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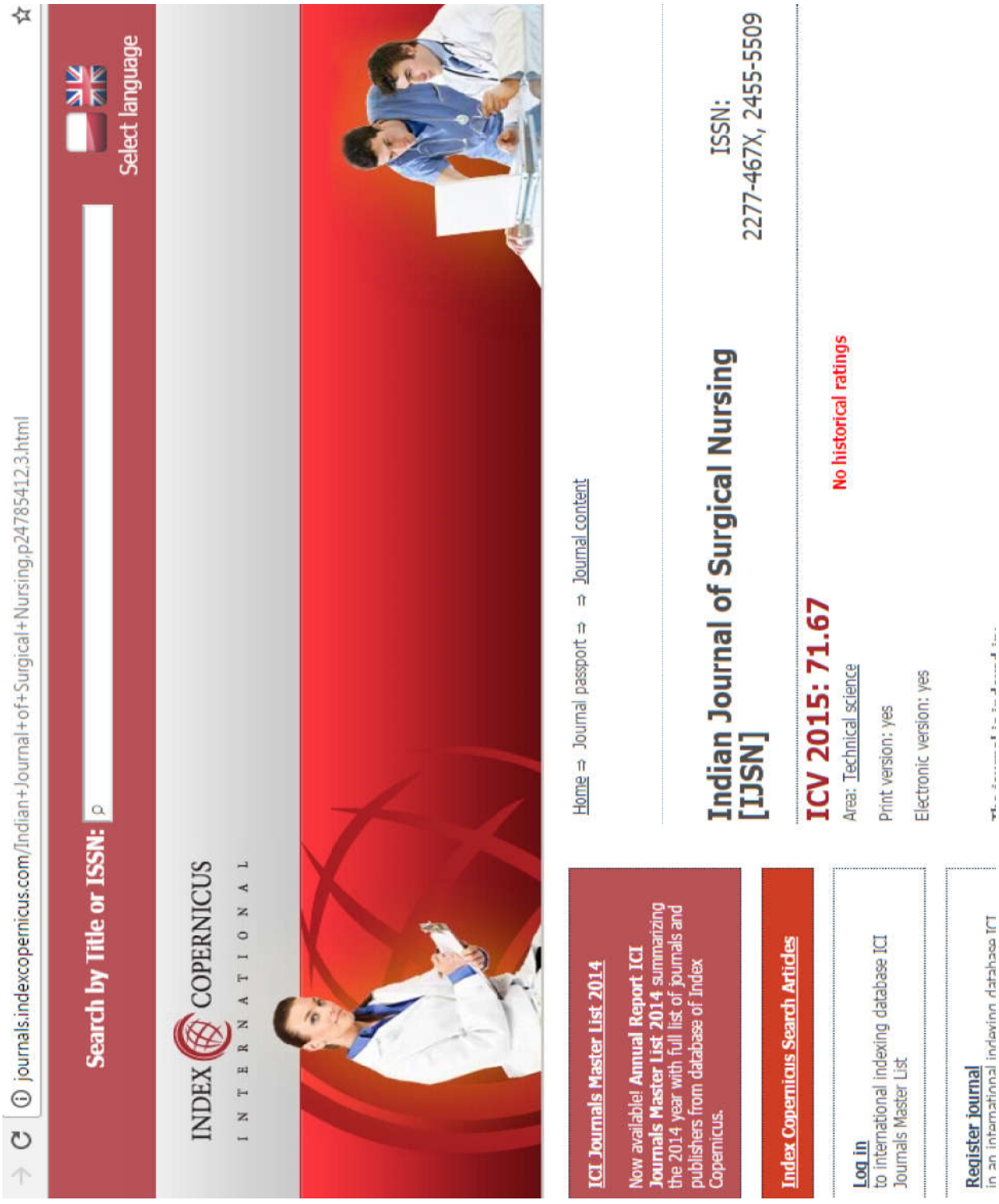

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A Study to Assess the Prevalence of Burnout Syndrome among Staff Nurses in a Selected Hospital, Thrissur

Ajitha John*, Bilha Paulson*, Bincy. M.B.*, Jisni T. George*, Neeraja P.M.*, Sruthi S.*, Tiji C. Varghese*, Sunitha P.P.**

Abstract

A study was conducted to assess the prevalence of burnout syndrome among staff nurses in a selected hospital, Thrissur. The sample size of this study comprised 75 staff nurses. Non probability purposive sampling technique was considered appropriate for this study. The instrument was Maslach Burnout Inventory to assess the level of burnout syndrome among staff nurses. The hypothesis was H0-There will not be a significant association between the levels of burnout syndrome among staff nurses with selected demographic variables. The collected data analyzed using descriptive and inferential statistics. The findings revealed that out of 75 staff nurses, in Emotional Exhaustion 58 samples (77%) were having low level of burnout, 16 samples (21%) were having moderate level of burnout and only 01 sample (02%) was having high level of burnout. Whereas in Depersonalization, 14, 21 and 40 samples (19%, 28%, and 53%) were having low level, moderate level and high level of burnout respectively. Regarding Personal Achievement, low level of burnout was for 38 samples (51%), moderate level of burnout was for 11 samples (15%) and high level of burnout was for 26 samples (34%). Emotional exhaustion shows low level of burnout, depersonalization shows moderate level of burnout and personal accomplishment shows high level of burnout. The study also shows that there is a association of level of burnout with selected demographic variables.

Key words: Burnout Syndrome; Staff Nurses.

Introduction

According to WHO health is defined as a state of complete physical, mental and social well being not merely the absence of disease or infirmity. Health is a state of being that people living in relation to their own values, personality, and life styles. All people free of disease are not equally healthy. Any change in the internal and external environments to maintain a state of physical, emotional, intellectual, social development and spiritual well being considered as unhealthy state [1].

Stress can be defined as a process which causes or precipitate individual to believe that they are unable to cope with the situation facing them and feeling of anxiety, tension, frustration, and anger. This results from the recognition that they are feeling in some way and the situation is getting out of control. Stress is a subjective feeling, based on an individual perspective. Stress can leads to burnout [2].

Today's economy and competition among hospitals have increased the demand placed on the workers [5]. Nurses who are an important part of the health care team are continually exposed to added pressure in the work place, which can negative result on the nurses as well as the population served by nurses. Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment [6]. Nurses are susceptible to get burnout mainly because of nature and the emotional demand of their profession. A study conducted in Australia has shown that burnout can occur in many professions, but the risk of burnout among nurses in workplace is higher compared to any other professions [3].

The professional working settings that are characterized by a very strong emotional involvement. Occupational burnout is typically and

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particularly found within human service professions. Professions with high level of burnout include social worker, nurses, teachers, engineers, physicians and police officers. Burnout has been describing as a specific kind of occupational stress reaction among human service professionally as a result of the demanding and emotionally changed relationships. As educators, care takers and lifelines, nurses take on several roles as they routinely care for patients' day in and day out. Nurses have more strain of the job can eventually leads to physical, mental and emotional exhaustion otherwise known as burnout [4].

A study was conducted to assess the risk factors and prevalence of burnout syndrome in the nursing profession in public health centre in Spain. The objectives of this study were to estimate the prevalence of burnout, to identify the variables related to burnout and to propose a risk profile for this syndrome among the nursing personnel. The result showed that the prevalence of burnout among nursing professionals is high. Gender, age, marital status, level of healthcare, work shift and health care services areas predicted at least one of the dimensions of the syndrome.Neuroticism, agreeability; extraversion and conscientiousness are personality traits that predict at least two of the dimensions of burnout syndrome in nurses. Therefore, personality factors should be considered in any theory of risk profiles for developing burnout syndrome in the nursing profession [5].

A descriptive correlation study was conducted to assess the burnout in Portuguese intensive care unit. Three hundred professionals (82 physicians and 218 nurses) from ten ICUs were included in the study, out of a total of 445 who were eligible. There was a high rate of burnout among professionals working in Portuguese ICUs with 31% having high level of burnout. Using multi variant analysis identified that gender being a risk factor were female status increases the risk of burnout [6].

In India and also in Kerala the studies related burnout among staff nurses are limited. From the above studies we can understand that the incidence of burnout among staff nurses is high. So the investigators interested to assess the prevalence of burnout among staff nurses.

Statement of Problem

A study to assess the prevalence of burnout syndrome among staff nurses in a selected hospital, Thrissur.

Objectives

- To assess the level of burnout syndrome among staff nurses.
- To associate the level of burnout syndrome among staff nurses with selected demographic variables.

Material and Methods

Research Approach

The research approach of this study was non experimental, quantitative approach.

Research Design

Non experimental descriptive research design was used for this study.

Setting of the Study

The study was conducted in Aswini hospital, Thrissur.

Sampling Technique

Non probability purposive sampling technique was adopted for the selection of the sample in the study

Criteria for Sample Selection

Inclusion Criteria

a. Staff nurses who are willing to participate.
b. Staff nurses who are present at the time of study.
c. Staff nurses who have degree or diploma.

Exclusive Criteria

a. Staff nurses who not willing to participate.
b. Staff nurses who are working in OPD.
c. Staff nurses not having basic degree or diploma.

Tool for Data Collection

The instrument was Maslach Burnout Inventory (MBI) to assess the level of burnout syndrome among staff nurses.

The tool consist of 2 parts

Part I: Demographic profile of staff nurses

Part II: Maslach's Burnout Inventory

This section consists of Maslach's burnout inventory. It includes 3 sections

Section A (Emotional Exhaustion): It containing 7 questions.

1. If feel emotionally drained by my work.
2. Working with people all day long requires a great deal of effort.
3. If feel like my work is breaking me down.
4. I feel frustrated by my work.
5. I feel I work too hard at my job.
6. I stresses me too much to work in direct contact with people.
7. I feel like I am at the end of my rope.

Section B (Depersonalization): It contains 7 questions.

1. I feel I look after certain patients / clients impersonally, as if they are objects.
2. I feel tired when I get up in the morning and have to face another day at work.
3. I have the impression that my patients/ clients make me responsible for some of their problems.
4. I am at the end of my patience at the end of my work day.
5. I really don't care about what happens to some of my patients/ clients.
6. I have become more insensitive to people since I've been working.
7. I'm afraid that this job is making me uncaring.

Section C (Personal Achievement): It contains 8 questions.

1. I accomplish many worthwhile things in this job.
2. I feel full of energy.
3. I am easily able to understand what my patients/ clients feel.
4. I look after my patients'/ clients' problems very effectively.
5. In my work, I handle emotional problems very calmly.
6. Through my work, I feel that I have a positive influence on people.
7. I am easily able to create a relaxed atmosphere with my patients/clients.
8. I feel refreshed when I have been close to my patients/clients at work.

Method of Data Collection

A formal written permission was taken from the Hospital Authority of Aswini hospital Thrissur in order to proceed for data collection. First investigator collected list of staff nurses based on inclusion criteria. Then the investigator established a good rapport with staff nurses and explained the purpose of the study and requested their full cooperation. Then investigator collected data from 75 staff nurses who met Inclusion criteria. Demographic data collected initially then given the MBI. During data collection investigator cleared the doubts of nurses for complete information.

Result

The data was collected from staff nurses was tabulated, analyzed and interpreted by using descriptive and inferential statistics. Analysis was done based on the objectives and hypothesis of the study.

Table 1: Frequency and Percentage distribution of demographic variables of staff nurses N=75

Sl. No.	Demographic Variables	Frequency (N)	Percentage %
1.	**Age**		
	21-30 years	55	73
	31-40 years	17	23
	41-50 years	3	4
	51-60 years	0	0
2.	**Gender**		
	Male	37	49
	Female	38	51
3.	**Professional Qualification**		
	GNM	34	45
	Post Basic Nursing	7	9
	B. Sc Nursing	32	43
	M. Sc Nursing	2	3

4.	**Marital Status**		
	Married	40	53
	Unmarried	35	47
	Divorced	0	0
	Separated	0	0
5.	**Type of Family**		
	Joint family	24	32
	Nuclear family	51	68
	Extended family	0	0
6.	**Area of Nursing Practice**		
	Ward	23	31
	ICU	38	51
	OT	13	17
	Casualty	1	1
7.	**Years of Professional Practice**		
	0-3 years	35	47
	3.5-6 years	26	35
	6.5-9 years	10	13
	>9.5 years	4	5
8.	**Role in Working Department**		
	Ward in charge	6	8
	Staff nurse	60	80
	Trainee	8	11
9.	**Any relaxation Technique Done Routinely to Reduce Stress**		
	Meditation	2	3
	Yoga	7	9
	Exercise	10	13
	Hearing music	54	72
	Any other	2	9
10.	**Previous Experience**		
	Yes	35	47
	No	40	53

Table 2: Description of level of burnout syndrome among staff nurses

Burnout	Low Burnout		Moderate Burnout		High Burnout	
	No.	%	No.	%	No.	%
Emotional Exhaustion	58	77	16	21	01	02
Depersonalization	14	19	21	28	40	53
Personal Achievement	38	51	11	15	26	34

Table 3: Association of level of burnout syndrome in Emotional Exhaustion with selected demographic variables

Sl. No.	Demographic Variables	Level of Burnout In Emotional Exhaustion			Degree of Freedom (DF)	Chi-square ($\chi 2$)
		Low Burnout	Moderate Burnout	High Burnout		
1.	**Age**					
	21-30 years	44	10	01		
	31-40 years	12	05	00		$\chi^2 = 2.13^{ns}$
	40-50 years	02	01	00	4	TV=9.49
	>50 years	00	00	00		
2.	**Gender**					
	Male	10	05	00	2	$\chi^2 = 1.78^{ns}$
	Female	48	11	01		TV=5.99
3.	**Professional Qualification**					
	GNM	27	07	00		
	Post BSc	05	02	00	6	$\chi^2 = 2.2^{ns}$
	B.Sc Nursing	25	06	01		TV=12.59
	M.Sc Nursing	01	01	00		

4.	**Marital Status**					
	Married	32	05	03		
	Unmarried	26	08	01	6	χ^2 =2.569^{ns}
	Divorced	00	00	00		TV=12.59
	Separated	00	00	00		
5.	**Type of Family**					
	Joint Family	19	05	00		
	Nuclear Family	39	11	01	4	χ^2 =2.397^{ns}
	Extended Family	00	00	00		TV=9.49
6.	**Area of Nursing Practice**					
	Ward	18	05	00		
	ICU	28	09	01	6	χ^2 =2.528^{ns}
	OT	07	02	00		TV=12.59
	Casualty	05	00	00		
7.	**Years of Professional Practice**					
	0-3 Years	26	09	01		χ^2 =2.52^{ns}
	3.5-6 Years	20	04	01	6	TV=12.59
	6.5-9 Years	10	01	00		
	>9.5 Years	02	01	00		
8.	**Role in Working Department**					
	Ward in Charge	05	02	00		χ^2 =10.991*
	Staff Nurse	47	12	01	4	TV=9.49
	Trainee	06	02	00		
9.	**Any relaxation technique used regularly to reduce stress**					
	Meditation	01	01	00		
	Yoga	04	03	00		χ^2 =4.766^{ns}
	Exercise	07	03	00	8	TV=15.51
	Hearing music	44	09	01		
	Any Other	02	00	00		
10.	**Previous experience**					
	Yes	30	05	00		χ^2 =5.37^{ns}
	No	14	14	01	2	TV=5.99

*significant at 0.05 level
ns-non significant at 0.05 level

Table 4: Association of level of burnout syndrome in Depersonalization with selected demographic variables

Sl. No.	Demographic Variables	Level of Burnout in Depersonalization			Degrees of Freedom (DF)	Chi-Square (χ2)
		Low Burnout	Moderate Burnout	High Burnout		
1.	**Age**					
	21-30 years	12	20	23		
	31-40 years	2	00	15		χ^2 =12.75*
	40-50 years	00	01	02	6	TV=12.59
	>50 years	00	00	00		
2.	**Gender**					
	Male	03	03	09	2	χ^2 =4.15^{ns}
	Female	11	18	31		TV=5.99
3.	**Professional Qualification**					
	GNM	06	11	18		
	Post BSc	01	01	04	6	χ^2 =2.63^{ns}
	BSc Nursing	07	09	16		TV=12.59
	MSc Nursing	00	00	02		
4.	**Marital Status**					
	Married	06	12	21		
	Unmarried	08	10	18	6	χ^2 =0.565^{ns}
	Divorced	00	00	00		TV=12.59
	Separated	00	00	00		

5.	**Type of Family**					
	Joint Famil	06	05	13		χ^2 =1.108^{ns}
	Nuclear Family	09	16	26	4	TV=9.49
	Extended Family	00	00	00		
6.	**Area of Nursing Practice**					
	Ward	04	07	12		
	ICU	07	10	21	6	χ^2 =7.913^{ns}
	OT	00	03	06		TV=12.59
	Casualty	03	01	01		
7.	**Years of Professional Practice**					
	0-3 Years	06	11	19		χ^2 =8.48^{ns}
	3.5-6 Years	06	09	10	6	TV=12.59
	6.5-9 Years	01	01	08		
	9.5 Years	01	00	03		
8.	**Role in Working Department**					
	Ward In Charge	01	02	04		χ^2 =2.921^{ns}
	Staff Nurse	14	15	32	4	TV=9.49
	Trainee	00	04	03		
9.	**Any relaxation technique used regularly to reduce stress**					
	Meditation	01	01	02		
	Yoga	00	02	05		χ^2 =4.32^{ns}
	Exercise	01	03	06	8	TV=15.51
	Hearing music	13	14	25		
	Any Other	00	01	01		
10.	**Previous Experience**					
	Yes	10	12	13	2	χ^2 =7.57*
	No	04	09	27		TV=5.99

*significant at 0.05 level
ns-non significant at 0.05 level

Table 5: Association of level of burnout syndrome in Personal Achievement with selected demographic variables

Sl. No.	Demographic Variables	Level of Burnout In Personal Achievement			Degrees of Freedom (DF)	Chi-square (χ2)
		Low Burnout	Moderate Burnout	High Burnout		
1.	**Age**					
	21-30 years	28	10	17		
	31-40 years	10	02	05		χ^2 =2.32^{ns}
	40-50 years	01	00	02	6	TV=12.59
	>50 years	00	00	00		
2.	**Gender**					
	Male	09	02	04	2	χ^2 =0.703^{ns}
	Female	29	09	22		TV=5.99
3.	**Professional Qualification**					
	GNM	16	03	15		
	Post BSc	05	01	01	6	χ^2 =6.40^{ns}
	B.Sc Nursing	15	07	10		TV=12.59
	M.Sc Nursing	02	00	00		
4.	**Marital Status**					
	Married	20	05	15		
	Unmarried	17	07	11	6	χ^2 =0.855^{ns}
	Divorced	00	00	00		TV=12.59
	Separated	00	00	00		
5.	**Type of Family**					
	Joint Family	12	04	08		
	Nuclear Family	27	06	18	4	χ^2 =0.322^{ns}
	Extended Family	00	00	00		TV=9.49
6.	**Area of Nursing Practice**					
	Ward	11	06	07		
	ICU	19	03	15		
	OT	03	03	03	6	χ^2 =7.193^{ns}
	Casualty	04	00	01		TV=12.59

7.	**Years of Professional Practice**					
	0-3 Years	15	07	13		
	3.5-6 Years	13	05	08	6	χ^2 =4.38^{ns}
	6.5-9 Years	07	00	03		TV=12.59
	9.5 Years	02	00	02		
8.	**Role in Working Department**					
	Ward In Charge	03	00	04		
	Staff Nurse	33	09	18	4	χ^2 =4.91^{ns}
	Trainee	02	02	04		TV=9.49
9.	**Any relaxation technique used regularly to reduce stress**					
	Meditation	01	00	01		
	Yoga	01	02	04		
	Exercise	06	01	03	8	χ^2 =5.072^{ns}
	Hearing music	29	08	17		TV=15.51
	Any Other	01	00	01		
10.	**Previous Experience**					
	Yes	22	04	09	2	χ^2 =3.84^{ns}
	No	16	07	17		TV=5.99

ns-non significant at 0.05 level

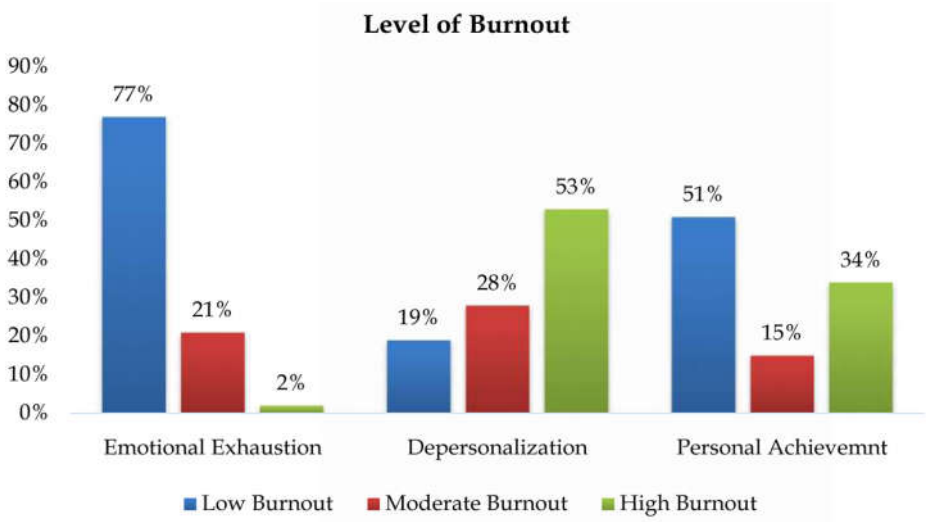

Fig. 1: Level of Burnout Syndrome among staff nurses

Frequency and percentage distribution of demographic variables of staff nurses are shown in Table 1.

Table 2 include description of level of burnout syndrome among staff nurses

Table 3 include the association of level of burnout syndrome in emotional exhaustion with selected demographic variables

Table 4 include the association of level of burnout syndrome in depersonalization with selected demographic variables

Table 5 include the association of level of burnout syndrome in personal achievement with selected demographic variables.

The first objective of the study was to assess the level of burnout syndrome among staff nurses

The analysis of the study insisted that in emotional exhaustion 77% (58) were having low level of burnout, 21% (16) were having moderate level of burnout and 2%(1) having high level of burnout. In depersonalization 19% (14) were having low level of burnout , 28% (21) were having moderate burnout and 53% (40) having high level of burnout .In personal achievement 51% (37) were having low level of burnout, 13% (12) having moderate level of burnout and 34% (26) having high level of burnout.

The second objective of the study was to associate the level of burnout syndrome among staff nurses with selected demographic variable.

The present study reveals that burnout has association with selected demographic variables in emotional exhaustion and depersonalization. The burnout of staff nurses were compared with selected

demographic variables such as age, gender, professional qualification, marital status, type of family, area of nursing practice, years of professional practice, role in the working department, use of any relaxation technique and previous experience.

Recommendations

In light of the findings listed above and from the personal experience of the investigator, later recommendations have been made for further studies and these are following.

- The same study can be replicated in large samples to validate and generalize the findings.
- The same study can be conducted in different settings.
- Similar study can be conducted to assess the factors affecting burnout syndrome
- A comparative study can be done among staff nurses working in various department.
- A similar study can be done to assess the knowledge of staff nurse regarding BOS.

Conclusion

Burnout is a type of psychological stress. Occupational burnout or job burnout is characterized by exhaustion and motivation feelings of ineffectiveness and also may have the dimension of frustration and as a result reduced efficacy within the work place . With this concept, the present study aimed to assess the level of burnout syndrome among staff nurses at selected hospital, Thrissur.

The result revealed that there is significant association between the level of burnout and selected demographic variables.

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A Comparative Study to Assess Knowledge and Practice of Allen's Test to Perform Arterial Sampling among the Second Year and Third Year B.Sc Nursing Students at MINS College of Nursing Latur

Kumarasamy A.P.*, Chinnasamy Azhagesan*, B. Venkatesan*, Jayavelmani*, Padmavathi R.*

Abstract

Nurse has the responsibility of practicing prior before doing the procedure Phlebotomy is the common procedure an incision or puncture to obtain a sample for analysis and diagnosis so it is very important to protect the vein/artery to normal functioning. The Allen test is a worldwide used test to determine whether the patency of the radial or ulnar artery is normal. It is performed prior to radial Cannulations or catheterization or obtains arterial blood sampling because placement of such a catheter often results in thrombosis. Therefore the test is used to reduce the risk of ischemia to the hand. This study was done to comparative study to assess the knowledge and practice regarding allen's test among II and III year B.Sc Nursing student a quantitate descriptive method used to collect the sample from II year 30 subjects were selected and III year Basic B.Sc Nursing by using convenient sampling technique. The results shows that half of the II year students 15 (50%) of them had inadequate knowledge, 8 are them adequate knowledge (26.6%), Mean score 16.2, and Standard deviation of 2.73. Regarding III year students majority of them 14 (47%) of them adequate knowledge 9 (30%) of them had inadequate knowledge mean score of 20.1 SD of 3.4. t value 4.89 ($p<0.001$). The study result shows that there is significant different in knowledge & practice between II and III year students ($p<0.001$). So it shows that hypothesis (H_1) was accepted.

Keywords: Allen's Test; Procedure Phlebotomy; Diagnosis.

Introduction

Phlebotomy is the common procedure an incision or puncture to obtain a sample for analysis and diagnosis so it is very important to protect the vein/artery to normal functioning.

The Allen test is a worldwide used test to determine whether the patency of the radial or ulnar artery is normal. It is performed prior to radial Cannulations or catheterization or obtains arterial blood sampling because placement of such a catheter often results in thrombosis. Therefore the test is used to reduce the risk of ischemia to the hand. The Allen's test can also be used to gather information preceding removal of the radial artery for a coronary bypass graft.

First described by Edgar van Nuys Allen, M.D. in 1929 The hand of the recumbent (conscious or unconscious) patient is raised to a vertical position to drain blood away from the hand/forearm prior to external occlusion of the radial/ulnar arteries at the wrist alternatively, the (conscious) patient refrains from raising his/her arm, and expresses blood from the hand/palm by "making a fist" several times in succession after external radial/ulnar compression is applied this is the so-called "Modified Allen's Test"

The examination of the patient is asked to open and close the hand several times as quickly as possible and then squeeze the hand tightly. The examiner's thumb and index finger are placed over the radial and ulnar arteries, compressing them. As an alternative technique, the examiner may use hands, placing one thumb over each artery to compress the artery and placing the fingers on the posterior aspect of the arm for stability. The patient

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then opens the hand while pressure is maintained over the arteries. One artery is tested by releasing the pressure over that artery to see if the hand flushes. The other artery is then tested in a similar fashion. Both hands should be tested for comparison.

The result of normal your hand quickly becomes warm and returns to its normal color. This means that one artery alone will be enough to supply blood to your hand and fingers. Ifits abnormal/negative your hand remains pale and cold. This means that one artery is not enough to supply blood to your hand ad fingers. Blood will not be collected from an artery in this hand

The researcher focus on the topic because of less knowledge on this topic among the student nurses about the Allen's test so the researcher taken interest to do research.

Statement of the Problem

A comparative Study to assess the knowledge and practice of Allen's test to perform Arterial sampling among the II year and III year B.B.Sc Nursing Students at MINS College of Nursing Latur.

Objectives of the Study

1. To assess the knowledge and practice of Allen's test among II year and III year B.Sc nursing students.
2. To evaluate the effectiveness of demonstration on Allen's test among II year and IIIyear B.Sc nursing students.
3. To associate the knowledge and practice with selected demographic variables such Age, Sex, Income, Domicile, Religion. Birth order and Number of siblings etc.

Research Hypothesis

H_1-There is significant differencebetween mean score of study skills among B.Sc nursing II and III year students.

H_2-There is significant association between the level of Study Skills among B.Sc Nursing II and III year Students with their selected demographic variables

Material and Methods

Source of Data

The data wascollected B.B.Sc Nursing II and III year Nursing students in selected nursing college Latur.

Method of Data Collection

Research Approach

Quantitative Descriptive evaluative approach.

Research Design

Descriptive approach.

Research Variables

Study Variables

In this study the level of Knowledge and Practice of B.Sc Nursing II and III year Students.

Demographic Variables

It includes nursing students Age, Sex, Income, Domicile, and Religion. Birth order and Number of siblings.

Setting

The study was conducted in Maharashtra Institute of Nursing Sceinces, Latur.

Population

The population of the study was comprise II and III year B.Sc nursing students in Maharashtra Institute of Nursing Sciences, Latur.

Sample and Sample Size

The nursing students whofulfill the certain inclusion criteria were selected for the study. The sample size was 30 in II year and 30 in III year.

Sampling Technique

Simple random sampling technique by using lottery method

Tool for Data Collection

The tool consists of the following sections

Section A: Demographic data includes nursing students Age, Sex, Income, Domicile, and Religion. Birth order and Number of siblings.

Section B: The standardized Knowledge of Allen's

test that has 25 items and total score is 25, it is dichotomous question.

Section C: It consist of practice question about Allen's test that has 4 items and total score of it is check list.

Plan for Data Analysis

The data collected was analyzed by means of descriptive and inferential statistics.

Descriptive Statistics

- Frequency and percentage distribution was used to describe demographic variables.
- Mean, Standard deviation and mean score percentage was used to assess the level of study skills among B.B. Sc nursing students in selected nursing college.

Inferential Statistics

- Unpaired ' t' test used to compare the level of study skills between II year and III year nursing students
- Chi – square test was used to analyze the association between the levels of study skills of B.Sc nursing students II & III year with their selected demographic variables.

Data Analysis

Table 1: Frequency and Percentage distribution of the demographic variables of B.Sc nursing II and III year students.

N = 60

S. No.	Demographic Variables	II Year students		III Year students	
		Frequency	Percentage	Frequency	Percentage
1.	**Age (in years**				
	18 years	7	23.3	1	3.3
	19 years	13	43.3	4	13.3
	20 years	6	20	18	60
	21 years and above	4	13.3	7	23.4
2.	**Sex**				
	Male	4	13.3	4	13.3
	Female	26	86.7	26	86.7
3.	**Family Monthly income**				
	5000 to 10000	7	23.3	4	13.3
	10001 to 20000	5	16.6	5	16.7
	20001 to 30000	11	36.	4	13.3
	above 30000	7	23.3	17	56.7
4.	**Domicile**				
	Rural	3	10	3	10
	Urban	18	60	19	63.3
	Semi Urban	9	30	8	26.7
5.	**Religion**				
	Hindu	22	73.3	21	70
	Christian	4	13.3	6	20
	Muslim	0	0	0	0
	Any Other	4	13.3	3	10
6.	**Birth order**				
	First	17	56.6	16	53.3
	Second	6	20	7	23.3
	Third	6	20	6	20
	Fourth	0	0	1	3.3
	Fifth	1	3.3	0	0
7.	**Number of siblings**				
	No	1	3.3	0	0
	One	9	30	11	36.7
	Two	12	40	4	13.3
	Three	7	23.3	11	36.7
	Four and above	1	3.3	4	13.3

Table 2: Frequency and percentage distribution of Level of Knowledge regarding Allen's test among B.Sc nursing II year and III year students N=60

Level of Knowledge	II year students		III year students	
	Frequency	Percentage	Frequency	Percentage
Inadequate	15	50	9	30
Moderately adequate	7	23.3	7	23.3
Adequate	8	26.6	14	46.6

Table 3: Range, mean standard deviation and mean score percentage of practice regarding allen's test among B.B.Sc Nursing II and III year Students N=60

S. No.	Study skills domains	Max score	Respondents of Practice skills					
			II Year students			III Year students		
			Range	Mean	SD	Range	Mean	SD
1.	Regarding Identifying radial artery	7	3-7	6.7	0.94	3-7	6.8	0.9
2.	Regarding Instruction during Allen's test	4	0-3	1.83	0.87	2-3	2..27	0.82
3.	Regarding Interpretation of Result	3	0-3	0.9	0.84	1--3	2.01	0.7
4.	Regarding after procedure	6	1-6	2	1.17	4-6	3.91	1.10
	Over all Practice skills	20	6-19	11.43	4.09	10-19	14.99	3.2

Table 4: Comparison of knowledge and Practice of B.Sc nursing students between II and III year N=60

Sample	Knowledge			Practice		
	Mean	SD	Unpaired 't' test	Mean	SD	Unpaired 't' test
II year students	16.2	2.73	4.89*	11.43	3.0	4.44 *
III year students	20.1	3.4		14.99	3.2	

Note :* - significant at 5% level for df 58 (i.e $p<0.05$)

Major Findings of the Study

- Regarding demographic variables of B.Sc nursing II year students the maximum number students age 19 years, 13 (43.3%). Majority of them were female 26 (86.7%). Regarding family monthly income majority of them between 20001-30000 11, (36). Regarding Domicile most of them belongs to Urban 18 (60%). In relation to religion majority of them Hindu 22 (73.3). With regard to birth order most of them first order 17(56.6%). In context Number of siblings majority of them were had Two Siblings, 12 (40%)
- Regarding demographic variables of B.Sc nursing III year students the maximum number student's age 20 years, 18 (60%). Majority of them were female 26 (86.6%). Regarding family monthly income majority of them between above 30000 17, (56.7). Regarding Domicile most of them belongs to Urban 19 (63.3%). In relation to religion majority of them Hindu 21(70%). With regard birth order most of them first order 16(53.3%). in context number of siblings majority of them were had one and Three Siblings 11(36.7%%)
- The results shows that half of the II year students 15 (50%) of them had inadequate knowledge, 8(27%) of them adequate knowledge (26.6%), Mean score 16.2, and Standard deviation of 2.73. Regarding III year students majority of them 14 (47%) of them adequate knowledge 9(30%) of them had inadequate knowledge mean score of 20.1 SD of 3.4 . t value 4.89 ($p<0.001$)
- In practice, II year students Mean score 10.43, and Standard deviation 3.0, III year students mean score of 14.9 SD of 3.2 un paired 't' value 4.44 ($p<0.001$)
- The study result shows that there is significant different in knowledge & practice between II and III year students ($p<0.001$). So it shows that hypothesis (H_1) was accepted.
- The results stated that there is significance association between the levels of study skills among B.Sc nursing IIyear students with their Domicile variables and in III year students shows that there is significance association with sex, income, Domicile, religion rest of the variables there is no significant association. It shows statistically hypothesis H_2 wasaccepted.

Recommendations

1. A similar study can be conducted with a large sample size.
2. A quasi experimental study can be conducted to

determine the effectiveness practice Regarding Allen's test.

Conclusion

The present study was attempted to assess the level of knowledge regarding allen test among B.Sc Nursing II and III year students, in that the majority of III year students had adequateknowledge and practice than the II year students. And also it shows that there was statistical significant difference in the level of knowledge between II and III nursing students and there was significant association between the level of practice of II and II Year students with selected demographic variables.

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A Study to Assess the Knowledge Regarding Telepediatrics among Staff Nurses in Selected Hospitals in Tumkur, Karnataka

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Vinu K.S.

Abstract

Objective: To assess the knowledge of staff nurses regarding telepediatrics in selected hospitals in Tumkur *Methods:* In the present study a quantitative research approach was used to assess the knowledge regarding telepediatrics among staff nurses. The study is based on quantitative approach and used descriptive design. 60 samples are selected by non-probability convenient sampling technique. The tool was prepared and validated by experts in respective fields and there liability of tool was established, the tool consists of two parts. Pilot study was conducted in selected hospitals Tumkur from 04.11.2011 to 10.11.2011 from 8 am to 6 pm with the sample size of 6 subjects. The main study was conducted in selected hospitals in Tumkur city from 20th Novemberto 20th December2011 with the 60 samples. The data collection was ended, grouped, tabulated, and interpreted according to the objectives of the study. Descriptive and inferential statistics were used for data analysis. *Results:* The overall knowledge aspects 56 (93.33%) of staff nurses had inadequate knowledge, 4 (6.67%) had moderately adequate knowledge and none of the subjects had adequate knowledge regarding telepediatrics. The overall mean value of knowledge telepediatrics was 15.67; median was 16.00, and a standard deviation of 4.091. *Conclusions:* The changes in the system such as advances in telepediatrics and its applications posea great need for updating the knowledge of those who practice the profession. Initiatives should be made from both nurses and management to passout the new knowledge. Nurses should find more time from their work schedule to study regarding telepediatrics by managing the time properly. In-service education should be demanded attended if gets any such opportunities

Keywords: Telemedicine; Telepediatrics; Nurses; Knowledge; Hospital.

Introduction

With the advances in technology, the delivery of health care to even remote locations has become feasible through methods like telemedicine. Telemedicine is practicing medicine at a distance, but this simple definition does not capture the complexity of the discipline. Telemedicine spans the spectrum of health care environment; the patient home, rural health Centre, community physicians and hospitals and tertiary care centers [1].

Telemedicine generally refers to the use of communications and information technologies for the delivery of care. Care at distance (also called in absentia care), is an old practice which was often conducted via post. There has been a long and successful history of in- absentia health care which, thanks to modern communication technology, has evolved into what we know as modern medicine. In its early manifestations, African villagers used smoke signals to warn people to stay away from the village in case of serious disease. In the early 1900s, people living in remote areas in Australia used two way radios powered by a dynamo to communicate with a royal flying doctors of Australia [2].

Telemedicine in pediatrics as the use of electronic communications technology to provide and support health care for infant, children,adolescent, young's adults when distance separate the practitioners from the patients, guardian, parents, or referring practitioner. When telemedicine researchers and developers apply their efforts to pediatric applications one would expect that there would be

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significant benefit to children with special needs or children residing in underserved areas [3].

Telepediatrics, which has the potential to improve pediatric care if expert knowledge is not locally available, involves transfer of information between two or more locations, to aid diagnosis or management and/or to allow continuing professional development and education. Paediatric benefits from previous telemedicine experiment such as that gained by some developed nations with sparsely populated, remote areas, where means of communications are simple and socio economic conditions poor [4].

To certain extend,now a days there is no enough pediatric nurses in the field of telepediatrics. Children's would not like to stay in hospital environment. So they need a care at distance (in absentia care). So the pediatric nurses should know how to deal the pediatric patient and their families by means of telemedicine services. But the criticism is, even the well expert pediatric nurses also do not have enough knowledge regarding telepediatrics. So the need of the study is relevant in present days.

Materials and Methods

Research Approach

In the present study a quantitative research approach was used to assess the knowledge regarding telepediatrics among staff nurses.

Research Design

The research design is concerned with the overall framework for conducting the study. Descriptive survey design is adopted for the present study.

The purpose of a design is to achieve greater control and thus to improve the validity of the study in examining the research problems. The researcher selected Non Experimental research design for the study

Study Setting

The study was conducted at selected District hospital, Shridevi hospital, and Siddharamanna hospital in Tumkur

Population

The population of the present study comprised of staff nurses working in the District hospital, Shridevi hospital, and Siddharamanna hospital in Tumkur.

Sample Size

The sample size of the present study consists of 60 staff nurses working in the selected study settings.

Sampling Technique

In the present study non-probability convenient sampling technique was adopted to select the sample

Description of the Tool

The tool was prepared and validated by experts in respective fields and the reliability of tool was established, the tool consists of two parts.

Part–I: It consists of 10 items related to demographic data which include age, gender, professional education status, computer knowledge, experience, area of residence,spouse'sjob, in-service education related to telepediatrics, current area of working, and sources of information.

Part–II: It is again divided into 2 Sections which are related to the knowledge regarding telemedicine and telepediatrics

Section A: It consists of 13 items related to the knowledge regarding meaning, origin, and general information regarding telemedicine

Section B: It consists of 29 items related to the knowledge regarding telepediatrics

Results

Analysis is defined as categorizing, ordering, manipulating and summarizing of data and reduces it to intelligible and interpretable form so that research problem can be studied and tested including relationship between variables.

Table 1: Knowledge regarding telepediatrics

Sl. No	Maximum Possible Score	Mean	Median	S.D	Range	Mean S.C %
Section-A	13	7.081	8	2.547	2-11	54.44%
Section-B	29	5.127	5	1.868	1-10	28.43%
Total	42	15.67	16	4.091	7-23	37.30%

This area deals with the analysis and interpretation of data obtained from 60 subjects in order to assess the knowledge regarding telepediatrics. Descriptive and inferential statistics such as mean, median, standard deviation, standard error of mean, percentage, and chi-square test were used to analyze the collected data.

Depicts the Knowledge of Subjects Regarding Telepediatrics

The above table shows the level of knowledge of the subjects with regard to Telepediatrics. As per the table the staff nurses knowledge regarding telemedicine is; median 8, mean 7.081, standard deviation 2.547 and mean percentage score 54.49% where maximum possible score was 13. Considering telepediatrics; the mean is 5.127, median 5, standard deviation 1.868, and mean percentage score 28.43% where the maximum possible score was 29. The overall score displayed mean 66 of 15.67, median of 16, SD of 4.091, and a mean score percentage of 37.30% where the maximum possible score was 42.

Associate the Level of Knowledge Regarding Telemediicne, and Telepediatrics

Only 13 (21.67%) subjects had adequate knowledge regarding telemedicine with a mean score percentage of 77.51%. 26 (43.33%) and 21 (35%) of the samples had moderately adequate and inadequate knowledge respectively with 61.54% mean score for moderately adequate knowledge samples group and 31.5% for inadequate knowledge group.

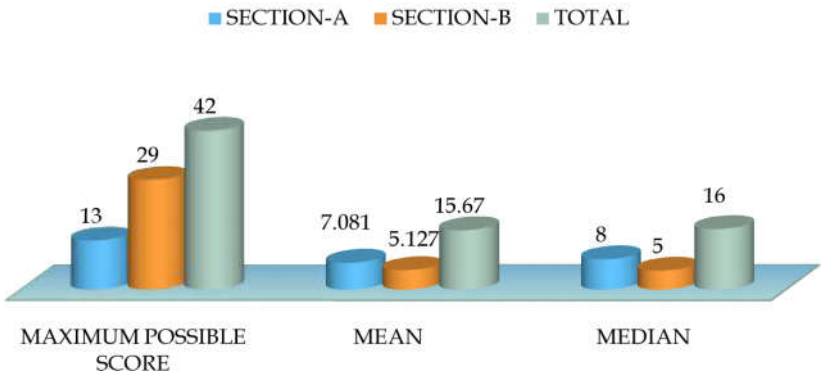

Fig. 1: Knowledge regarding telepediatrics

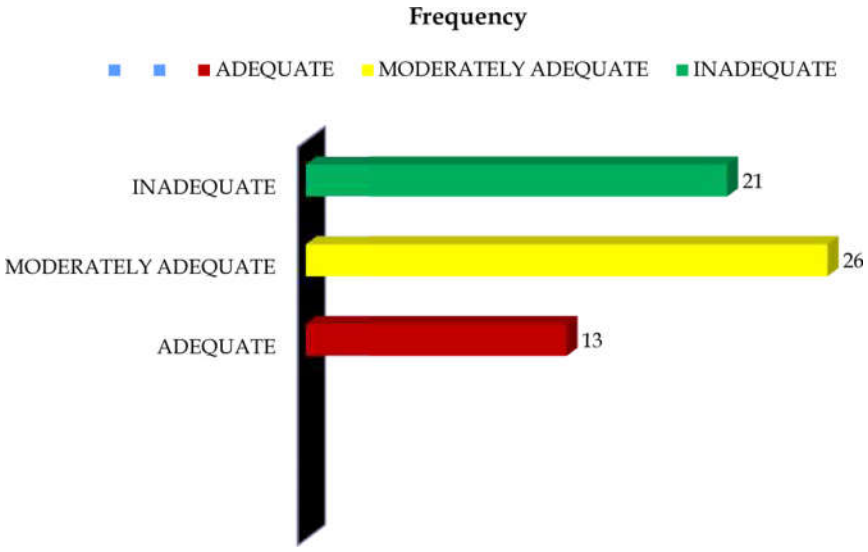

Fig. 2: Distribution of knowledge score regarding telemedicne

Table 3: Distribution of knowledge score regarding telepediatrics

Sl. No.	Knowledge Score Regarding Telepediatrics	Frequency	%	Mean score %
1	Adequate	0	0	0
2	Moderately Adequate	1	1.67%	55.56%
3	Inadequate	59	98.33%	27.97%

Table 4: Distribution of overall knowledge score

Sl. No.	Overall Knowledge Score	Frequency	%	Mean Score %
1	Adequate	-	-	-
2	Moderately Adequate	4	6.67%	52.98%
3	Inadequate	56	93.33%	36.18%

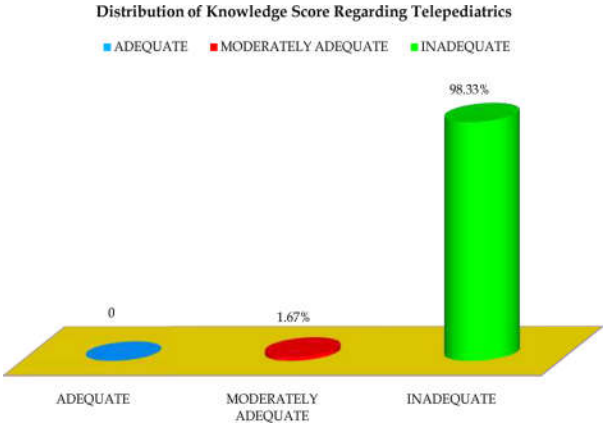

Fig. 3: Distribution of knowledge score regarding telepediatrics

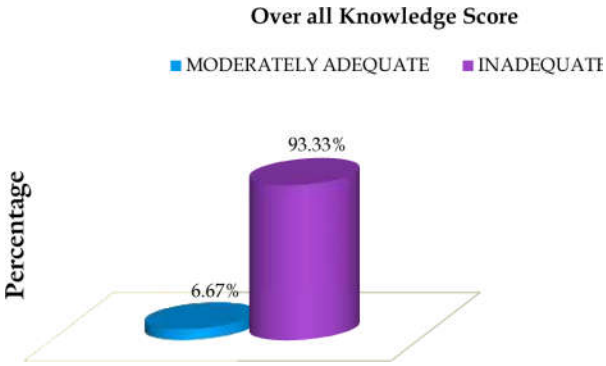

Fig. 4: Distribustion of Overall Knowledge Score

Considering knowledge regarding telepediatrics, none of the samples had adequate knowledge, whereas, only 1 (1.67%) with a score percentage of 55.56% had moderately adequate knowledge leaving all the other 59 (98.33%) in the inadequate group with the mean score percentage of 27.97%

Distribution of overall knowledge score suggest that most of the samples had inadequate overall knowledge regarding telepediatrics accounting 56 (93.33%) of the subjects. only 4 (6.67%) had at least moderately adequate knowledge and no samples had adequate knowledge. the result was almost same in the sub-divisions of the tool too, which suggest the considerable lack of knowledge among staff nurses regarding telemedicine, telepediatrics, though some nurses had an adequate knowledge regarding telemedicine, which did not reflect in related fields, the inadequate category outplayed with considerable margin.

Discussion

This study was descriptive in nature. A total of 60 staff nurses were selected by using non-probability convenient sampling technique from selected hospitals Tumkur. After the selection of sample, the structured questionnaire method was used with the help of instrument.

Knowledge of staff nurses regarding telepediatrics was assessed based on the knowledge score after the test using structured questionnaire. The data shows that the mean score regarding general telemedicine is 7.08 with a maximum possible score of 13. The mean score percentage is 54.49%. Considering the telepediatrics, the mean score percentage is just 28.43% with a mean of 5.12 on an 18 point scale. Knowledge regarding applications of Telepediatrics shows a mean score percentage of 31.51 with a mean score of 3.47 where the maximum possible score was 11. The over all knowledge gives a 37.30 mean score percentage with a mean score of 15.67 over 42. The results show that the samples knowledge regarding telepediatrics is verylow.

Based on the present study's revelations, out of 60 staff nurses, 4 (6.67%) had moderate knowledge and 56(93.33%) had in adequate knowledge regarding over all telepediatrics aspects.

But the staff nurses knowledge regarding telemedicine depicted 13 (21.67%) with adequate knowledge and 26 (43.33%) with moderately adequate knowledge.

Conclusion

Telepediatrics is not new, but, certainly, it is now. Due to the advancements in the fields of information technology and the computer science, automated devices have evolved to be an essential partinany institution. In this changing situation and competitive profession, nurses should enable themselves to deal with the changes in the field of nursing and should keep up with the emergency of telepediatrics. The present study reveals that most of the subjects are having in a dequate knowledge in this aspect.

Acknowledgements

Thanks to GOD almighty, my parents and brothers for their enormous support and for Professor Indra D. for guiding me in this study and the staff nurses of shridevi, Siddha Ramanna and district hospitals in Tumkur.

For Compliance with Ethical Standards

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Structured Teaching Program on Knowlege Regarding Prevention of Dental Caries among Mothers of School going Children

Thamarai Selvi P.*, Akansha, Yogita Nainwal****

Abstract

A structured teaching program was conducted to assess the knowledge of mothers of school going children regarding prevention of dental caries. The sample of this study comprise of 40 mothers of schoolgoing children. Collected data was analyzed by using description and inferential statistics. The mothers mean value for the pre test 0.37 with the mean% of 37%. The mean value of post test is 0.73 with the mean% of 73%. The data analysis revealed that there is a significant association between income of family and remaining variable were found to be non significant. The study revealed that the mothers of school going children gained adequate knowledge regarding prevention of dental caries.

Keywords: Prevention; Dental Caries; Mothers of School Going Children.

Introduction

Childhood is an age span ranging from birth to adolescence the term childhood is non-specific and can imply a varying range of years in human development. Children are curious and responsive and they can learn, adopt and practice thing easily. The common problem among the school going children's are dental caries it (tooth decay) is a major oral health problem in most industrialised countries, affecting 60-90% of school children [1].

Dental caries, also known as tooth decay or a cavity, it is an infection usually bacterial in origin, that cause demineralization of hard tissues and destruction of the organic matter of the tooth, usually by production of acid hydrolysis of the food debris accumulated on the tooth surface. The demineralization exceeds saliva and other demineralization factor such as from calcium and fluoridated toothpastes, these tissues progressively breakdown, producing dental caries [2].

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It is also associated with failure to thrive; can affect appearance self-esteem, speech, and school performance; and is associated with future caries in both the primary and permanent dentitions. Premature loss of primary molars due to early childhood caries can result in loss of arch space, leading to crowding of the permanent teeth, affecting aesthetics and potentially requiring orthodontic correction [3].

Factors involving in caries teeth are ignored and poverty. The terminal stage of the disease is after much damage has been done. Not knowing the importance's to save the tooth is ignorance and poverty only enhances further and limits any action to be taken till a point the disease has reached the terminal phase. All over the world reported a prevalence of dental caries varying from 30%-80% [4].

Overall caries prevalence in total sample was recorded to be 63.20% caries prevalence in the boys groups was 65.91% and girl group was 59.03% the difference between both the groups was statistically significant. Among the total children 85.07% needed treatment. It was further calculated that out of the total children 51.20% children needed sealant 85.73% needed one surface filling, 5.20% children needed pulp care and crown. 4.13% children needed extractions and 19.87% children needed other care which in this case was mostly veneers, preventive

and interceptive orthodontics [5].

In view of above matter the researcher felt that there is a need for the study among mothers of school going children on prevention of dental caries to reduce mortality in selected area of Jeolikote, UK.

Problem Statement

A study to assess the effectiveness of Structured Teaching Program on prevention of dental caries among mothers of school going children in selected hospital, Haldwani, Uttrakhand.

Objectives of the Study

1. Assess pre-test knowledge score on prevention of dental caries among mothers of school going children in selected hospital, Haldwani, Uttrakhand.
2. Find out the effectiveness of Structured Teaching Program on prevention of dental caries among mothers of school going children in selected hospital, Haldwani, Uttrakhand.
3. Find out the association between post test knowledge score and selected demographic variables among mothers of school going children in selected hospital, Haldwani, Uttrakhand.

Materials & Methods

The research design adopted for the present study is pre experimental research design in that one group pretest posttest design. The setting of the study is Sushila Tiwari Hospital Haldwani, Uttrakhand. The population of present study include mothers of school going children. Simple random sampling is the type of probable sampling was found appropriate for the study. The sample of the present comprised of 40 mothers of school going children. In the present study the tool consist of two parts: Section A encompassed of demographic variable and Section B Comprise of Knowledge questionnaire regarding prevention of dental caries with 20 items. It is a multiple choice questionnaire in which score 1 was awarded to correct response and 0 for wrong response.

The investigator had collected the data after getting formal permission from the authority from the selected hospital Haldwani, Uttrakhand and approval was obtained to conduct the study. The participants were selected by simple random sampling technique using lottery method & informed about the purpose of the study also written consent was taken from the participants. On an average each participant took 30 minutes to complete the pre test questionnaires after that structured teaching

Table 1: Demographic Characterstics of Respondants N=40

S. No.	Variable	Category	Frequency	Percentage%
1.	Age	19-22 years	13	33
		23-26 years	18	45
		27-30 years	09	22
2.	Education	Primary	3	08
		Higher secondary	24	60
		Graduate	12	30
		Post graduate	01	02
3.	Occupation	House wife	34	85
		Govt. job	00	00
		Private job	06	15
		Business	00	00
4.	Religion	Hindu	31	78
		Muslim	09	22
		Christian	00	00
		Others	00	00
5.	Type of family	Joint	23	58
		Nuclear	17	42
6.	Order of children	1	18	45
		2	22	55
7.	Income	5000	13	33
		8000	09	22
		10,000	18	45

program was given to the respondents on the same day. After sevendays post test was conducted with same tools to the participants. The study was conducted in 2016. Subsequent with coding the data, it was analyzed in accordance wiyh the objectives of the study.

Table 1 depicits the characeristics of demographic variables included in the present the study. The age group shows majority of respondents 18(45%) were in the age group of (23-26) and 13(33%) were from age group (19-22) and 09 (22%). With regard to the education majority of mother 24(60%) were higher secondary educated, where as 12(30%) were graduate and 03(8 %) were primary and post graduate were 1(2%) respectively. Regarding Occupation majority of respondents 34(85%) were housewife, and remaining 06(15%) were in private job. Pertaining to the religion majority of respondents 31(78%) were Hindus, and remaining 09(22%) were Muslim. Related to type of family majority 23(58%) were from joint family and 17(42.%) were from nuclear. In orde of children majority 22(55%) were having 2 children and 18(45%) were having 1 children. Related to income majority of respondents 18(45%) of mothers family were having 10,000 income, 13(33%) of mothers family were having 5000 income, 09(22%) of mothers family were having 8000 income.

Table 2: Comparison of Pre and Post test score of mothers on prevention of dental caries N=40

Mothers Level of knowledge	Pre test			Post test			t- test
	Mean	Mean %	SD	Mean	Mean %	SD	
	0.37	37	1.64	0.73	73	1.45	17.2

Table 2 represents the Comparison of Pre and post test score of mothers of schoolgoing childen on prevention of dental caries. In pretest Mean, Mean pecentage & SD of mothers level of knowledge were 0.37, 37 & 1.64 respectively. In post test Mean, Mean Percentage & SD of mothers levels of knowledge were 0.73, 73 & 1.45 respectively.

Table 3 displays association between the knowlege score of mothers with their selected demographic variables.

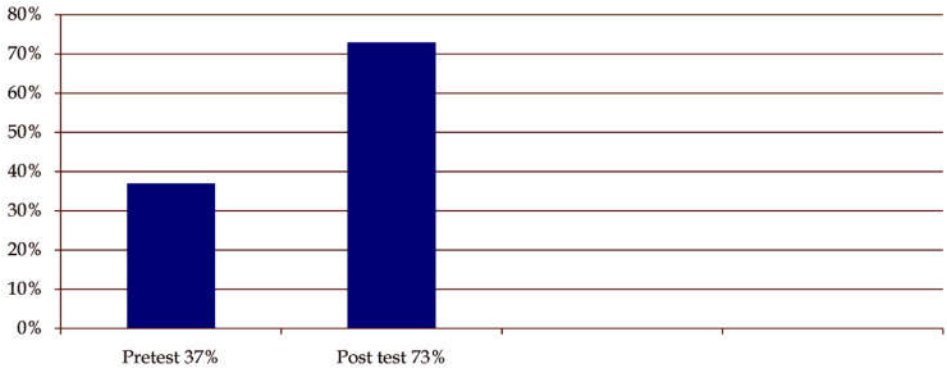

Fig. 1: Bar graph on pre & Post test mean score of mothers on prevention of dental caries.

Table 3: Association between selected demographic variables and knowledge score of mothers regarding prevention of dental caries

S. No	Variables	Chi square value
1.	Age	9.49**
2	Education	12.59**
3	Occupation	12.59**
4	Religion	12.59**
5	Type of family	5.99**
6	Order of children	5.99**
7	Income of family	9.49*

** Non Significant * Significant at p<0.05 level

Discussion

Demographic Characteristics of Respondent

The majority findings of the demographic variables are described. It is revealed that there 18(45%) were in the age group of (23-26) years. The education level among them is (60%) in majority. The majority of mother (77.5%) were Hindus. There is a great majority

(57.5%) of mother belongs from joint family and majority of mothers (55%) were having 2 children's and the income of family is (45%).

Assess the Knowledge Score of Mother of School Going Children on Prevention of Dental Caries

The data of Table 2 revealed that the mean value of mothers for pre test is 0.37 with the mean% of 37%. & SD values were 1.64.

Find out Effectiveness of Structured Teaching Program on Prevention of Dental Caries among Mothers of School Going Children in Selected Hospital, Haldwani .U.K.

The data of Table 2 revealed that the mean value of mothers for post test is 0.73 with mean% 73% & SD value were 1.45 after the structured teaching program. Figure 1 shows comprison of pre & Post test score of mother's knowledge on prevention of dental caries.

Explore the Association of Pre Test and Post Test Knowledge Score of Mothers Regarding Prevention of Dental Caries with Selected Demographic Variables

Analysis revealed that there is significant association between Income of family and the remaining variables are found to be non significant at P< 0.05 levl.

Implication

Health education is a primary response of the nurse who is called to be care giver with knowledge expertise. The nursing personnel are challenged to provide standard and quality nursing care. The Nurse should take into consideration to provide education regarding prevention of dental caries mothers of children.

Recommendations

- The study can be replicated in large samples for better generalization.
- A structured teaching programme on knowledge & practice regarding prevention of dental caries can be conducted.

Conclusion

Dental caries, also known as tooth decay or a cavity, it is an infection usually bacterial in origin, that cause demineralization of hard tissues and destruction of the organic matter of the tooth, usually by production of acid hydrolysis of the food debris accumulated on the tooth surface. It is preventable condition .Childrens are more prone to get dental caries. Prevention is beter than cure. Through health education dental caries can be prevented.

Acknowledgement

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A Study to Assess the Effectiveness of Structured Teaching Programme on the Knowledge of Sexually Transmitted Disease among Women of Vitthalnagar Loni (BK)

Sonali Kashid*, Nilesh Mhaske**

Abstract

Background: The global burden of reproductive tract infection is enormous and of a major public health concern, particularly in developing countries where RTIs are endemic. RTI's, excluding Human Immunodeficiency Virus (HIV) constitute the second major cause of disease burden (after maternity related causes) in young adult women in developing countries [1]. *Aims and Objectives:* The present Quasi – Experimental study was undertaken to assess the effect of planned health teaching regarding Sexually Transmitted Disease among 100 women of Vitthalnagar, Loni (BK). The collected data was tabulated coded and summarized. Analysis was done by using descriptive and inferential statistics. The tests used were calculation of frequency, percentage, mean, standard deviation and chi-square test. *Results*: result revealed that 45.58% women knew the information of sexually transmitted disease. Sign and symptoms knew by 46.25%, the treatment & prevention knew by 41.25%, the treatment and prevention knew by 41.11% after the planned teaching there is significant change in the pre test knowledge. *Conclusion:* It can be concluded that the planned teaching on sexually transmitted disease is proved to be effective in imparting knowledge and creating awareness.

Keywords: Sexually Transmitted Disease; Reproductive Tract Infection.

Introduction

Sexually Transmitted Diseases tend to be contracted by people between the ages of 15 and 45 who "practice unsafe sex; Deaths from syphilis are an important component of Sexually Transmitted Diseases in both the younger and older populations in India [2].

WHO is working on additional indicators for global monitoring in reproductive health, including indicators on incidence and prevalence of sexually transmitted disease, quality of family planning services, access to and quality of maternal health services, prevalence of female genital mutilation and prevalence and nature of obstetric and gynecological morbidities [3].

A quasi experimental approach was choosen for the study and the study was carried out in Kancheepuram district. A total of 50 women were selected using lottery method. The instrument used for this study was consisted of a structured questionnaire to assess the knowledge. The data analysis showed that in pre-test man score were 41.63 with a standard deviation of 11.61 and in post-test the mean score was 93.43 with a standard deviation of 19.82. The pair 'T' test valve was 17.97 and it was significant at p,0.001. this revealed the STP was effective [4].

A study was conducted in Mangalore, to assess the effectiveness of planned teaching programme on knowledge of emergency drugs among nurse working in critical care units in selected hospitals, Mangalore: the sample of the study(n=30). Method for data collection was done by preparing knowledge questionnaires on emergency drugs, pre-test followed by administration of planned teaching programme and post-test was done 7th day. The study finding

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revealed that, 70% were female and 30% male among the study group. The educational level showed that, all respondents were GNM (100%) with regard to working experience 33.3% (10) were between the age group of more than 6 monthto 1 year of experience. The result indicate that the pre-test mean knowledge scores was 87.73% with mean and SD 43.87+4.13 is higher than pre-test mean knowledge score of 52% (50 with mean and (SD 26.0=6.98) with overall effectiveness of 35.73%.This study revealed that, planned teaching programme on emergency drugs help the nurses to improve their knowledge [5].

Material and Methods

The Quasi –Experimental study was undertaken to assess the effect of planned health teaching regarding Sexually Transmitted Disease among 100 women of Vitthalnagar, Loni(BK). Before commencement of the study, ethical approval was obtained from the Institutional Ethical Committee, and official permission was received from the authority. Patients who were intheagegroup 20-60years, able to knowMarathi and English and willing to participate in the study were included in the study by using the Non probability purposive Convenient Sampling method.

The purpose of the study was informed and explained to the participants and those who voluntarily agreed to participate in the study and gave an informed consent for the same were asked to the response format provided in the structured questionnaire. Material used is self prepared; and content validated structured questionnaire to collect the data.The collected data was tabulated and analyzed using appropriate statistical methods like descriptive statistics (mean, SD and mean percentage) and inferential statistics (chi – square test).

Results

Findings Related to Socio Demographic Variables

Highest percentage (45%) were in the age group 20-30 year, (43%) was in the primary & very few (12%) were in the graduates & above, (59%) were housewife, (75%) married, (85%) nuclear and few (15%) were joint family, (66%) Hindu, (46%) were having monthly income is Rs 4000/-, (76%) was having mixed diet, (50%) were having two children.

Aspect Wise Finding Related to Pre Test and Post Test Knowledge Score

The per-test mean knowledge score in the aspect of information of STD, causes & transmission was 45.58%, the pre-test mean knowledge score in the aspect of sign and symptoms was 46.25, the pre-test mean knowledge in the aspect of treatment and prevention was 44.08. The total mean pre-test knowledge score on STD were 44.08 with standard deviation of 1.89.

The post-test mean knowledge score in the aspect of information of STD, cause, and transmission was 72.5%, the post-test mean knowledge score in the aspect of sign and symptoms was 74.75%, the post-test mean knowledge score in the aspect of treatment and prevention was 68.66% The total mean post-test knowledge score on STD were 71.4% with standard deviation of 2.12.

Finding Related to Knowledge Score

The findings of the present study reveal that overall mean pretest knowledge score was 44.08% and the post-test score rise to 71.4%. This shows that women have inadequate knowledge score in the pre-test.

Discussion

Overall post test mean knowledge score on knowledge of STD among women. The current study findings depicta real evidence of significant difference between knowledge score of STD regarding overall post-test mean knowledge score of STD was 71.4%. The obtained 't' value is 3.65 is statistically significantat $p>0.05$ a level. Hence, there is significant difference in the post-test mean knowledge score of STD among the women. The reforere search hypothesis (H_1) was accepted. So this indicates structured teaching programme on knowledge of STD is effective in increasing the knowledge of STD among the women. Above finding supported by, quasi experimental study was conducted to evaluate the effectiveness of structured teaching programme for women of knowledge of STD. the finding revealed that the difference between in pre-test & post-test knowledge score were highly significant ('t'=18.69, $p<0.05$). Pre-test score was very low as compare to post-test score [6].

Conclusion

The planned teaching on STD found to be effective

in increasing the knowledge in women. The sample had a highly significant gain in knowledge after the planned teaching programme. Age group of 20 to 40 years showed a gain in knowledge in all the content areas of planned teaching. The planned teaching on sexually transmitted disease found to be effective in enhancing the knowledge in women planned teaching of sexually transmitted disease is an effective method of educating the women.

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Application of Peplau's Interpersonal Theory on Mr. X with History of Road Traffic Accident

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Preethy Maria Paul*, Kavitha B., Nandini M.*****

Abstract

Nursing is a healing artand an interpersonal process between the nurse, and the patients. Interpersonal competency is a keyelement for nurse in assisting patients and their family to regain their health and restore the well-being. Peplau's theory of interpersonal communication focuses and guides these interpersonal processes and therapeutic relationship that develops between the nurse and client.Recognizing the importance and effects of the nurses relationship with the client, professional nurse use this knowledge in proceeding through each phase of the nursing process [1].

Keywords: Peplau' Sintersonal Theory; Interpersonal Process; Nurse and Client/ Patient.

Introduction

Peplau's theory of interpersonal relations provides a useful framework for investigation clinical phenomena and guiding nurse's actions. Through this interpersonal relationship, nurses assess and assist people to:

a. Achieve healthy levels of anxiety interpersonally and

b. Facilitate healthy pattern integrations interpersonally, with the overall goal of fostering well- being, health and development. This relationship also provides the contexts for the nurses to develop, apply, and evaluate theory-based knowledge as well as patient characteristics and needs are well important dimensions in the process and outcomes of the relationship. The structure of the interpersonal relationship was originally described in four phases. Her theory focuses primary on the nurse-client relationship in which problem-solving skills are developed [2].

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Assumptions

1. The kind of nurse each person becomes makes a substantial difference in what each client will learn as she or he is nursed throughout his or her experience with illness.
2. Fostering personality development in the direction of maturity is a function of nursing and nursing education; it requires the use of principles and methods that permit and guide the process of grappling with everyday interpersonal problems or difficulties.
3. Nursing can take as its unique focus the reactions of clients to the circumstances of their illnesses or health problems.
4. Since illness provides opportunity for learning and growth, nursing can assist clients to gain intellectual and interpersonal competencies, beyond those that they have at the point of illness, by gearing the nursing practices to evolving such competencies through nurse-client interactions

The Four Phases of Nurse-Patient Relationship are

Orientation

- During this phase, Nurse and patient come together as strangers; meeting initiated by patient who expresses a "felt need"and seeks

professional assistance.

- The nurse helps the individual to recognize and understand his/her problem and determine the need for help

Identification

- Patient participates in goal setting; has feeling of belonging and selectively responds to those who can meet his or her needs.
- The nurse permits exploration of feelings to aids the patient in undergoing illness as an experience that reorients feelings and strengthens positive forces in the personality and provides needed satisfaction.

Exploitation

- During this phase, the patient attempts to derive full value from what he/she are offered through the relationship.
- The nurse can project new goal to be achieved through personal effort and power shifts from the nurse to the patient as the patient delays gratification to achieve the newly formed goals.

Resolution

- Occurs after other phases are completed successfully. This leads to termination of the relationshipi.ethe patient frees himself from identification with the nurse.
- The patient gradually puts aside old goals and adopts new goals.

Throughout These Phases the Nurse Functions Cooperatively with the Patient in the Roles of

- Counseling Role- working with the patient on current problems.
- Leadership role- working with the patient democratically
- Surrogate role- figuratively standing in for a person in the patient's life
- Stranger- accepting the patient objectively.
- Resource person: interpreting the medical plan to the patient.
- Teaching role- offering information and helping the patient learn [3].

Metapradigm of the Theory

Person

- An individual is made of physiological, psychological and social spheres striving towards equilibrium in life
- A developing organism that tries to reduce anxiety caused by needs

Environment

- Being and occurring in the context of the nurse client relationship
- Existing forces outside of the individual

Health

- Peplau didn't include an exact definition of health within her model.
- Peplau viewed health as "a word symbol that implied forward movement of personality and other ongoing human processes in the direction of creative, constructive, productive, personal, and community living"

Nursing

- As an educative and therapeutic relationship in which the nurse makes the client a partner in their health care and promotion
- As a significant therapeutic interpersonal process

Case Presentation

Mr.X, 50 yrs. old male admitted to ABC hospital on 01/12/2016 with alleged history of road traffic accident. At the time of admission patient had deformity of right forearm and abrasions over the face and both elbow. He was in intense pain over the right forearm. He was confused on arrival. X-ray revealed impacted fracture of the right ulna. Primary debridement and suturing over the right elbow done on 01/12/2016 and open reduction and internal fixation of right forearm done on 15/12/2016. He was started on antibiotic, Inj. Monocef 2G for 5 days.

Past Health History

He has history of acute renal failure with hypertension 2 years ago(on regular medications). He is also a known case of diabetes mellitus since 6 years on Inj.Mixtard 30/70.

Application of Interpersonal Theory in Nursing

Practice

- An article in ***Current Nursing*** evaluated using the theory in nursing practice
  - Assessment = Orientation phase
  - Nursing diagnosis
  - Planning = Identification phase
  - Implementing = Exploitation phase
  - Evaluation = Resolution phase

Orientation Phase

Mr.X was lying on the bed. He was conscious and oriented. Greeted him. He greeted back.He was admitted in MICU from 01/12/2016. On the first encounter dated 27/12/2016, he explained his problems and difficulties.

- His first complaint was about severe pain on the right forearm due to fracture of the right ulna.
- He is not able to do his activities of daily because of the severe pain
- He said that he wanted to come out of this helpless situation as soon as possible

The Problems Identified by his Nurse was

- He has severe pain over the right arm.Pain score-8/10
- He was anxious and worried about his present condition.
- He is unable to do his activities of daily activities due to severe pain.

Identification Phase

Mr.X and his nurses identified his actual and potential problems through various sessions of interactions.According to the identified problems specified diagnosis were framed:

1. Acute pain related to tissue trauma, as evidence by persistent score of 8/10 on pain scale of 10
2. Impaired physical mobility related to loss of integrity of bone structure,movement of bone fragments, soft tissue injury and prescribed movement restrictions as evidenced by inability to purposefully move and inability to bear weight.
3. Imbalanced nutritional status less than body requirement related to anorexia as evidenced by poor oral intake.
4. Risk for infection related to surgical wound.
5. Activity intolerance related to fracture as evidenced by bed-rest and need assistance to do ADL.
6. Risk for peripheral neurovascular dysfunction related to vascular insufficiency and nerve compression secondary to application of casts.
7. Disturbed sleeping pattern related to hospitalization as evidenced by sunken eyes and verbal reports.
8. Ineffective therapeutic regimen management related to lack of knowledge regarding muscle atrophy, exercise program as evidenced by questions about long-term effect of immobilization.
9. Anxiety related to disease condition as evidenced by facial expression and anxious talks.
10. Risk for complications related to application of cast.

Exploitation Phase

- Planned care of action will be implemented
- Communicates with the patient regarding intervention and its rationale.Patient clarifies his doubts regarding procedure.
- Active participation of patient in self-care activities
- Aids him in exploiting all avenue of help and progress is made towards the final step

Resolution Phase

- Termination of professional relationship
- Evaluation of accomplishment of patient's need will be briefed by the nurse.
- Patient will gradually put aside the old goals and adopt new goals
- The patient frees himself from identification with nurse.
- The nurse and patient engage in planning for discharge and potential needs for transitional care.

Table 1:

Assessment (Orientation phase)	Nursing Diagnosis	Planning (Identification phase)	Implementation (Exploitation Phase)	Evaluation (Resolution Phase)
Mr X expresses pain in the right forearm. Regarding pain discussion was made to assess the severity and the type and duration of pain. Also the measures to reduce pain were discussed.	Acute pain related to tissue trauma as evidenced by persistent score-8/10 on pain scale of 10.	Goal setting was done with patient Mr.X will have reduction in pain as evidenced by his verbalization of reduction in pain response. *Provide non-pharmacological intervention (e.g.Diversion therapy) *Support area with extra pillow to allow the normal alignment and to prevent strain.	1. Carried out plans mutually agreed upon 2. Provided non-pharmacological measures like diversion therapy. (music ,newspaper to read) 3. Used pillow to support the fracture arm 4. 4.Encouraged him to express his feelings 5. 5. Administered analgesic (Inj.Tramazac 50mg)	Mr.X Was free to express problem of pain. He expressed that he got slight relief from pain.
Mr.X has cast over his right forearm and is unable to do any activities with right arm. The need for immobilization and restricted movement of right forearm.	Impaired physical mobility related to loss of integrity of bone structure movement of bone fragments, soft tissue injury and prescribed movement restrictions as evidenced by inability to purposefully move and inability to bear weight.	Goal setting was done with patient *Patient will have improved physical mobility as evidenced by participating in self-care within the limits. *Provide active and passive exercises to all the extremities to improve the muscle tone and strength. *Make the patient to perform the breathing exercise which will strengthen the respiratory muscle.	1. Carried out plans mutually agreed upon. 2. 2.Provided active and passive exercises to all the extremities 3. 3.Made the patient to perform breathing exercise 4. Provided positive reinforcement to the patient. 5. 5. Assisted him is completion of his ADL.	Mr.Narayankutty was free to express problems regarding difficulty in mobilizing. He expressed satisfaction when he was able to meet his ADL.
Mr.X need assistance to get down from bed. Discussion regarding activity tolerance was done Discussed measures to solve the problems	Activity intolerance related to fracture as evidenced by bed rest and need assistance to do ADL.	Goal setting was done along with patient *Client will achieve and maintain self-care activities with assistance of care giver or within his limits *Keep all articles within his reach *Frequent visits to the patient to enquire needs *Assist the client in doing his ADL.	1. Carried out plans mutually agreed upon. 2. Keep articles within reach of the patient. 3. Frequent visit was made to enquire needs. 4. Assisted him in completion of his daily activities. 5. Provided positive reinforcement.	Mr.X was free to express problems of activity tolerance He was able to maintain good activity tolerance level at the end of 5 days.

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Nursing Care: A Critical Analysis

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Vasantha Kalyani*, Beena**

Abstract

Nowadays the challenges of Nursing Profession is to implement the independent and inter dependent nursing care with other health care profession .This nursing care explains the nurse has to assess and implement the nursing care n all the aspects of patient suffering with cancer stomach.

Keywords: Nursing Care; Ca Stomach; Nursing Diagnosis.

Demographic Data

Name	-	AXZ
Age	-	45year
Gender	-	female
Education	-	Un Educated
Occupation	-	housewife
Address	-	Roorkee
Marital status	-	married
Ward Ward	-	General Surgery
No of days in hospital	-	12 days
Provisional diagnosis	-	Ca . Stomach

- *Chief Complaints*

Pain in upper abdomen xo month fever x 8 month

- *History of Illness*

History of Present Medical Illness

Patient was apparentlyasymptomatic last 8 months She gradually developed pain in upper abdomen which is mild in intensity, on-off type non-radiating, no anointing factor relived by taking medication. She has a compliant of nausea which is relived by taking medication patient also undergoing treatmentfor fever since 8 months.

History of past medical illness patient took treatment for kock's disease before 25 years.

No H/O DM, HTN.

History of Present Surgical Illness

Patient has undergone total gastroectomy, cholecystectomy spleenotomy with D_2 lymph adenotomy, Roux-en-^{y} anastamosis.

History of Past Surgical Illness

Not significant

Personal History

Good Habits	–	All household activites
Bad Habits	-	Tobacco Chewing

Elimination Pattern

Bowel	–	Constipation
Bladder	–	Patient is kept on indwelling Cather with adequate intake and out put
Activity pattern	–	dull

Menstrual History

Menarche	–	18 years
Duration	-	5 days
Cycle	–	28 days

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Family History

In patient's family there are 9 Members. She is living in nuclear family and no history of consanguineous marriage. There is history evident in cancer in family.

Investigations

Biochemistry	Result	Normal Values	Remarks
Total Bilirubin	1.0 mg /dl	0.3-1.2 mg/dl	Normal
Direct Bilirubin	0.66 mg/dl	<0.20 mg/dl	increased
S.G. P.T.	19.0 U/l	M- <50; F- <35 U/L	normal
S.G.O.T.	17.0 U/L	M- <50; F- <35 U/L	normal
AL P	69.0 U/L	30-120 U/L	normal
Serum total protein	3.1 mg/dl	6.6 – 8.3 g/dl	decreased
Serum albumin	1.14 mg/dl	3.5 -5.2 g/dl	decreased
Serum Globulin	2.0	2.5 -3.2 g/dl	decreased
A.G ratio	1.0	1.4 -1.6	decreased
Serum Na+	135mmol/L	136-146 mmol/L	decreased
Serum K+	4.24 mmol/L	3.5- 5.1 mmol/L	normal
Serum Cl^-	107.0 mmol/L	101-109 mmol/L	normal
Serum Total Calcium	7.29 mg/dl	8.8- 10.6 mg/dl	decreased

Hematology Report

Hematologyreport	Result	Normal Values	Remarks
Hemoglobin	13.9 gm/dl	M: 13-17gm/dl;	Normal F: 12-15 gm/dl
RBC count	5.69 million/cumm	M: 4.5-5.5;	Normal F: 3.8-5.2 million/cumm
TLC	15,200 /cumm	4000-11000/cumm	Increased
DLC	Neutrophill - 89.7 %	40%-70%	Increased
	Easinophill – 0.1 %	1-6%	Decreased
	Basophill – 0.1 %	<2%	Normal
Platelet count	2.19 lakh/cumm	1.5-4.0 lakhs/cumm	Normal
Hematocrit	44.3%	M: 40-50%; F: 36-45%	Normal
MCV	77.8 fl	78-98 fl	Normal
MCH	24.5 pg	27-32 pg	Decreased
MCHC	31.4gm/dl	31-36 gm/dl	Normal
RDW	24.0	11-14	Increased

Urine Report

Routine examination	Result
Colour	pale yellow
Clarity	clear
Specific gravity	1.030
PH	6.0
Proteins	Negative
Glucose	Negative
Bilirubin	Negative
Urobilirogen	Normal
Blood	Negative
Leucocytes	Negative
Nitrite	Positive
Ketone	Negative

Microscopy Examination	Result
PNS cells	1-2/HDF
Epithelial cells	2-3/HPF
Red blood cells	nil
Casts	nil
Crystals	nil

Endoscopic Report	
Esophagus	normal
Funds	normal
Body	big mass seen
Autrum	Normal
Pylorus	Normal

Duodenum	
First Part	Normal
Second part	Normal

Surgical pathology cancer case summary

Specimen

- Stomach
- Spleen
- Separately sent Gall bladder

Procedure D2 Gastrectomy

Specimen size 30x23x5 cm

Tumor site: Gastric body- posterior wall

Tumor size: Greatest dimension-8.5 cm

Additional dimension: 6x2 cm

Impression

Big mass in stomach.

Medications

FORM	DRUG	DOSE	FREQ.	ROUTE
Inj.	Tazact	4.5g	TDS	I/V
Inj.	Metrogyl	100 mg	TDS	I/V
Inj.	Amikacin	500 mg	OD	I/V
Inj.	Pantop	40 mg	BD	I/V
Inj.	PCM	1g	TDS	I/V
Inj.	Ca. Glucanate	1 amp	BD	I/V

Nursing Diagnosis

1. Anticipatory Grieving
2. Situational Low Self-Esteem
3. Acute Pain
4. Altered Nutrition: Less Than Body Requirements
5. Risk for Fluid Volume Deficit
6. Fatigue
7. Risk for Infection
8. Risk for Altered Oral Mucous Membranes
9. Risk for Impaired Skin Integrity
10. Risk for Constipation/Diarrhea
11. Risk for Altered Sexuality Patterns
12. Risk for Altered Family Process
13. Fear/Anxiety
14. Nursing Diagnosis for Gastric Cancer on priority daily need /problem

Preoperative

1. Acutepain related to the growth of cancer cells
2. Anxiety related to plan surgery
3. Imbalanced Nutrition Less Than Body Requirements related to nausea, vomiting and no appetite
4. Activity intolerance related to physical weakness.

Postoperative

1. Ineffective breathing pattern related to the influence of anesthesia.
2. Acute pain related to interruption of the body secondary to invasive procedures or surgical intervention.
3. Imbalanced Nutrition Less Than Body Requirements related to fasting status.
4. Risk for infection related to an increased susceptibility secondary to the procedure.

Anticipatory Grievingrelated to Anticipated loss of physiological well-being (e.g., loss of body part; change in body function); change in lifestyle *related* **to** anticipated loss of physiological well-being (e.g., loss of body part; change in body function); change in lifestyle, Perceived potential death of patient, Changes in eating habits, alterations in sleep patterns, activity levels, libido, and communication patterns, denial of potential loss, choked feelings, anger.

Nursing Interventions

- Expect initial shock and disbelief following diagnosis of cancer and traumatizing procedures (disfiguring surgery, colostomy, amputation).
- Provide open, nonjudgmental environment.
- Use therapeutic communication skills of Active-Listening, acknowledgment, and so on.
- Encourage verbalization of thoughts or concerns and accept expressions of sadness, anger, rejection. Acknowledge normality of these feelings.
- Be aware of mood swings, hostility, and other

acting-out behavior.

- Be aware of debilitating depression.
- Ask patient direct questions about state of mind.
- Visit frequently and provide physical contact as appropriate, or provide frequent phone support as appropriate for setting.
- Arrange for care provider and support person to stay with patient as needed.
- Review past life experiences, role changes, and coping skills.
- Talk about things that interest the patient.
- Be honest; do not give false hope while providing emotional support.
- Reinforce teaching regarding disease process and treatments and provide information as appropriate about dying.

Situational Low Self-Esteemrelated to, chemotherapy or radiotherapy side effects, e.g., loss of hair, nausea/vomiting, weight loss, anorexia, impotence, sterility, overwhelming fatigue, uncontrolled pain, fear and anxiety, verbalization of change in lifestyle; fear of rejection/reaction of others; negative feelings about body; feelings of helplessness, hopelessness, powerlessness.

Nursing Interventions

- Review anticipated side effects associated with a particular treatment, including possible effects on sexual activity and sense of attractiveness and desirability.
- Tell patient that not all side effects occur, and others may be minimized or controlled.
- Encourage discussion of concerns about effects of cancer and treatments on role as homemaker, wage earner, parent, and so forth.
- Acknowledge difficulties patient may be experiencing.
- Provide emotional support for patient.
- Use touch during interactions, if acceptable to patient, and maintain eye contact.

Expected Outcomes

- Verbalize understanding of body changes, acceptance of self in situation.
- Begin to develop coping mechanisms to deal effectively with problems.
- Demonstrate adaptation to changes/events that have occurred as evidenced by setting of realistic goals and active participation in work/play/ personal relationships as appropriate.

Acute Pain related to compression/destruction of nerve tissue, infiltration of nerves or their vascular supply, obstruction of a nerve pathway, inflammation, Side effects of various cancer therapy agents evidenced byReports of pain, guarding behaviors and restlessness.

Nursing Interventions

- Determine pain history (location of pain, frequency, duration, and intensity using numeric rating scale (0–10 scale), or verbal rating scale ("no pain" to "excruciating pain") and relief measures used.
- Determine timing or precipitants of "breakthrough" pain when using around-the-clock agents, whether oral, IV, or patch medications.
- Evaluate and be aware of painful effects of particular therapies .
- Provide non pharmacological comfort measures (massage, repositioning, backrub) and diversional activities.
- Encourage use of stress management skills or complementary therapies (relaxation techniques, visualization, guided imagery, biofeedback, laughter, music, aromatherapy, and therapeutic touch).
- Be aware of barriers to cancer pain management related to patient, as well as the healthcare system.
- Evaluate pain relief and control at regular intervals.
- Adjust medication regimen as necessary.
- Discuss use of additional alternative or complementary therapies (acupuncture and acupressure).
- Administer medications as prescribed and indicated.

Expected Outcomes

- Report maximal pain relief/control with minimal interference with ADLs.
- Follow prescribed pharmacological regimen.
- Demonstrate use of relaxation skills and diversional activities as indicated for individual situation.

Altered Nutrition: Less Than Body Requirements related to Hypermetabolic state associated with cancer, surgery, e.g., anorexia, gastric irritation, taste

distortions, nausea, Emotional distress, fatigue, poorly controlled pain. Evidenced by Reported inadequate food intake, altered taste sensation, loss of interest in food, perceived/actual inability to ingest food, Body weight 20% or more under ideal for height and frame, decreased subcutaneous fat/muscle mass Sore, inflamed buccal cavity, diarrhea and/or constipation, abdominal cramping.

Nursing Interventions

- Monitor daily food intake; have patient keep food diary as indicated.
- Measure height, weight, and tricep skinfold thickness.
- Weigh daily or as indicated.
- Assess skin and mucous membranes for pallor, delayed wound healing, enlarged parotid glands.
- Encourage patient to eat high-calorie, nutrient-rich diet, with adequate fluid intake.
- Encourage use of supplements and frequent or smaller meals spaced throughout the day.
- Encourage open communication regarding anorexia.
- Adjust diet before and immediately after treatment (clear, cool liquids, light or bland foods, candied ginger, dry crackers, toast, carbonated drinks).
- Control environmental factors (strong or noxious odors or noise).
- Avoid overly sweet, fatty, or spicy foods.
- Identify the patient who experiences anticipatory nausea and vomiting and take appropriate measures.
- Insert and maintain NG or feeding tube for enteric feedings, or central line for total parenteral nutrition (TPN) if indicated.

Expected Outcomes

- Demonstrate stable weight/progressive weight gain toward goal with normalization of laboratory values and be free of signs of malnutrition.
- Verbalize understanding of individual interferences to adequate intake.

Participate in specific interventions to stimulate appetite/increase dietary intake.

Post operative nursing management

Risk for Fluid Volume Deficit may include Excessive losses through normal routes (e.g., vomiting, diarrhea) and/or abnormal routes (e.g., indwelling tubes, wounds), Hypermetabolic state, Impaired intake of fluids

Nursing Interventions

- Monitor I & O and specific gravity; include all output sources, (emesis, diarrhea, draining wounds. Calculate 24-hr balance).
- Monitor vital signs. Evaluate peripheral pulses, capillary refill.
- Weigh as indicated.
- Encourage increased fluid intake to 3000 mL per day as individually appropriate or tolerated.
- Observe for bleeding tendencies (oozing from mucous membranes, puncture sites); presence of ecchymosis or petechiae.
- Minimize venipunctures (combine IV starts with blood draws).
- Encourage patient to consider central venous catheter placement.
- Avoid trauma and apply pressure to puncture sites.
- Avoid trauma and apply pressure to puncture sites.
- Provide IV fluids as indicated.
- Monitor laboratory studies (CBC, electrolytes, serum albumin).

Expected Outcomes

- Display adequate fluid balance as evidenced by stable vital signs, moist mucous membranes, good skin turgor, prompt capillary refill, and individually adequate urinary output.

Anxiety May be related to Situational crisis, Threat to/change in health/socioeconomic status, role functioning, interaction patterns, threat of death *evidenced by* Increased tension, shakiness, apprehension, restlessness, insomnia, expressed concerns regarding changes in life events, feelings of helplessness, hopelessness, inadequacy

Expected Outcomes

Outcomes

- Display appropriate range of feelings and lessened fear.
- Appear relaxed and report anxiety is reduced to a manageable level.

- Demonstrate use of effective coping mechanisms and active participation in treatment regimen.

Nursing Interventions

- Determine what the doctor has told patient and what conclusion patient has reached.
- Encourage patient to share thoughts and feelings.
- Maintain frequent contact with patient.
- Talk with and touch patient as appropriate.
- Be aware of effects of isolation on patient when required by immunosuppression or radiation implant.
- Limit use of isolation clothing and masks as possible.
- Avoid arguing about patient's perceptions of situation.
- Permit expressions of anger, fear, despair without confrontation.
- Help patient prepare for treatments.
- Provide primary and consistent caregivers whenever possible.
- Promote calm, quiet environment.

Conclusion

Nursre who are providing Nursing care 24 hours understands the holistic approach and implement all the aspects while delivering care to the patient. This makes the patient very comfortable and co-operate them to accept all the care providing to him/her.

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Interventional Cardiology

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Anjail Sancha

Abstract

Interventional cardiology is a branch of medical specialty of cardiology that deals specifically with the catheter based treatment of structural heart disease. Various procedures named: angioplasty, ELANA, MIDCAB, TECAB etc has evolved, which involves the extraction of clots from occluded coronary arteries, deployment of stents and balloons through a small hole made into major artery, leaving no scars, leading to increased life span of people suffering from cardiovascular problems.

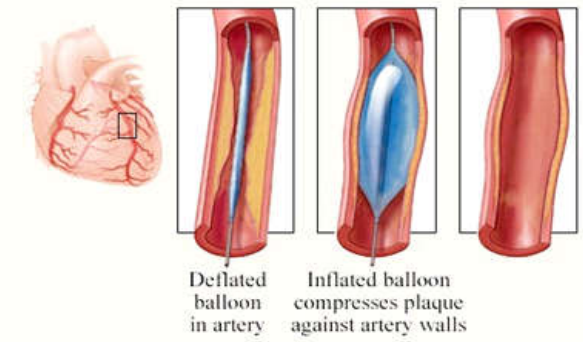
Keywords: Cardiology ; Interventional Cardiology; Angioplasty.

Introduction

Advancement in science and imaging technology has given rise to variant modalities of treatment. Among these, interventional cardiology is one of them.

Interventional Cardiology is also one of the branches in cardiology which mainly deals with the catheter based treatment of structural cardiac diseases.

The main advantages of using this innovation are the avoidance of the scars, pain, and long postoperative hospitalization & recovery associated with surgery.



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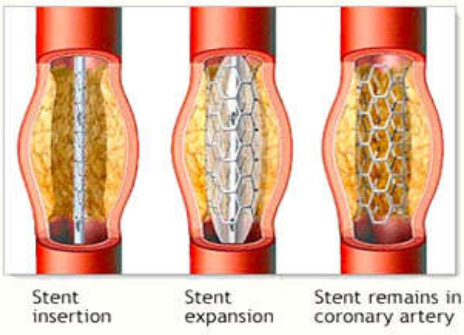
For Coronary Heart Disease

Coronary artery disease is mainly caused by hypertension, diabetes, sedentary lifestyle, smoking, high cholesterol levels, diets rich in fats, and other cardiovascular disease which lead to blockage of the arteries.

- *Angioplasty*

It is a technique used to dilate an area of arterial blockage with the help of a catheter, which is introduced through the skin of the groin or arm. Percutaneous Transluminal Coronary Angioplasty (PTCA) is among one of them.



- *Vascular bypass*

There are various types of bypass surgeries, like femoral popliteal bypass surgery and cerebral artery bypass surgery.

Excimer Laser Assisted Nonocclusive Anastomosis (Elana)

Excimer laser assisted nonocclusive anastomosis

(ELANA) is a new technique in vascular surgery and neurosurgery in which bypass is created without interrupting blood flow in the recipient blood vessels. Therefore, chances of stroke or rupture of an aneurysm are less.

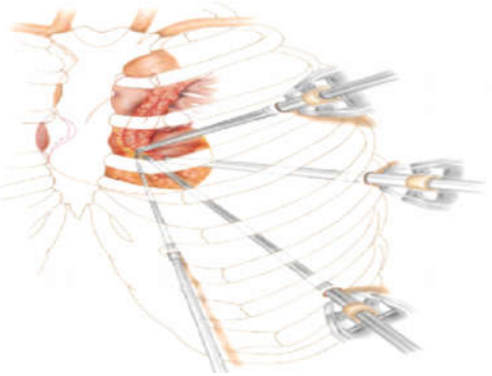
Minimally Invasive Direct Coronary Artery Bypass (Midcab)

Another name of for MIDCAB is "keyhole" surgery because it involves operation through a keyhole. It is a form of off-pump coronary artery bypass surgery (OPCAB).

"Off-pump" indicates that the heart-lung machine is not used. MIDCAB differs from OPCAB in the type of incision used for the surgery, i.e. in MIDCAB, mini-thoracotomy is done whereas median sternotomy is done for CABG & OPCAB.

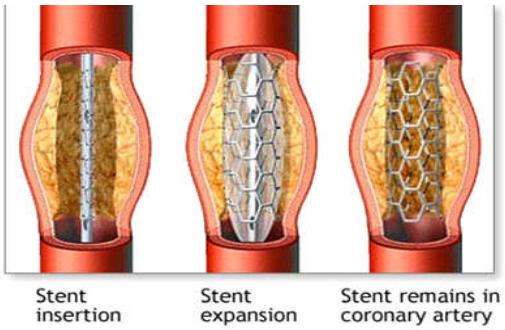
Totally Endoscopic Coronary Artery Bypass Surgery (TECAB)

TECAB is an absolute endoscopic robotic surgery used to treat CAD. It is an advanced form of MIDCAB.

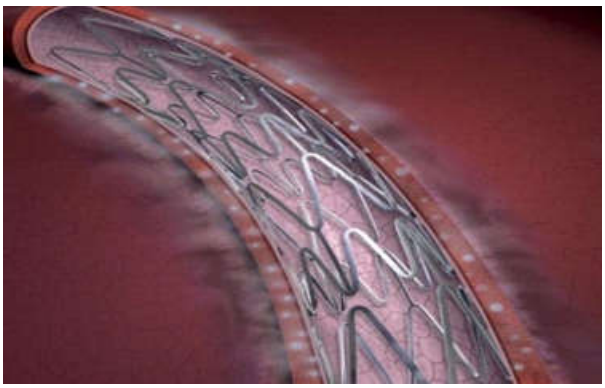


Coronary Stent & Drug- Eluting Stents

These were designed to overcome, some of the shortcomings of the angioplasty. These are made up of stainless tube having slots. It is kept in collapsed state over a balloon- catheter and when balloon gets inflated, stent expands and pushes itself against the inner wall of the coronary artery.



Drug -eluting stent slowly releases a drug and it has been found that there are reduce incidence of reoccurrence of plaque or blockage. Sirolimus is the drug which gets released from the stent and is cytostatic in nature.



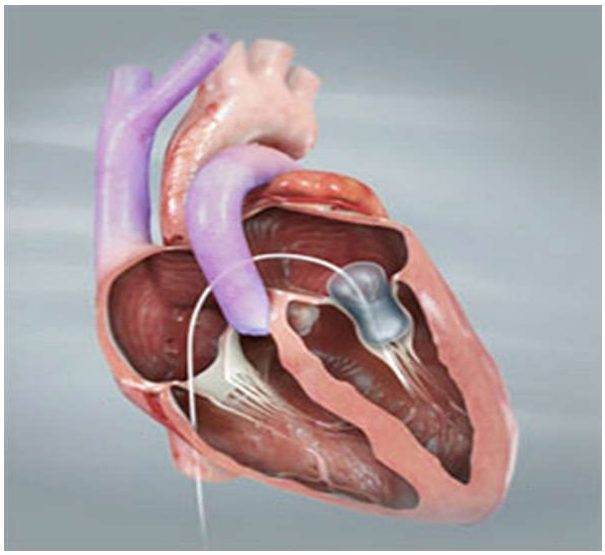
For Valvular Heart Disease

Valvular heart diseases may be congenital or acquired. Treatment modalities may include medication along with valve repair or replacement.

Heart Valve Repair

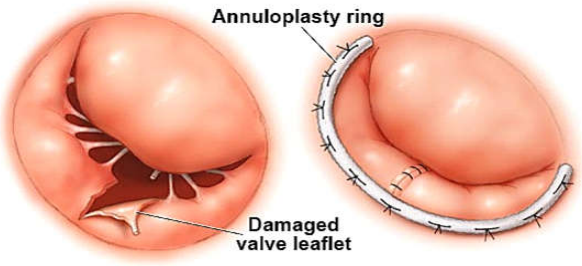
Heart valve repair includes Valvuloplasty, Valvulotomy, Mitral valve repair, Aortic valve repair, Tricuspid valve repair.

- *Valvuloplasty* is the widening of a stenotic valve using a balloon catheter. It can be aortic valvuloplasty or mitral valvuloplasty.



- *Valvulotomy* is also called as commissurotomy of cardiac valves. This surgery consists of making one or more incision at the edges of the commissure formed.
- *Mitral valve repair* is mainly used to treat stenosis

or regurgitation of the mitral valve. Repair includes annuloplasty, quadrangular resection, and Gore -Tex cord.



- *Aortic valve repair* is used to correct some aortic valve disorder but is less performed and technically more difficult than mitral valve repair. Aortic valve repair involves 2 surgical technique:
- The Reimplantation-Technique (David-Procedure)
- The Remodeling-Technique (Yacoub-Procedure)
- *Tricuspid valve repair* is used to correct tricuspid regurgitation.

Heart Valve Replacement

Valve replacement is other treatment modalities in which replacement of one or more heart valves is done either by an artificial valve or bioprosthesis (homograft or xenograft).

It includes following procedures:

- Aortic valve replacement
- Mitral valve replacement
- Tricuspid valve replacement
- Pulmonary valve replacement

Types of Heart Valves

There are two basic types of an artificial heart valve: mechanical valves and tissue valves.

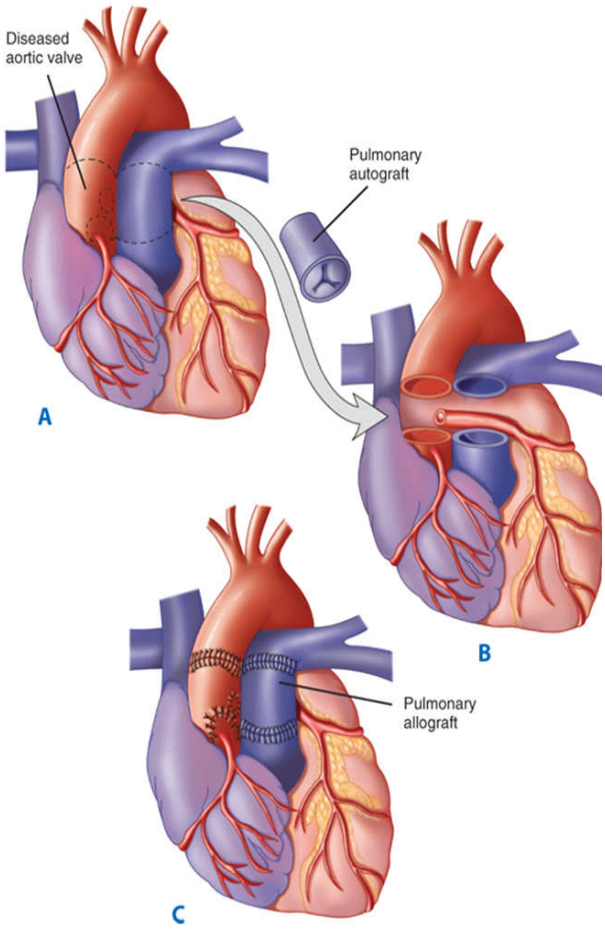
Mechanical Valves

These are long lasting & generally one surgery is required but there is an increased risk for blood clot formation. Therefore, the recipient of mechanical valve must take an anticoagulant for the lifetime, which makes the patient more prone to bleeding.

Tissue Valves

Tissue heart valves are usually made from animal tissues. Homograft is also used.

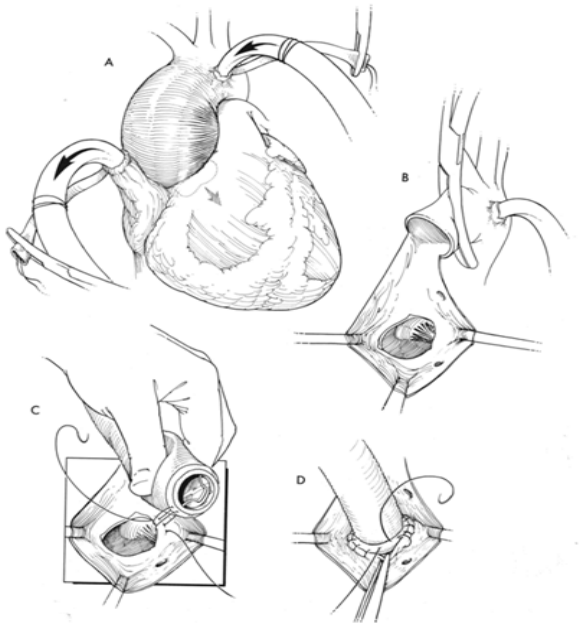
Ross procedure is also called as pulmonary autograft where a diseased aortic valve is replaced with the person's own pulmonary valve.a pulmonary homograft (valve from a cadaver) is then used to replace the patient own pulmonary valve.



For Great Vessels

- *Bentall Procedure*

It is used to treat combined aortic valve and ascending aorta disease including lesion associated with Marfan Syndrome.

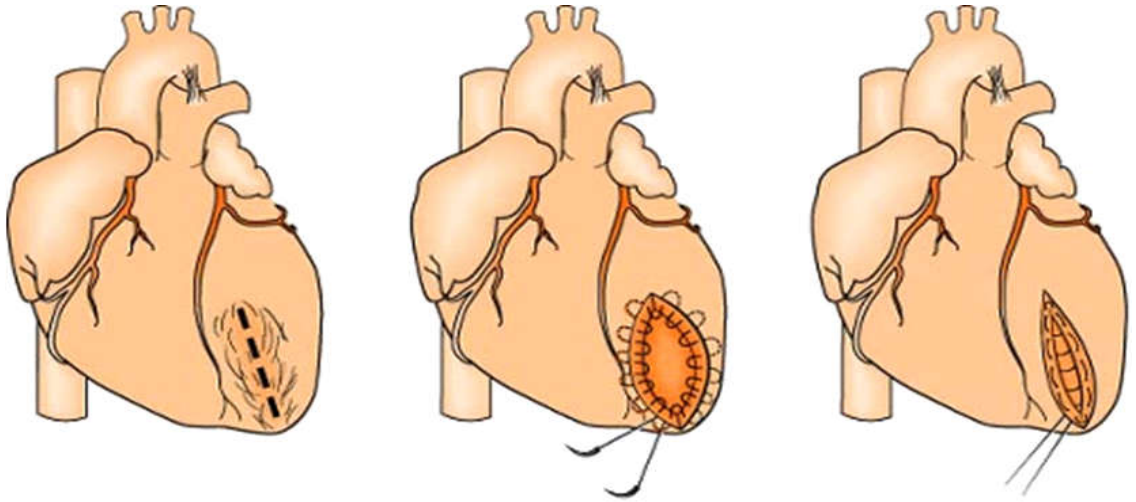


- *Pulmonary thromboendarterectomy(PTE)*

PTE involves removal of the blood clot (thrombus) from the pulmonary arteries. It is usually done for the treatment of the thrombolytic pulmonary hypertension.

For Myocardium

1. Cardiomyoplasty: It is a surgical procedure in which healthy muscle from another part of the body is wrapped around the heart to provide support. Latissimus dorsi muscle is the most often used and a special pacemaker is implanted to make the skeletal muscle contract.
2. Dor procedure: the another name of Dor procedure is endoventricular circular patch plasty (EVCPP), which is used to restore a dilated left ventricle to its normal, elliptical geometry. A circular suture and a Dacron patch is used to LV aneurysm & exclude scarred parts of the septum and ventricular wall.



3. Ventricular reduction: Ventricular reduction is a type of surgery is done to reduce enlargement of the heart from cardiomyopathy or ischemic aneurysm formation.
4. Septal myectomy: It is a cardiac surgery used in the treatment of hypertrophic cardiomyopathy (HCM). The surgery involves removing a portion of the septum that is blocking the blood flow from the left ventricle to aorta.
5. Alcohol septal ablation: This is a percutaneous, minimally-invasive treatment done to relieve symptoms and improve functional status in severely symptomatic patient with hypertrophic cardiomyopathy (HCM), who meets strict clinical anatomic and physiologic selection criteria. This technique creates a small controlled heart attack, killing the area of heart muscle responsible for the obstruction, and eventually causing it to become less thick.

Conclusion

In today's era, interventional cardiology has proved itself to be a boon for the patient suffering from cardiac disorders. It results in increasing the life span of people as well as they have better prognosis. There is an increase in the incidences of

cardiac disorders for the past few decades, which is mainly due to the change in lifestyle. By the advancement of imaging technology, diagnosis and treatment of the cardiac disorders has been made easier and accessible with reduced risk.

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De Quervain Syndrome: Conservative Care

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Thamarai Selvi P.

Abstract

It is also known as Black Berry thumb, texting thumb, gamer's thumb, washer woman's sprain, radial styloid tenosynovitis, de Quervain disease, de Quervain's tenosynovitis, de Quervain's stenosing tenosynovitis, mother's wrist, or mommy thumb), is atenosynovitis of the sheath or tunnel that surrounds two tendons that control movement of the thumb. In de Quervain syndrome, the tunnel where the tendons run narrows due to the thickening of the soft tissues that make up the tunnel. Hand and thumb motion cause pain, especially with forceful grasping or twisting. Womens are affected more often than men. The cause of de Quervain's disease is not established. Occupational risk factors are debated. Repetitive hand or wrist movements can make the condition worse. Treatment is generally successful when begun early .

Keywords: De Quervain Syndrome; Thumb.

Definition

De Quervain's disease is a painful inflammation of tendons in the thumb that extend to the wrist (tenosynovitis). The swollen tendons and their coverings rub against the narrow tunnel through which they pass. The result is pain at the base of the thumb and extending into the lower arm [1,2].

Incidence

Women's are affected more often than men. The syndrome commonly occurs during and after pregnancy. More than 1 million cases per year (India).

Causes

- The cause of de Quervain's disease is not established.
- Evidence regarding a possible relation with: Occupational risk factors are debated.
- Personal and work-related factors
- Wrist bending and movements associated with the twisting or driving of screws were the most significant of the work-related factors.
- Where the thumb is held in abduction and extension
- Workers who perform rapid repetitive activities involving pinching, grasping, pulling or pushing have been considered at increased risk.
- Specific activities that have been postulated as potential risk factors include intensive mouse/trackball use and typing, as well as some pastimes, including bowling, golf and fly-fishing, piano-playing, and sewing and knitting.
- Contributory factors may include hormonal changes, fluid retention and—more debatably—lifting.

Pathophysiology

De Quervain syndrome involves non inflammatory thickening of the tendons and the synovial sheaths that the tendons run through. The two tendons concerned are those of the extensor pollicis brevis and abductor pollicis longus muscles. These two muscles run side by side and function to bring the thumb away from the hand; the extensor

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pollicis brevis brings the thumb outwards radially, and the abductor pollicis longus brings the thumb forward away from the palm. De Quervain tendinopathy affects the tendons of these muscles as they pass from the forearm into the hand via a fibro-osseous tunnel (the first dorsal compartment). Evaluation of histopathological specimens shows a thickening and myxoid degeneration consistent with a chronic degenerative process, as opposed to inflammation.

Signs & Symptoms

- Pain at the radial side of the wrist.
- Pain is made worse by movement of the thumb and wrist, and may radiate to the thumb or the forearm.
- Spasms
- Tenderness
- Occasional burning sensation in the hand.
- Swelling over the thumb side of the wrist.
- Difficulty in gripping with the affected side of the hand.
- The onset is often gradual.

Diagnosis

- Therapist will perform a physical exam that will include feeling for tender spots, measuring the flexibility and range of motion of the thumb and wrist, and testing the strength of the thumb muscles and grip.
- Physical therapist will also perform a Finkelstein test: In this therapist Curl the fingers over patients thumb (make a fist with your thumb inside your fingers) and bend wrist towards little finger. If this causes pain at the wrist below thumb, patient may have De Quervain's tenosynovitis [5].

Treatment: Medical Treatment

- Palliative treatments include a splint that immobilized the wrist and the thumb joint.
- Ultrasound therapy may be applied to improve pain. This treatment uses ultrasonic sound waves applied over the involved area to improve circulation, reduce swelling, and aide healing of the tissues and tendons.
- Iontophoresis is another option to reduce swelling and pain. Iontophoresis is a type of electrical stimulation that is used to administer medication to the problem area through your skin.
- Ice or heat may be recommended for short term pain relief. Your therapist will advise you for what is best for your condition.
- Anti-inflammatory medication or acetaminophen.
- Injection of corticosteroid into the sheath of the first dorsal compartment reduces tendon thickening and inflammation. A dose of 0.5 ml of 1% plain lidocaine and 0.5 ml of a long-acting corticosteroid preparation can be injected either sequentially or simultaneously.
- Physical/Occupational therapy can suggest activities to avoid based on the theory that certain activities might exacerbate one's condition, as well as instruct on strengthening exercises based on the theory that this will contribute to better form and use of other muscle groups, which might limit irritation of the tendons.
- Some physical and occupational therapists use other treatments based on the rationale that they reduce inflammation and pain and promote healing, such as deep heat treatments, as well as TENS, dry needling, or infrared light therapy, and cold laser treatments.

Surgical Therapy

- If injection therapy fails, surgical release of the first dorsal compartment to relieve pain.
- Surgical release of de Quervain tenosynovitis is an outpatient procedure. The operation can be performed under local or regional anesthesia, depending on surgeon preference. Use of a tourniquet precludes intra operative bleeding and facilitates the identification of structures [1,2].

Operative Details

A 3-cm incision is placed over the prominent thickening of the first dorsal compartment. A transverse skin incision is preferred because it provides better appearance of the scar in this highly visible area. Once the skin is incised, only longitudinal, blunt dissection is used until the first dorsal compartment is exposed. This minimizes the risk of sharp injury to the superficial radial nerve, which runs superficial to the first dorsal compartment. Along its dorsal margin, the first dorsal compartment is sharply opened longitudinally for

approximately 2 cm.

The tendon(s) are inspected to ensure that the abductor pollicis longus and the extensor pollicis brevis are released. If present, a septum separating the two motor units can be deceiving. Gently moving the patient's thumb distinguishes one tendon from the other. If a tendon glides with metacarpo-phalangeal (MCP) joint motion, it belongs to the extensor pollicis brevis. If a septum between the abductor pollicis longus and the extensor pollicis brevis is identified, it also is released.

Surgeons have personal preferences regarding the management of the sheath. Some excise a portion and others make a step-cut and then suture a strip of sheath back loosely over the exposed tendons. The author obtains good results without sheath excision or reconstruction by releasing just the thickened portion of the first dorsal compartment and leaving in place the transparent fascia overlying the tendons proximal and distal to the first dorsal compartment.

The skin is sutured. Patients generally appreciate the diminished disfigurement from the placement of a subcuticular skin closure. A soft, dry, circumferential wrist dressing is placed for a week. The suture is removed approximately 10 days after surgery. Thereafter, patients may rapidly resume full activities. Some surgical-site tenderness is expected for several months [3].

Conclusion

De Quervain's disease is a painful inflammation of tendons in the thumb that extend to the wrist (tenosynovitis). Women's are affected more often than men. As a woman, your health concerns are as unique as your body. How you take care of yourself has a huge impact on your future, affecting everything from your ability to have children to your risk of heart disease. There's no substitute for good health, and when it's gone, it's often gone for good. Prevention is always better than cure. Treatment is generally successful when begun early.

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