that had children with chronic disease would fall into maladaptive condition easily, that made the family was not able to survive in that difficult condition. But strong closeness of emotional in family

would made the family was able to provide emotional support and inspire confidence that the family was able to pass through these conditions.[19] Family who had family members with severe mental disorders also shown that the emotional attachment in family became one of the identified factors that affected the family resilience, togetherness and routines, especially in times of crisis would form an emotional attachment that triggered positive emotion that made a family support each other to survive and through period of crisis.[20]

Relationship between the communication with family resilience

The study result shown that there was positive relationship between communication with family resilience of adolescent with mental disorder.

Family communication was a transactional process of delivering messages, ideas, opinions and sharing of feelings between family members. Implementation of family communication was an act of communication itself. Implementation of effective family communication would be more flexible and shown emotional support when having problems. Implementation of effective family communication was not only carried out through verbal communication but also non-verbal communication such as using facial expressions, body expression, touch, eye contact and listening gesture.[21]

Communication become important thing in family to ensure the harmonious relationship. Open communication that conducted by family made they would be more understand each member of family. Communication also made the sense of involvement and care in family life.[22] Family communication was directly related to the life quality of person, especially in term of health. Implementation of effective family communication played important role in adaptive coping mechanism that helped to avoid distress condition. Implementation of effective family communication could be seen from indicators such as active listening, giving a positive response, open, empathy and communication to make decision together.[19]

The implementation of effective family communication would give positive interaction and harmonious in family. This was sorely needed by the family when experiencing times of crisis, thus family was able to survive and remain stable which eventually

could encourage the family resilience.[23]

One of factor of resilience was family communication. Implementation of family communication that had characteristic of expressing feeling openly, delivering clear and consistent message and also collaborating in finding solution of problem was become important aspect in encouraging family resilience. The resilient family did not mean did not show their anger, but they would listen actively, understand and give the reason why they were angry or show negative emotion.[24]

Implementation of family communication become significant predictor against family resilience. Implementation of family communication that affected resilience was communication which giving freedom to family member to give their opinions and ideas, share their feeling and involve in decision-making than give certain boundaries to the family member to be or not to participate in the communication.[12] Family resilience in managing the problem should be supported by various resources, one of them was effective family communication. Resilience family would show dynamic interaction and communication in family.[25]

Conclusion

The conclusion of this study shown that family of adolescent with mental disorder could encourage the family resilience through emotional attachment and communication.

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Adolescents' Perspectives Towards Using Social Networking and Internet to Gain Information about Reproductive and Sexual Health in Jordan: A Qualitative - Community based Study

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Abstract

Background: Prevention of reproductive health problems in adolescents to enhance health outcomes through increasing awareness and knowledge has become a priority.

Method: A community based qualitative study was conducted to explore Jordanian adolescents' perspectives on using Internet and social media to learn about reproductive and sexual health

Results: Adolescents indicated that they often access social media and the internet to find information regarding reproductive and sexual health. They explained that these resources were easier, faster and available through smart phones.

Conclusions: It is crucial to initiate a culturally sensitive website to meet the adolescents' needs to gain accurate and reliable reproductive and sexual health information, through collaboration between reproductive health experts and local government decision makers, community health nurses, and school teachers.

Keywords: *Community based study, Reproductive and Sexual health; adolescents; Jordan.*

Introduction

It is evident by research from the Arab world that adolescents spend long hours invading websites and chatting [1,2,3,4]. However, using the internet and social networking by adolescents may have positive or negative outcomes on their health. Unfortunately, some information gained from the internet and social media is prone to be incorrect.

Adolescents use the internet and social media for a variety of reasons, most popularly for chatting, building virtual friendships, and playing games [5], seeking information for academic and / or health information purposes[6]. In Jordan, adolescents spend a great deal of time surfing the internet[3]. Adolescents' use of the internet for gaming and chatting, rather than for seeking information was found to be associated with negative effects (ie Internet addiction) [3]

Using social media and the internet can contribute to enhancing self-esteem among young people as these networks have given them a safe space to talk with others about their lives, while preserving their identity and dignity[7]. In contrast, other researchers reported

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that the escalating use of these sites has contributed to the vulnerability of young people, social isolation, depression, and bullying [8, 9.]

Despite the negative consequences of the internet on adolescents, it can be beneficial in disseminating information about sensitive topics such as reproductive and sexual health (RSH). Findings of a study conducted in USA revealed that 49% of the adolescents had used the internet to gain health information on topics such as sexually transmitted diseases and sexual behaviors, the authors concluded that the internet is an accessible and trustworthy tool for adolescents to learn about sensitive health information [10].

In Jordan, adolescents are the largest segment of society [11, 12]. It has been found that Jordanian adolescents do not know where to get such information because they believe reproductive clinics are reserved for married women and mothers [13]. Young persons who try to find RSH information from non-health care professionals may find that they are not receiving accurate information [14] and this lack of RSH information may put them at risk of pregnancy, abortion, sexually transmitted infections (STI).

Study Objectives:

- To explore how often adolescents surf the internet and how long (hours) they spend on using the internet and social media

- To explore the RSH information that adolescents expect to gain by using the internet and social media

- To explore adolescent perspectives on using websites and social media to gain knowledge and information about RSH

Method

Design

A qualitative design has been conducted using eight focus groups (FGs) in discussions to gain adolescent perspectives about reproductive health education via using the internet and social media. The FGs discussed participants' perspectives, experiences and opinions about the provision of RSH information for adolescents through using the internet and social media

for reproductive health topics. The FG interviews were conducted in Arabic and audio taped. Participants were notified when the recording commenced.

Sample and Setting

The participants in this study were recruited using a snowball sampling technique. The sample size was 40 Jordanian adolescents aged between 15-19 years (males and females) distributed into eight focus groups. In addition, another 8 Jordanian adolescents were recruited to be interviewed face to face to reach the saturation of the data.

The eight FGs were conducted in three regions in Jordan (North, Middle and South) with two groups in each region (one for males and another for females). Different areas in Jordan were used as it was expected that the cultural differences among these areas would have an impact on the adolescents' perspectives towards using social networking and the internet to gain information about RSH.

Data Collection Methods

The researchers developed a set of open-ended and non-leading semi-structured questions relevant to the study goals. The questions were thoroughly reviewed by experts to make to sure that the questions were culturally acceptable and appropriate to use. Furthermore, to make sure the final list of questions were understandable, a pilot study with five teenagers was conducted.

Ethical Consideration

Ethical approval from the Institute Research Board (IRB) at Al al-Bayt University was gained. Informed consents were obtained from participants and parents after giving them an information sheet about the study. The information sheet included the purpose of the study, an explanation that the study was voluntary in nature, and participants had the right to withdraw at any time without penalty.

Qualitative data analysis

The data collected through FGs and interviews, were transcribed for the content and managed. After cleaning the data, contents were looked at by each FG and interview questions, themes, patterns, relationships, and processes emerged.

Trustworthiness

Credibility was accomplished by taking a description back to the five pilot study participants to see if it reflected their perceptions. Truthful representations of the reality of the participants' data were presented with the aim of attaining trustworthiness [15]. An inquiry audit can be used to trace the data to their sources [16]. In this study, we audited the whole research process. The transferability of this study was insured because we gained similar findings from different areas in Jordan.

Results

48 Jordanian adolescents were recruited to participate in the study. The average time spent on using Internet and social media during vacation was 4.5 hours and 3 hours during week days. FGs findings regarding the participants' perspectives were presented in two main themes:

First Theme: e-reproductive health website: adolescents' perspective

In the era of e-learning and e-health, online methods have become an important and widely used method in health education and promotion. The participants in this study supported the idea of using a web-based platform to provide reproductive health information and skills as well as to discuss its contemporary issues.

One female participant stated (16 years old)*: 'I support the idea of developing a reproductive health educational website. Such websites regarding reproductive health improve the knowledge level of adolescents regarding reproductive health'.* Female participants expressed their support to developing a reproductive health website; a17 years old female stated*: 'I support at least that the site has privacy and confidentiality and supervised by specialists).*

Most of the participants could not explain their ideas and views in depth. They gave short superficial answers to reflect their perspectives. However, one female participant from south area group expressed herself differently: a 19 year old female stated *'I support it because any female who cannot reach the health care providers to answer their questions can resort to the site and this shortens effort and time.* Another female participant aged 15 years old from the same FG stated *'I supported it because some girls have neither awareness*

nor full knowledge about RSH'.

Another participant focused on the understanding that women and girls are in need to use the website because they have the perception that reproductive health means females' health. A female aged 18 years old said *'Yes, I support it, because it works on educating women and provides information she doesn't know by visiting the site.'*

Male participants in another FG provided different perspectives in supporting developing a reproductive and sexual health website. For example, a 16 year old male stated *'I support the idea largely because it increases awareness of people.'* Also two 17 and 18 year old males supported establishing a website because the use of electronic devices has become public and the availability of information on the internet. In addition, they felt less shame when accessing information. *'I support it because of the significant use of electronic means'*, and *'I support it because one can get the great information without shame.'* Some participants who supported the idea were concerned about providing the same content of information on RSH for all ages. For example, a 15 year old male stated*: 'surely I support the idea but not for all ages'.* However, a few participants (4) were opponents of such a website because they thought that the RSH information is not appropriate for children if it is occasionally accessed by them.

Adolescent participants in this study were using social media and the internet to find information or knowledge because it is easier, faster and available through smart phones. A 15 years old described his use of social media; *'I use social media and the internet because it is available easily at home, on smart phones, and I can use it any time. So it is easier than books or stories'.*

The responses of male participants from South area presented similar reasons to use social media and the internet; they (15, and 18 year old males respectively) conveyed their opinions in superficial and short answers as follows: *'Easy access to information and multiple sources'*, *'Provides private, fast, and comprehensive information on reproductive health'*. These comments contradicted findings from female participants of the South area FG and male participants of the Middle area group. They reported that they did not use the internet to find any information regarding RSH issues.

Some participants were cautious in establishing such a website. Some of them supported using the internet and social media by the adolescents only if they use it under their parents' supervision. A 15 year old female reported *"I do not mind using the internet and social media to gain information on RSH, but there must be control of parents to avoid misuse of such sites"*. Others supported establishing such websites only if it is managed and controlled by reproductive health specialists. For example, a 15 year old girl: *"The administrators of such sites must be competent with their information on reproductive and sexual health topics and have a strict control of such sites"* Their reasons for supporting this include that they feel ashamed to discuss some RSH topics with their parents and/ bold the line as well or brothers and sisters.

Second theme: the vehicle towards reproductive health knowledge

Using social media for RSH education was a preferred method but not all participants agreed. For example, a 15 year old female stated *'I have not used social media for seeking reproductive health knowledge'*. Female participants (16 and 18 years old respectively) emphasized their need for information on reproduction and physiological problems, such as *'Information about the menstrual cycle, pregnancy period, and problems after the interruption of the cycle.', 'Adolescent health issues, psychological problems related to puberty'*. Also, some participants emphasized the need for information about masturbation and sexual relationships. An 18 year old male stated *'I expect to find knowledge about masturbation, sexual relationship between partners, signs and symptoms of puberty in males.'*

Participants in this study have many concerns about RSH issues. Their knowledge is insufficient and weak. They support developing a website for RSH education but they reported that they would be hesitant to use it. Some of participants preferred not to ask anyone about puberty changes nor would they use a website. However some participants reported that they may ask their parents or visit a doctor to ask about puberty. For example, a 16 year old male said *'I may ask my parents and visit a doctor'*.

Findings from the interviews revealed more in-depth points of view. For example, in response to a question on why they are using the internet and social media to learn about RSH, a 17 year old female stated: *'I use social media and the internet because it shows different people's opinions on issues regarding* reproductive *and sexual health, also, more explanations and information are available on such sites especially for issues that I feel shame to ask about, such as sexual intercourse'*. An 18 year old male stated *'by using the internet and social networking we can find information on RSH introduced to us as adolescents in nontraditional ways as when we watch videos and request information from people in more private context; they don't even know who am I or where I am'*. A female aged 16 years old stated *"I support the development of an educational website in the area of RSH, for the sensitivity of these subjects and the restraints and embarrassment we may face"*.

It was noted that participants from the middle region including the main cities in Jordan such as Amman (the capital) and Zarqa (both cities are located in the middle district) talked about using the internet and social media to find RSH information without feeling shame. However, participants from South region and North region did not freely talk or express their needs about RSH education, although they supported the idea of developing a specified website regarding RSH education.

Discussion

Adolescents indicated that they often access social media and the internet to find out information regarding RSH. They explained that these resources were easy, quick to access and available through smart phones. This finding is consistent with the previous literature [10, 15].

In addition, the participants supported the idea of using a web-based platform to provide RSH information and skills and to discuss relevant contemporary issues. The majority of the participants supported initiating a website to provide them with the essential RSH information although some of them are opponents of such website because they are afraid that these sites are inappropriate for children who may accidently open it. This result is expected in the Jordanian conservative community.

An interesting finding in this study was that the participants' expectations about RSH knowledge on a website were varied and fragmented. The findings were superficial and were not in such a depth as to reflect the actual needs for RSH education of the Jordanian

adolescents.

It is worth noting that parental supervision should be the main source of information about RSH to their children. It is reasonable to understand that unmonitored internet use may place adolescents at significant risk of unreliable and incorrect information.

Building on the results of the current study, we shall propose to the local government to initiate a culturally sensitive website to meet the adolescents' RSH needs to gain accurate and reliable information regarding their RSH, introduced to them by reproductive health and community health experts. Thus, we recommend a culturally sensitive website in Arabic language (to our knowledge there are no such websites in Jordan). Such a website is expected to be responsive to the needs of the Jordanian adolescents and culturally competent to suit the Arab Islamic culture.

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A Study to Assess the Effectiveness of Drawing and Painting on Behavioural Problems of Children with Attention Deficit Hyperactivity Disorder in a Selected Special School at Kanyakumari District

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Abstract

Attention deficit hyperactivity disorder (ADHD) is one of the most frequently diagnosed psychiatric disorders in children[1]. In worldwide it affects roughly about 5% of children. In India, the prevalence of ADHD among primary school children was 11.32%[2] Its core symptoms include developmentally inappropriate levels of attention, concentration, activity, distractibility and impulsivity. It has also been shown to have long term adverse effects on academic performance, vocational success and social emotional development[1].

The present study aims to prove that the drawing and painting is an effective modality in reducing the behavioural problems among ADHD. Here the post test mean score of behavioural problems 37.1 was lower than the pre test mean score of behavioural problems 44.9, and the corresponding 't' test value 24.810 which was also significant (P < 0.001).

Keywords : *Attention Deficit Hyperactivity Disorder, Behavioural Problems, Drawing, Painting*

Introduction

Children are the world's most valuable resource and its best hope for the future

> *- John Fitzgerald Kennedy*

The children of today will be adults of tomorrow. Their quality and the personality will determine the kind of destiny that beacons the nation. But these children's are experiencing lot of problems in their early life itself. One of the most common problems that were faced by the children's is behavioural difficulties. Behavioural difficulties in children have wide ranging social and economic consequences[3].

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Attention deficit hyperactivity disorder (ADHD) is one of the behavioural disorder and developmental condition of inattention and distractibility, with or without accompanying hyperactivity. It may also lead to difficulties with academics or employment and social difficulties that can profoundly affect normal development[4]. However, studies suggest that childhood attention deficit hyperactivity disorder a risk factor for subsequent conduct and substance abuse problems[5].

A wide variety of treatments have been used for attention deficit hyperactivity disorder which include play therapy, dietary management, biofeedback, meditation, psychosocial treatment, psychotropic medications etc. In empirical literature agreed that only three treatments have been validated as effective short term treatment of attention deficit hyperactivity disorder that is behavior modification, central nervous system stimulants and the combination of these. Treatment strategies are designed to address the behavior, cognitive, social and family problems[6].

Drawing and painting has been used extensively with children in the latency age group in a school setting. A study describes six weeks of drawing and painting intervention was given for children with attention deficit hyperactivity disorder to exhibit the hyperactive behavior. Preliminary finding indicate that drawing and painting has the effect of decreasing hyperactive behaviors over time[7]. Thus drawing and painting considered as an effective method of intervention to reduce the behavioral problems in children with attention deficit hyperactivity disorder

Back Ground of the Study

Attention deficit hyperactivity disorder is a highly co morbid condition and associated with externalizing disorders like Oppositional defiant disorder and conduct disorder, Internalizing disorders like major depression, and Somatization disorders. Up to 44% of attention deficit hyperactivity disorder children may have one psychiatric disorder, 32% of them are having two psychiatric disorder and 11% of them are having at least three of these disorders[8].

In 2016, an estimated 6.1 million US children aged 2–17 years (9.4%) were diagnosed with ADHD. Of these children, 5.4 million currently had ADHD, which was 89.4% of children ever diagnosed with ADHD and 8.4% of all U.S. Almost two-thirds of children with current ADHD (62.0%) were taking medication and slightly less than half (46.7%) had received behavioral treatment for ADHD in the past year; nearly one fourth (23.0%) had received neither treatment[9].

Behavioural difficulties in children have wide ranging social and economic consequences. However up to 50% of preschool behavioural problems can persist and develop into childhood mental health problems, leading to an increased risk of substance misuse, family violence and later crime[3].

Studies conducted in the western countries revealed that, many interventions had reduced the behavioural problems of children with attention deficit hyperactivity disorder like behavioural modification, drawing, painting, neurofeedback, multi model intervention etc. Among this intervention many studies shows that drawing and painting is an effective mode of treatment, because it gives a way to express themselves and find ways to redirect the energy required to maintain attention,

so that it can be applied to listening, and improving the academic performance of the children.

Drawing and painting has much benefit as a treatment modality, it works with children with attention deficit hyperactivity disorder. It gives children a way to express themselves. Drawing and painting is also been used to help disturbed children learn to trust adults and have positive feelings about school. The role of drawing and painting has also been emphasized in developing and evaluating cognitive skills[10].

Drawing and painting is an intervention that has many benefit as a treatment modalities and it works with children having attention deficit hyperactivity disorder, like it gives children a way to express themselves and it has the ability to stop activity or even intrusion on others

Hypotheses

H1 : There will be a significant difference in the behavioral problems of children with attention deficit hyperactivity disorder after drawing and painting.

H2 : There will be a significant association between the behavioral problems in children with attention deficit hyperactivity disorder and selected demographic variables like age, sex, education, type of family and income.

Material and Method

The study conducted using quantitative approach with pre experimental one group pre test post test design. The population was children with attention deficit hyperactivity disorder who getting special education at Santhi Nilayam, a special school for mentally challenged, Erumbukadu. Totally 30 samples were selected using Purposive sampling technique.

Tool used to collect the data consist of 2 part. First part Demographic variable collected from participants profile and information from teachers consist of age, sex, education, type of family and income and the Second part to assess the behavior of the children by Attention deficit hyperactivity disorder rating scale. The content validity of the tool was established by seven experts. The reliability of the tool was tested by test retest method (0.96). The tool was found to be reliable.

The tool has 18 items, mainly assessing the core symptoms of attention deficit hyperactivity disorder that

is Inattention, Hyperactivity and Impulsivity symptoms. Items are rated on a four – point scale from 0 – 3 (0 – Not at all, 1- Just a little, 2- Often, 3- Very often) and the maximum score for this scale is 54. Based on the score level the behaviour was assessed.

S.No	Behavioural problems	scores
1	Mild	1-18
2	Moderate	19-36
3	Severe	37-54

Data collection was done for six weeks.

Step 1 (Pre intervention assessment)

Pre test was conducted in order to assess the moderate and severe behavioural problem of children with attention deficit hyperactivity disorder After the pre test and analyzing the score 30 children's had moderate and severe behavioural problems was selected as sample.

Step 2 (Administration of intervention)

The intervention of drawing and finger painting for 1 hour every day till 6 weeks. The children showed much interest in drawing and painting, which was observed throughout the intervention period.

Step 3 (Post intervention assessment)

After 6 weeks of intervention a post test was conducted using the same tool by the teachers

All the data were analyzed using Descriptive statistics to assess the pre test and post test score among attention deficit hyperactive disorder children and Inferential statistics (Paired 't' test) to compare the pre test and post test score among attention deficit hyperactive disorder children.

Findings

In the pretest 6, (20%) of attention deficit hyperactivity disorder children had moderate behavioural problems and 24, (80%) of attention deficit hyperactivity disorder children had severe behavioural problems. In the posttest 10, (33.3%) of attention deficit hyperactivity disorder children had moderate behavioural problems and 20, (66.7%) of attention deficit hyperactivity disorder children had severe behavioural problems. In demographic variables the nuclear family was associated with the pretest behavioural problems and other demographic variables have no association with the pre test behavioural problems of children with attention deficit hyperactivity disorder.

Table : 1 - Assessment of behavioural problems among children with attention deficit hyperactivity disorder before and after the drawing and painting N = 30

Score	Level of behaviour	Pre test		Post test	
		Frequency	%	Frequency	%
1-18	Mild	0	0	0	0
19-36	Moderate	6	20.0	10	33.3
37-54	Severe	24	80.0	20	66.7

Table : 2 - Effectiveness of drawing and painting in reducing the behavioural problems among children with attention deficit hyperactivity disorder N = 30

Subjects	Pre test		Post test		Reduction		't' test	d.f Significance P - value
	Mean	S.D	Mean	S.D	Mean	S.D		
Behavioural problems	44.9	6.2	37.1	6.0	7.8	1.7	24.810	29 P < 0.001 3.66

The post test mean score of behavioural problems 37.1 was lower than the pre test mean score of behavioural problems 44.9, the 't' test value 24.810 which was also significant (P < 0.001).

Discussion

The discussion based on stated objectives

1. *To assess the pre test score of behavioral problems of children with attention deficit hyperactivity disorder before drawing and painting.*

On analyzing 20% of children had moderate behavioural problems and 80% of children had severe behavioural problems.

2. *To assess the post test score of behavioral problems of children with attention deficit hyperactivity disorder after drawing and painting.*

On analyzing 33.3% of children had moderate behavioural problems and 66.7% of children had severe behavioural problems.

3. *To find out the effectiveness of drawing and painting on behavioral problems of children with attention deficit hyperactivity disorder.*

On analyzing the data on effectiveness of drawing and painting on behavioural problems of children with attention deficit hyperactivity disorder revealed that mean reduction of behavioural problems was 7.8 ± 1.7. The above mean reduction was statistically significant. (d.f = 29, P < 0.001).

4. *To find out the association between the behavioral problems of children with attention deficit hyperactivity disorder and selected demographic variables such as age, sex, education, type of family and income.*

By analyzing the data found that nuclear family has significant association with the behavioral problems of attention deficit hyperactivity disorder children

Conclusion

The study findings revealed that there was a significant reduction in the behavioural problems among children with attention deficit hyperactivity disorder after the administration of drawing and painting. Thus, drawing and painting played an important role in reducing behavioural problems among children with attention deficit hyperactivity disorder.

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A Study to Evaluate the Effectiveness of Problem Based Learning (PBL) Module on Knowledge and Attitude among Nursing Students

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Abstract

Objective: To evaluate the knowledge and attitude regarding Problem Based Learning (PBL) Module among Nursing Students, Associate knowledge and attitude scores with selected demographic variables, Correlate the knowledge and attitude of Nursing students who undergone to Problem Based Learning activities.

Background: The Problem based learning (PBL) is require for present situation in all aspects of competence care providers and research action tool for upgrading deep knowledge about clinical subjects[1].

Method and Materials: Research approach: Qualitative approach, **Research design:** Quasi-experimental design. **Sampling:** The Final year students of B.Sc nursing and GNM whose are final year traing in the clinical area. The Number of students was influenced by the nature of the design and number of respondents. The purposive sampling technique was adopted. It is the participant sense of reality and truth therefore the researcher recruited 40 samples foe the study

Results and Discussion: The findings revealed that majority of the students (72.3%) belongs to 18-21 years, 78.2% of the students were from rural background and 21.8% of the students were from urban background. The study revealed that 70.4% of the students had moderately adequate knowledge, 25% had inadequate knowledge and only 4.6 % of nursing students had adequate knowledge in the pretest. The study revealed that 48.8% of the nursing students had adequate knowledge, 6.6% of had inadequate knowledge and only 44.6% of nursing students had moderately adequate knowledge in the posttest. The present study revealed that overall 38.7% of the nursing students had a favourable attitude, 31.7% of the nursing students had moderately favourable attitude and 30 % of nursing students had unfavourable attitude in the pretest. The study revealed that overall 68.5% of the nursing students had favourable attitude, 31.5% of nursing students had moderately attitude in the posttest. There was no significant difference between mean pretest knowledge score (t=1.813,p>0.05).But there was significant difference between mean post-test knowledge score(t=10.814,p>0.05).The results implied that the Problem based learning module was effective sense of performance in improving knowledge among nursing students. There was no significant association between pretest knowledge level among nursing students and age,religion,years and working areas. There was association between pretset levels of knowledge among nursing students regarding Problem based learning module with their source of information. It was found that statistically significant at p>0.05.

Conclusion: The nursing students had average knowledge and attitude before planned Problem Based learning module and then the source of information had impact on knowledge and attitude of nursing students. There was no significant association between pre-test knowledge level among nursing students and age, religion, years and working areas. There was association between pre-test levels of knowledge among nursing students regarding Problem based learning module with their source of information. It was found to be statistically significant at P>0.05.

Keywords: *Effectiveness, Problem Based Learning Module, knowledge, Attitude, Nursing students*

Introduction

PBL's impact on the attendants' learning objectives is largely positive but not entirely. It is found that PBL contributes to the higher performances of Nursing students on the final examinations compared with those who received traditional regular teaching. PBL education on standardized examinations were not consistent. PBL is based on or situated in healthcare and activates prior knowledge that is then elaborated in small group discussion. The process facilitates learning and knowledge retrieving. Retrieving knowledge and applying it to a clinical setting is an important step to help a novice nurse to become an expert. Rapidly advancing medical technology and science requires nursing education to become "hybrid," combining old teaching methods with innovative methodologies[2,3].

Need and significance

Nursing education has begun to shift from teacher-centered learning to student-centered learning where students are required to actively   seek knowledge. Instead of training for the nurses who only can see one problem, Problem Based Learning offers a more holistic perspective of the problem in its own contextual nursing environment. Problem Based Learning fits well with the concepts of the nursing metaparadigm (person, environment, health, and nurse. The PBL process addresses each problem with a focus on person (problem embedded in that person), the specific environment that affects the person's health, particular health related issues, and the nursing strategies/management executed to promote a person's health. In addition, the PBL process is a learner-centered process that triggers free requisition for knowledge by the learner [4].

PBL has been incorporated into some nursing programs but its effectiveness has not yet been reported. One study showed that PBL will produce proactive learning and suggested that nursing education should incorporate PBL. Beers and Bowden reported that those nursing students taught with PBL had significant improvement in long-term knowledge retention compared with their counterpart. One study indicated that Korean nursing students who were taught by PBL had better test performance than the traditional group. The purpose of this study was to evaluate the educational benefit on those who were taught in traditional didactic methods versus PBL [6].

Objectives

Assess the knowledge and attitude regarding Problem Based learning Module among Nursing Students

Associate knowledge and attitude scores with selected demographic variables.

Correlate the knowledge and attitude of Nursing students Problem Based Learning skills.

Hypothesis

H_1: There will be significant association knowledge regarding PBL Module with demographic variable.

H_2: There will be significant association of attitude regarding PBL Module with demographic variable.

Conceptual Framework

The study is   focused on assessing the knowledge and attitude regarding Problem Based learning module among nursing students who performed in Problem Based Learning   skills. The present study is intended to assess the knowledge and attitude of nursing students regarding Problem Based Learning in nursing. The conceptual framework for the present study was based on Bertanfy's model. The phases of the model are assessment,   input, process and output. The theory is concerned with changes due to interaction between the factors in a particular situation. There is a continuous interaction between students and teacher [7].

Review of Literature

PBL is a small group teaching method that was developed to help learners acquire the knowledge, skills, and attitude so significant proportion of a course or curriculum. The first definition of PBL was given by Barrows and Tamblyn(1980) "the learning that results from the process of working toward the understanding or solving a problem". PBL is student (learner)-centered approach that fosters learners to search, combine between theory and practice by utilizing knowledge and skills to evolve a viable solution to the problem [6]

Nursing education must keep up with the rapidly changing medical landscape to support the competences of nurses in the areas of critical thinking, problem solving, and creativity. Problem-based learning (PBL)

provides an appropriate strategy for nursing education innovation. Nursing curricula based on PBL remain in the growing stage. The critical events in the process included: (1) nurturing key tutors; (2) using PBL teaching methods in an elective course--Oncology Nursing, and designing a new elective course--Symposiums Regarding Clinical Cases; (3) holding conferences inside and outside the school to promote PBL teaching methods; (4) linking e-learning and PBL teaching methods; (5) conducting PBL research; (6) establishing a committee of PBL, objective structured clinical examination, and teaching material review for the College of Nursing; and (7) setting up a required course--Nursing Ethics. The approach helps students to cope with the changing medical landscape. Furthermore, tutors and teachers develop adequate PBL teaching skills. Moreover, learning in PBL helps students share one's ideas with each other that improves thinking and deepens understanding. PBL creates opportunities for students to interact with the teacher and their peers, which further promotes their conflict resolution skills as well as facilitates a greater student motivation, broadens the use of a variety of learning resources and encourages team building and group working, self-directed work, and communication skills [14]. Furthermore, PBL gives room to students to search for knowledge and information to solve problems, thus allowing them to learn and acquire the problem solving skills. In addition, when students solve such problems, they generate hypotheses and face multiple alternatives or solutions to the problem in which they should choose the best one from these alternatives or solutions; thus, such students can acquire decision-making skills. Decision-making is an essential aspect of management, and a vital ability for the practice of nursing that enables nurses to perform their complex responsibilities. Decision-making is a behaviour displayed when selecting and implementing a course of action from among alternatives with the purpose of dealing with a particular situation or problem[13]. Furthermore, decision-making is a process that chooses a preferable option or a course of actions from a set of alternatives based on given criteria or strategies. It is the process of examining possible options, comparing them, and choosing a course of action. Decision-making skills are enhanced and developed through a process of decision-making. Firstly, one should identify the problem or the opportunity. Then, he/she should think up alternative solutions. After that, he/she should

evaluate the alternatives and select a solution. To ensure the success of implementation, there is a need to do two things: plan carefully and be sensitive to those affected. While evaluating the decision made, if the action does not work, one can give it more time, change it slightly, try another alternative, or start over again[8].

Numerous studies indicate that the process of learning is different in PBL and PBL challenges students to become self-directed life learners. Few studies have demonstrated the effectiveness of PBL in an undergraduate nursing program on student test performance. This paper reports the effectiveness of PBL by comparing the test performances from the PBL group and the traditional group in an undergraduate nursing program [10].

Problem based learning is a strategy that enhances student's ability to critically apply cumulative knowledge to actual clinical problems. It necessitates collaborative student effort to analyse and solve unfolding clinical problems that are fluid and reflect real life situations. The authors describe an approach developed to generate PBL scenarios and guidelines that may be however, in reality is PBL utilised by clinicians as a method of clinical teaching in health professional programs [12].

Methods and Procedures

Research approach: Qualitative approach,

Research design: Quasi-experimental design.

Study Settings: The study was conducted in selected colleges of Nursing and Hospitals in East Godavari district ,Andhra Pradesh.

The Nursing students of BSc and GNM programme were adopted for the study. The number of students was influenced by the nature of design and number of respondents.

Sampling:

The purposive sampling technique was compromised of respondents who are likely to be able to provide information and the phenomenon under study.the nursing students were targeted as a sample to respond questionnaire.

The identified participants were then approached by researchers and requested to participate in the study.

Written consent was taken from the students to maintain confidentiality of the study. The sample size for qualitative research was not predetermined and therefore sampling was done until saturation.

The Final year students of B.Sc nursing and GNM whose are final year training in the clinical area. The Number of students was influenced by the nature of the design and number of respondents. The purposive sampling technique was adopted. It is the participant sense of reality and truth therefore the researcher recruited 40 samples foe the study

Criteria for sample selection

Inclusive criteria: Nursing students who were available at time of data collection and who attended the seminar. Who has understood better English and willing to participate in the study.

Exclusion criteria: Nursing students who has through about previous knowledge on Problem Based Learning skill

Description of the tool

The structured questionnaire consisted of three sections.

Demographic data: It included age of the students, medium of instructions, education of parents, education type, duration of the course and previous source of information**.**

Questionnaire: There were multiple-choice questions regarding Problem Based Learning Module.

Likert attitude scale: The likert attitude scale consisted of 15 items of Problem Based Learning Skills.

Validity of Tool: The self-administered structured knowledge questionnaire attitude scale and structured psychomotor module are given to expert and got suggestion and modification were accepted and incorporated.

Reliability of tool:

Reliability of the questionnaire and attitude scale computed by applying split half method using karl pearson coefficient formula i. e r= 0.91which shows tool was internally consistent.

Data collection:

Data was collected through the depth in questionnaire about knowledge and attitude scale basis for convergence on truth because it was hoped that true information could be sorted out, a researcher with an opportunity to probe more on the issues under study.

The date was collected thoroughly with permission from the participant they wished to make any comments pertains to the study topic. Following this, the researcher thanked each participant for their time and valuable contribution. The data collection totally took six weeks of time. As there were no overlaps of staff between departments and the departments were far apart contamination between subjects were negligible[10]

Data Analysis

The data analysis included descriptive and inferential statistics. The following plan of analysis was developed with opinion of experts. The analysis would be done based on objectives and hypothesis to be tested. The demographic data would be analysed in terms of descriptive statistics. The analysis was made based on objectives and assumptions.

The transcribed data and written notes made by researcher followed questionnaire distribution the means to begin exploring the data obtained. The data was analyzed descriptive and analytical way of transmission of data[10].

Results and Discussion

The findings revealed that majority of the students (72.3%) belongs to 18 -21 years, 78.2% of the students were from rural background and 21.8% of the students were from urban background.

The study revealed that 70.4% of the nursing students had moderately adequate knowledge, 25.0% had inadequate knowledge and only 4.6 % only the nursing students had adequate knowledge in the pretest.

The study revealed that 48.8% of the nursing students had moderately adequate knowledge, 6. 6% had inadequate knowledge and only 44.6 % only the nursing students had moderately adequate knowledge in the post test.
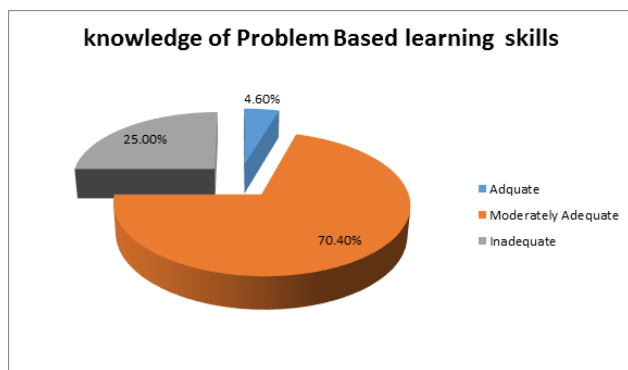
Figure 1; Overall Knowledge of Nursing students regarding problem based learning skill module in pre test(N=40).
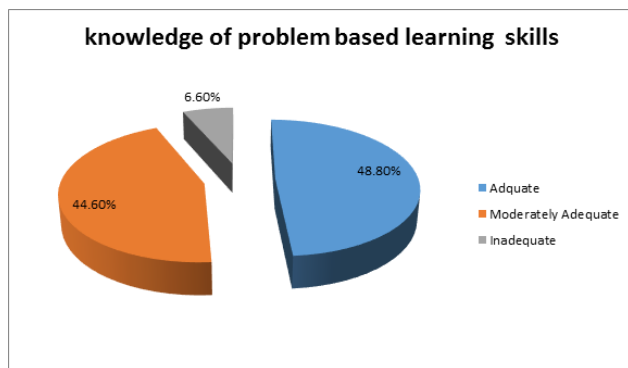

Figure 2; Overall Knowledge of Nursing students regarding problem based learning module in post test(N=40).

The present study revealed that overall, 38.7% of the nursing students had a favorable attitude, 31.7 % of the nursing students had moderately favorable attitude and 30% of the nursing students had unfavorable attitude in the pretest
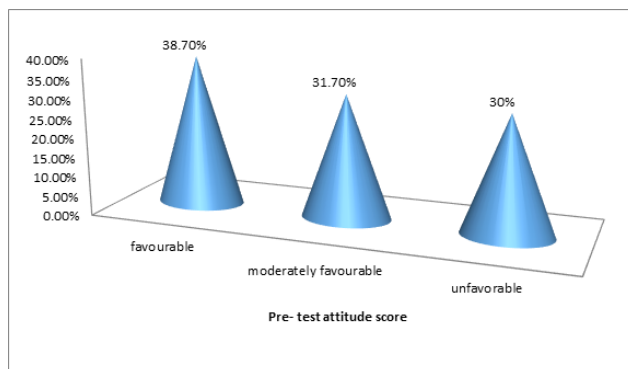

Figure 3; Overall Attitude of Nursing students regarding Problem based learning module in pre test (N=40).

The study revealed that overall, 68.5% of the nursing students had a favorable attitude, 32.5 % of the nursing students had moderately favorable attitude in the post test.
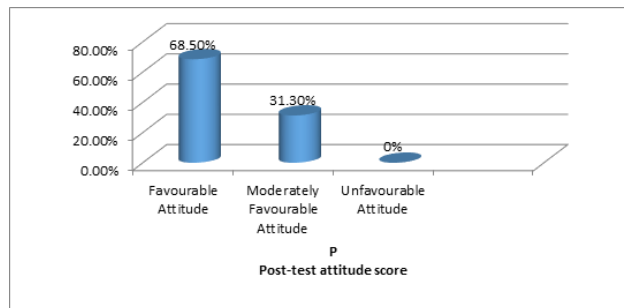

Figure 4; Overall Attitude of Nursing students regarding problem based learning module in post test(N=40).

Table 1: Comparison of pretest and post test level of knowledge among nursing students(N=40)

Knowledge score	pretest	Post test
Mean	14.0	21.2
Standard deviation	3.1	1.8
Upaired t,df, p value	1.670,5,0.100	-10.914,5,0.000

There was no significant difference between mean pre test knowledge score (t=1.670,p>0.05). But there was significant difference between mean post test knowledge score(t=10.914,p<0.05). The results implied that the structured psychomotor clinical module was effective improving knowledge among nursing students.

There was no significant association between pretest knowledge level among nursing students and age, religion, years and working areas. There was association between pre test level of knowledge among nursing students regarding structured Problem Based learning module with their source of information. It was found to be statistically significant at p<0.05.

Conclusion

The nursing students had average knowledge and attitude before problem based learning module, then the source of information had impact on knowledge and attitude of nursing students. There was no significant association between pretest knowledge level among nursing students and age, religion, years and working areas. There was association between pre test level of knowledge among nursing students regarding problem based learning module with their source of information. It was found to be statistically significant at p < 0.05.

Conflict of Interest: None

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Study on Effectiveness of Intervention Programme on Knowledge and Practice Regarding Impact of Walking Exercise on Old Age Activities of Daily Living among Old Age Persons in Tripura West District

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Abstract

Introduction: Walking Exercises are plays major role in Old age groups. As the aging population keeps increasing all sort of diseases, so the older people are recognizing the growing balance in activities need for exercise in their lives. Maintaining an active lifestyle is crucial for sustaining health and happiness. Exercise can help older age group to achieve the higher quality of life, and it can help them live longer as well[1].

Method and Materials: The research design adopted for this study was pre experimental i.e. one group pre-test post-test with evaluate approach. The sample size was 40 Old age persons, structured questionnaire were used to measure the knowledge and practice of Old Age groups.

Results: The post Knowledge and Practice mean score is significant higher than pre-test knowledge and practice mean score at the level of significant $p > 0.05$.

Conclusion: The knowledge and practice of walking exercise with Activities of Daily living of Aged persons can be further improved by providing ongoing teaching and training programme.

Keywords: *Effectiveness, knowledge, Practice, Walking exercises, Old age person*

Introduction

Exercise can have an especially positive effect on heart and brain health. A study reported by the Gerontological Society of America found that fitness training led to significant increases in brain volume in people between 60 and 79 years old. Regular exercise can also help treat several chronic health conditions, including arthritis, diabetes and heart disease[1]. There were approximately 40.3 million people aged 65 years or older living in the United States in 2010, making up 13 percent of the overall population during this time period [2].

The aging process can have an enormous impact on the human body. As people age, they may notice a loss of agility, balance, endurance and strength as well as a loss of bone density and muscle mass. Likewise, they may also notice an increase in body fat and possible joint injuries. It is estimated that four out of every five adults aged 50 years and above are suffering from at least one condition that is chronic[4].

Older people can try a wide range of exercises to improve their physical health. Aerobics, swimming, tai chi, weight training and yoga are all great options for maintaining a healthy lifestyle[3]. Engaging in strenuous physical activity is not the only way to stay fit and healthy. It is also possible to stay physically active by keeping up with casual daily activities. Walking briskly, taking the stairs, gardening, doing yard work and completing household chores are all simple activities that may make staying active an easier endeavor [4].

Trying new things can be exciting and rewarding in multiple ways. Consider walking to the park instead

of playing video games or watching television when babysitting grandchildren. This healthy activity could even be a memorable bonding experience [6, 7]. Rethinking priorities could be helpful as well. Taking a walk after lunch instead of reading a book could potentially become a fun daily routine [5].

Turning everyday walking activities into an exercise is another easy way to increase physical activity. There are many reasons why we tend to slow down and become more sedentary with age. It may be due to health problems, weight or pain issues, or worries about falling. On perhaps we think that exercising simply is not for the old age. However, as the growing older age, an active lifestyle becomes more important than ever to the old age health. Getting moving can help boost the energy, maintain independence, protect heart, and manage symptoms of illness or pain as well as body weight. In addition, regular exercise is good for the mind, mood and memory. No matter of old age or the current physical condition, these tips can show the simple way, enjoyable ways to become more active and improve the health status and outlook [9].

Starting or maintaining a regular exercise routine can be a challenge at any age and it does not get any easier as for the old age. They may feel discouraged by health problems, aches and pains, or concerns about injuries or falls. If never exercised before, it may not know where to begin, or perhaps the old persons have to think for regular exercise, when there need for regular pattern[10].

While these may seem like good reasons to slow down and take it easy as in old age, they are even better reasons to get moving. Becoming more active can energize the stress, mood, relieve stress, it help manage symptoms of illness and pain, and improve the overall sense of well-being. Moreover, reaping the rewards of exercise does not have to involve strenuous workouts or trips to the gym. It is about adding more movement and activity to improve daily activities in life, even in small ways. No matter the age or physical condition, it is never too late to get the body moving, boost the health and outlook, and improve how old age activities [12].

Old age walking is a real exercise that can build the aerobic fitness. The walking will need to walk briskly and bring the heart rate up into the aerobic zone at 70 percent to 80 percent of the maximum heart rate for a 30-minute session, at least three to four times per week. This is between the moderate-intensity and vigorous-intensity zones. It will be breathing heavily. If old age persons are already fit, it may need to add some hills, treadmill incline, or jogging intervals to reach this zone with a walking workout [13]. Walking may be the simplest way to work out. The old persons can do it almost anywhere, and it is a snap to get started: Just put one foot in front of the other. There are many great reasons to walk. The heart will get stronger, the lower blood pressure, and bones will get stronger. Walking also eases stress, helps to better sleep and can boost for outlook on life [11].

Walk at a brisk pace for 30 minutes or more on most days. Do it alone or with a friend. Try a walking club or recruit the family for an after-dinner walk. All you need is a pair of walking shoes. However, some of the most prominent effects of aging may be mitigated by exercising regularly. Exercising can have numerous positive effects for older people because of its ability to increase balance, increase flexibility, increase mobility and lower blood pressure. It can also help people maintain a healthy weight and reduce the chance of developing diseases and disabilities[14].

Objectives

Assess the pre-test knowledge and practice regarding impact of walking exercise on Activities of daily living among Aged persons

Design and conduct a nursing intervention programme on knowledge and practice regarding impact of walking exercise on activities of daily living among aged persons

Assess the post-test knowledge and practice regarding impact of walking exercise on Activities of daily living among Aged persons

Correlate knowledge and practice regarding impact of walking exercise on Activities of daily living among Aged persons

Determine the association between knowledge and practice regarding impact of walking exercise on Activities of daily living with selected demographic variables among Aged persons

Hypothesis

H_1: There will be significant association knowledge

regarding Activities of Daily Living with demographic variable.

H_2: There will be significant association of attitude regarding Activities of Daily Living with demographic variable.

Methodology

In view of the nature of the problem under study and to accomplish the objectives of the study evaluate approach was found to be appropriate to describe the scholar intervention programme on knowledge and practice regarding impact of walking exercise on activities of daily living i. e one group pre-test post-test design was adopted for the study. Here only one group was observed twice before and after introduction of independent variable. The effect of treatment would be equal to the level of the phenomenon after the treatment minus the level of phenomenon before treatment; the sample for the present study consists of older age people's non-probability convenient sampling technique was

found to select 40 Old age persons. The tools used by the researcher to collect data were structured questionnaire on knowledge and practice regarding impact of Old age walking exercise for activities of daily living.

Data Collection

Prior permission obtained from concerned authority of Old age homes in Tripura west district. The ethical consideration of research data informed concerned from the subjects. The respondents were assured the anonymity and confidentiality of the information provided by them. The researcher himself has collected the data from the sample. Pre-test was conducted by using structured questionnaire followed by structured teaching programme. Lecture cum demonstration was method of instructions. Poster and charts were used as AV aids. The duration of the session was one hour. After 7 days, a post-test was conducted using the same structured questionnaire to evaluate the effectiveness of Old age walking exercise technique.

Results and Discussion

Table 1: Frequency and percentage distribution of knowledge score

Variables F		Inadequate (0-30%)		Moderately adequate (31-70%)		Adequate (71-100%)	
		%	F	%	F	%	
Knowledge	Pre test	33	82.5	3	7.5	4	10
	Post test	0	0	12	30	28	70

Table 2: Frequency and percentage distribution of practice score

Variables F		Inadequate (0-30%)		Moderately adequate (31-70%)		Adequate (71-100%)	
		%	F	%	F	%	
Practice	Pre test	33	82.5	3	7.5	4	10
	Post test	0	0	8	20	32	80

Table 3: Effectiveness of Walking exercise on Impact of Old age activities of daily living (N=40)

Areas	Pretest			Post test			Effectiveness of Exercise			Paired 't' Value
	Mean	Mean%	SD	Mean	Mean %	SD	**Mean**	**Mean %**	**SD**	
Knowledge	9.43	24.3	5.81	29.22	72.99	2.7	19.42	49.23	3.01	40.61*
Practice	5.21	20.91	6.35	16.22	65.22	4.1	11.0	44.2	2.14	30.42*

t(39)3.64 P<0.001 * significant

The data presented in the above table shows that 49.23% with SD of 19.42±3.01, and the total mean practice score increase the total mean knowledge score was increased by 44.2% with mean SD 11.0±2.14 after teaching demonstration of walking exercise. The 't' value of knowledge (40.61) and practice (30.42) scores were found more than the table value 3.64,P<0.001 with degree of freedom 39. Hence, the old exercise are found to be effective in terms of knowledge and practice.

Based on the findings of the investigative study, following conclusions were drawn: Distribution of aged persons according their level of knowledge showed that majority of them (82.5%) had inadequate level of knowledge and 7.5% had moderately adequate knowledge. The total mean percentage of knowledge and practice scores of Aged persons in the pre-test was 22, 67 with mean ±SD of 15.03 ± 11.99 and in the post test, the total mean percentage of knowledge, and practice scores was 69.23 with 45.43 ± 6 as mean ±SD.

The mean post-test knowledge and practice scores were significantly higher than the mean pre-test knowledge, and practice scores of the Old age persons in all the matter of Old age exercises. The study showed that the scholar intervention programme was very highly effective in improving the knowledge of Old age persons regarding the impact of Old age exercise on activities of daily living. The findings showed that there was no significant association between pre and post-test knowledge and demographic variables.

Discussion

Old age walking exercise among old age people was associated with activities of daily living it remedial measures of old age problems like heart, lung and other diseases. These teaching of walking exercise will enhance activities of daily living and prevent further complications in future.

The present study finding Shows that there is a significant difference between pre-test and post-test median scores. The pre-test and post-test median values of knowledge and practice 72.99,65.22 respectively indicated that there is an increase in knowledge and practice among old age persons regarding impact of walking exercise on activities of daily living after administration of walking exercise therapy, but the impact factor based on their interest, attitude and confidence. Old age risk factors and anxious are directly linked with the walking exercise.

There was study find that old age exercise with scheduled manner is reduced the risk factor of their old age related disease problems. This study conducted in Tripura West Districts old age homes from January 2018 August 2018 with 40 old age people. Data was collected regarding their demographic characteristics and old age assessment. All old age persons were explained the procedures and method of exercise with scheduled details for time bound of the study.

The post-test mean values of the old age persons walking excises 72.99 for knowledge and 65.22 for practice were significantly higher than pre-test. There was a significant difference pre and post (p<0.05).The results of the study have shown that old age exercise is effective for their actives of daily living.

Conclusion

The finding of this study was the need of scholars to conduct training programme for old age persons to enhance their knowledge and practice of old age persons to improve their Activities of daily living with walking exercise.

The study proves that old age persons in old age homes are gained knowledge and practice level highly

than their previous knowledge and practice prior to the administration of scholar intervention programme, through these knowledge the aged persons are enhance their knowledge which will improve the status of daily walking exercise which will prevent upcoming complication and problems related their age conditions.

Implications for Nursing Practice:

Lack of information regarding the exercise on old age is a serious problem for them in the old age factor. Scholars working with the relevant field of social and empower in different settings like old age homes ,Rehabilitation centre and other areas are in a better position to understand their needs and provide information at appropriate their needs and provide information at appropriate time. Hence, NGOs should take suitable interest in preparing different teaching strategies, which is necessary to the old people. Scholars should always encourage caretakers and old age persons to be involved in educating the old age people for regular exercise in activities of daily living to avoid their old age problems.

Conflict of Interest: Author have declared no conflict of interest exist in this study.

Source of Funding: Nil

Ethical Clearance: Informed consent was obtained from the administrators, supervisors and participants of the respected old age homes before conducting data collection and maintained the confidentiality and anonymity of the subjects.

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Knowledge on Selected Natural Pain Relief Methods During Labour Among Primigravida Mothers

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Abstract

Child birth is a natural biological process and therefore the pain associated with it also received as normal and natural. Both pharmacological and non-pharmacological methods are used to reduce the pain perception during labour. Midwife should work with mothers during the prenatal period to identify the personal coping strategies and encourage make efficient and effective use of these resources. The objective of the study is to assess the level of knowledge regarding selected natural pain relief methods during labour and is to associate the level of knowledge with selected demographic variables. A descriptive research design was used. Purpose sampling technique was used. Data was collected through semi structured knowledge questionnaire. Data was analysed by descriptive and inferential statistics. The finding reveals that 36% of the subjects had adequate knowledge, 48% of them had moderate knowledge and only family income and place of residence had significant association with knowledge.

Keywords: *Natural Pain Relief Methods, Primigravida Mothers, Knowledge Level.*

Introduction

Pain is whatever the person says it is, existing whenever the experience person says it does (Mc. Caffery). This emphasizes the highly subjective nature of pain and pain management. Pain is an unpleasant sensory and emotional experience association with actual or potential tissue damage[1] .It is the most common reason for seeking health care. The health personnel must have the knowledge and skills to assess pain to implement pain relief strategies and to evaluate the effectiveness of these strategies regardless of setting.

Pain in labour is a nearly universal experience; pregnant women commonly worry about the labour pain which they experience during labour and child birth. Pain thresholds cause the amount of pain experienced to be unique to each individual anxiety commonly associated with increased pain during labour. Pain is complex individual and multifactor phenomenon influenced by several factors namely psychological, biological, socio, cultural and economic in way[2]. Pain can be shared from the reports by those who feel it, characterized by normal transformation, such as menstrual pain.

Labour pain is often described as the most intense ever experienced, and in many cases, it is the aspect of child birth most feared by expectant mother, physical psychological, and cultural factors play an important role in the women's response to child birth, although the intensity of pain experienced varies a great deal from women to another[3] .

Pain during child birth is generally handled with pharmacological techniques. Pain medications are widely used throughout hospitals in the labour and delivery units including intramuscular and intravenous pain medication, regional, local anaesthesia, epidurals and spinal blocks. Non-pharmacological techniques for pain relief during labour are a generally new concept for more people. The women who choose to deal with childbirth pain by using non-pharmacological methods needs care and support from nurses[4].

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Many of these methods require practice for best result although the women or couple having prior knowledge, women should be encouraged to try a variety of methods and to seek alternatives including pharmacological methods.

There are some of the non-pharmacological pain relief methods such as counter pressure, therapeutic touch and massage, walking, rocking, changing positions application of heat or cold, water therapy, aromatherapy, music imaginary use of focal points hypnosis and bio feedback etc. Other surveys have shown that labour is significantly more painful during first time than the subsequent births. As if the mechanism of pain was not complicated enough, its expression is even more enigmatic. Some individuals reveal their pain and suffering more freely than others[5].

Statement of Problem :

A study to assess the level of knowledge regarding selected natural pain relief methods during labour among primigravida mothers in selected hospital at Madurai.

Objectives :

- To assess the level of knowledge regarding selected natural pain relief methods during labour among primigravida mothers.

- To find the association between the level of knowledge on selected natural pain relief methods and selected demographic variables such as age, education level, religion, occupation, family income, type of family, place of residence

Research Methodology

Research Design: Non- experimental descriptive design was used for this study.

Setting of the study: The study was conducted at Infant Jesus Maternity Hospital in Madurai.

Sample & Sample size: The study consisted of primigravida mothers between the age group 21-40 years in the outpatient department in Infant Jesus Hospital and sample size 50.

Sampling Technique: Purposive sampling technique was used to select the samples.

Data collection tools:

Part-1: Demographic Data

Part-2: Semi Structured Knowledge Questionnaire

This part consisted of 20 multiple choice questions regarding selected natural pain relief methods such as massage technique, changing position, heat application and breathing exercises.

Data Collection Procedure:

After obtaining permission from hospital authority, study was conducted for period of two weeks. The informed consent was obtained after given clear information about the study and assured confidentiality. Data was collected by using semi structured questionnaire. Collected data was then tabulated and analysed using descriptive and inferential statistical methods.

Findings

Demographic variables:

Majority of samples 54% belongs to age group between 21 – 25 yrs. Where 48% were Hindus, 24% had primary education, 56% were housewives, 58% had family income of Rs.1001 – Rs.2000/-, 56% were from nuclear family and 54% were from urban areas of residence.
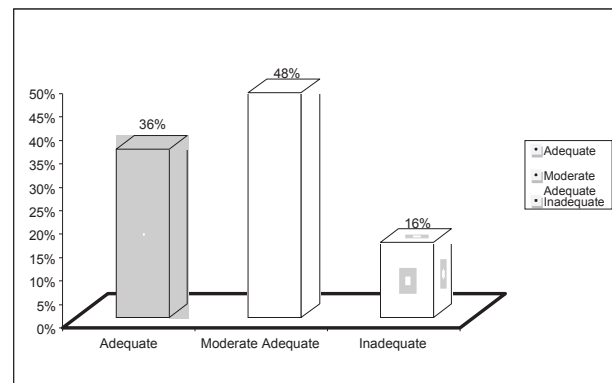

Fig.1 Distribution of samples according to their level of knowledge regarding primigravida mothers

18 (36%) samples had adequate level of knowledge, 24 (48%) of them had moderately adequate and 8(16%) of the subjects had inadequate knowledge. The results shows that demographic variables such as family income and place of residence had significant association with knowledge and other demographic variables such as

age, education, occupation, religion, type of family and availability of health personnel did not have significant association with knowledge score.

Conclusion

The child birth is natural process for every women, it should be handled naturally as much as possible. The mother should have knowledge regarding pain relief methods which helps them to face this situation as happiest and memorable event. The midwives are responsible for pain relief measures using of both pharmacological and non-pharmacological methods during labour in the hospitals.

Ethical Clearance: Ethical Clearance was obtained from College Research Advisory Committee.

Source of Funding: Source of funding was by self.

Conflict of Interest: Nil.

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