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Contents

Corona Virus

Corona Virus (Covid-19) has spread from Vohan city of China to about all over world, with 2900 plus death in China and hundred plus deaths in other parts of the world especially in Italy and Iran. In China alone more than 80,000 positive cases have been reported. USA has spent more than 120 crore money for research of the vaccine which is yet to come. Screening is in progress at airports in India and other parts of the World. Delhi has around 29 cases found so far but no casualty. Around 14 Italian tourists have been shifted to Medanta, Gurugram, India in isolation ward. Children below 9 years or so almost are rare to get infection. Mostly 80 plus years patients with some other chronic disease suffer from fatality (1.5% death rate). 30 plus to 60 plus patients are likely to recover. 5% cases are on Ventilator. It is an enveloped virus with not more than 48 hours or so to live. 7 types of virus, 4 being wild are recognized. Spread occurs by coughing/sneezing of droplets and by contact e.g. hand shaking. So, distance more than 1 meter or so and constant washing of hands with soap 60% plus alcohol or some other hand wash for more than 20 to 40 seconds kills the virus. Females are less likely to be infected, may be due to estrogen hormone or one X protective chromosome among two XX chromosome. Bats in China are reservoir of infection. In china one possibility of spread of infection may be due to eating of live animal's e.g snakes etc. Eating cooked meat has no risk. Normal mask is good enough for patients and attendants but not must for other people. More of psychological stress especially in eighty plus years of cases is cause of casualties. Continuous health practices like yoga etc and use of garlic maintains the immunity but they are not good for immediate help for the patients. Avoid close contact and crowded places, use of handkerchief or tissue paper while coughing and sneezing, contact of hand with eyes, nose and mouth is to be avoided. Repeated hand wash with disinfectant is good enough. No need to Panic with closing of Schools etc. So, *Say Namaste and Do Not Shake Hands For The Time Being.*

—Dr. (Prof) R.K Bhatnagar
Pathology

Original Article

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Knowledge and Practice Regarding Household Waste Management among Women in Selected Rural Area at Puducherry

Anupriya R[1], Divyasree P[2], Kumari Puja[3], Tamilselvi N[4], Gomathi A[5]

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Author's Affiliations: [1,2,3,4]M.Sc. Nursing, College of Nursing, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Gorimedu, Dhanvantari Nagar, Puducherry 605013, India. [5]Associate Professor Faculty, College of Nursing, All India Institute of Medical Sciences (AIIMS), Basni, Jodhpur, Rajasthan 342005, India.

Corresponding Author: Gomathi A, Associate Professor, College of Nursing, All India Institute of Medical Sciences (AIIMS), Basni, Jodhpur, Rajasthan 342005, India.

E-mail: arumugamg@aiimsjodhpur.edu.in

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Abstract

Introduction: Waste is generated as consequences of household activities such as the cleaning, cooking, repairing empty containers, packaging, huge use of plastic carry bags. Many times these waste gets mixed with biomedical waste from hospitals and clinics. The improper management and lack of disposal technique of the domestic waste pollutes to the environment. *Aims and objectives:* To assess the level of knowledge and practice of household waste management among rural women, and to identify the association between level of knowledge with selected socio demographic variables of rural women. *Materials and methods:* Cross sectional descriptive study was conducted among women (210) residing in the village Ramanathapuram, Pondicherry in the age group of 18–55 years. *Results:* The knowledge level of the rural women regarding disposal of waste was inadequate as mean score was less than 50% of the total score (13). The practice of waste disposal was inappropriate. *Conclusion:* The study concluded that the most of the women residing in the rural area were having inadequate knowledge, practice was inappropriate at most of the situation.

Keywords: Knowledge; Practice; Household waste management.

Introduction

Women residing in the rural area must have basic knowledge on segregation and disposal of household waste and the health professionals need to have awareness onhousehold waste management of waste disposal.[1] Domestic waste management problem is drawing attention of the people as huge garbage is lying down uncollected beside the roads, streets dustbins and on the ground which is causing threat to the environment as well as endangering public health and this deteriorates the environment.[2] Uncollected waste and improper disposal techniques get clogged in to drains which lead to mosquitoes by which various diseases like malaria, chikungunya, viral fever, dengue etc. arise and affect the health of people adversely.[3] Poor domestic waste management also displays an ugly scenario of the environment. This can affect the tourism industry, as the tourist may not get attracted to visit the country.[4] It is estimated by TERI that in 1997 India released about 7 million tons of methane into the atmosphere. This could increase to 39 million tons by 2047 if no efforts are made to reduce the emission through composting, recycling, etc.[3] A Global Review of Solid Waste Management,

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estimated that cities currently generate roughly 1.3 billion tone of solid waste per year, due to current urbanization trends, this figure will grow to 2.2 billion tons per year by 2025 i.e an increase of 70 percent.[5] In developing countries, 20–50% of recurring budgets of municipalities is often spent on solid waste management, although only 50% of urban population is covered by those services. In low income countries, collection alone drains 80–90% of total waste management budgets.[6] Swachh Bharat Mission or Swach Bharat Abhiyan campaign was launched on 2nd of October (the birthday of the Mahatma Gandhi) in seeking the way to create a Clean India target by 2019, to complete the vision of the father of the nation.[7]

The accomplishment of this vision is impossible without cooperation of the public and most of the public still not aware about the proper household waste disposal methods. So this study was undertaken to assess the level of knowledge and practice of household waste management among rural women, and to identify the association between level of knowledge with selected socio demographic variables.

Materials and Methods

Cross-sectional descriptive study approach was conducted among the women (210) residing in the village Ramanathapuram, Pondicherry in the age group of 18–55 years to assess the level of knowledge on house hold waste management and the practice regarding waste disposal. Women who were mentally disabled, bedridden and with severe systematic diseases were excluded. After obtaining informed consent, the semi structured questionnaire was used to collect the socio demographic variables and structured knowledge questionnaire which contains 28 items were used to collect knowledge related information. <50% indicated inadequate knowledge, 50–75% indicated moderate knowledge and >75% indicated adequate knowledge. structured check list was used to assess the practices regarding household waste management. House to house survey was done to collect the data for 3 days. Mean and SD was calculated for knowledge questioner and frequency distribution was assessed for the method of waste disposal practices.

Results

Table 1 represents the distribution of level of knowledge of women residing at rural area on household waste management, 206 women were having inadequate knowledge (98%), 4 women were having moderate knowledge (2%). The knowledge level of the rural women regarding disposal of waste was inadequate as mean score was less than 50% of the total score (13).

Table 1: Frequency distribution of level of knowledge among women residing in the rural area

N = 210

Level of knowledge	Frequency (no)	Percentage (%)	Mean	SD
Inadequate (<50%)	206	98	13	2.3
Moderate (50–75%)	4	2		
Adequate (>75%)	–	–		

The Table 2 represents that the most of the women 184 (87.4%), were preferred dustbin method, 189 (90%) were removing the waste one-day interval, 169 (80.5%) were expressed that waste contain veg matter and 165 (78.6%) were having the practice of throwing thewaste at the backyard.

The Table 3 shows there was a significant association between the income and the level of knowledge on household waste management.

Table 2: Frequency distribution of practice among women residing in the rural area

N = 210

Level of practice		Frequency (no)	Percentage (%)
How much quantity of waste segregated in your house per day?	<1 kg	201	95.7
	1–2 kg	9	4.3
How often do you dispose the waste?	Once a day	189	90.0
	Twice a day	17	8.1
	Once in 2 days	4	1.9

(Contd.)

Level of practice		Frequency (no)	Percentage (%)
Method used to dispose	Dumping at Govt dustbin	184	87.6
	Burning	9	4.3
	Burying	10	4.8
	Throwing	7	3.3
What is the distance to go for disposing the waste?	<500 m	163	77.6
	>500 m	47	22.4
How often panchayat remove the waste?	Once in 2 weeks	4	1.9
	Once a month	192	91.4
	Never	14	6.7
Who removes waste from your location?	Gram panchayat	12	5.7
	Municipality	198	94.3
Do you segregate the waste?	No	210	100.0
Do you have the practice of Composting?	Yes	202	96.2
	No	8	3.8
How do you store the waste?	Closed container	58	27.6
	Open container	91	43.3
	Polythene bags	60	28.6
	Pile in the yard	1	0.5
Which is common waste of your disposal.	Veg matter	169	80.5
	Plastic waste	20	9.5
	Papers	21	10.0
Whether do you have reusable items in your waste?	Yes	205	97.6
	No	5	2.4
Who takes wastes to common dustbin?	Father	24	11.4
	Mother	22	10.5
	Children	15	7.1
	All by turn	149	71
Where do you throw your household waste?	Backyard	165	78.6
	Municipality area	40	19.0
	Outside	5	2.4
Reason for throwing out side ?	No dumping area	157	74.8
	Far dumping area	53	25.2
Do you get Government help for disposal?	No	205	97.6
	No idea	5	2.4

Discussion

The focus of the study was to assess the level of knowledge and practice of household waste management among women residing in the selected rural area at Puducherry. The result revealed that among 210 subjects 206 (98%) women were having inadequate knowledge, 4 (2%) women were having moderate knowledge, most of the women 184 (87.4%)were preferred dustbin method, 189 (90%) were removing the waste once a day at one-day interval, 169 (80.5%) were expressed that most of the waste contain veg matter and 165 (78.6%) were having the practice of throwing of the household waste at the backyard. There was a significant association between the income and the level of knowledge on household waste management ($p < .005$). the mean knowledge score was 13 ± 2.3. The findings were supported by (Ehrampoush MH) shows that 66% of men having good Knowledge, comparatively 51.4% females had low Knowledge. The difference between the knowledge of males and females was significant ($p < 0.016$), 72.1% believed that the segregation at home was best method and 9.6% deemed that the segregation must be done in the place of disposal and 66% not done any action in segregating and recycling of solid waste.[8] Haider A et al conducted a study on knowledge, perception, Attitude of common people towards solid waste management in Pakistan revealed that solid waste management practices have been improved, but still unsatisfactory. Source separation and recycling were hardly practiced and people occasionally sweep their places when throwing the wastes in the streets and 78.5% people were willing to pay for recycling.[9]

Conclusion

The study concluded that the most of the women residing in the rural area were having inadequate knowledge regarding household waste management and among rural women half of the waste disposal practices was upto the expectation and half of the practices was inappropriate due to lack of facilities provided by the government, lack reinforcement for proper disposal of waste and also lack awareness. So, health education and community awareness programs can improve their knowledge as well as practices.

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Original Article

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Knowledge on Prevention and Management of Anaemia among Adolescent Girls

D Anitha[1], T Nanthini[2]

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Author's Affiliations: [1]M.Sc. Nursing, [2]Associate Professor, Department of Community, Health Nursing, College of Nursing, Mother Theresa Post Graduate & Research Institute of Health Sciences, Gorimedu, Puducherry 605006, India.

Corresponding Author: T Nanthini, Associate Professor, Department of Community, Health Nursing, College of Nursing, Mother Theresa Post Graduate & Research Institute of Health Sciences, Gorimedu, Puducherry 605006, India.

E-mail: nandhini_lect@yahoo.co.in

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Abstract

Anaemia is a condition in which the number of red blood cells and consequently their oxygen-carrying capacity is insufficient to meet all the body's physiologic needs which are vary with a person's age, gender, altitude, smoking and different stages of pregnancy. Iron deficiency is thought to be the most common cause of anaemia globally, but some other nutritional deficiencies (including folate, vitamin B12 and vitamin A), acute and chronic inflammation, parasitic infections, and inherited or acquired disorders can cause anaemia. *Methodology:* Quantitative non-experimental Descriptive research design was used. The targeted population is adolescent girls age group (12–19 years). 60 subjects were collected using convenient sampling technique. The tool used to collect data is structured questionnaire prepared by the researcher. *Result:* Out of 60 subjects, majority of them 53.3% has average knowledge on prevention and management of anaemia, 36.7% of them had good knowledge and 10% of them had poor knowledge. There was statistically significant association between the level of knowledge with selected demographic variables as age at $p > 0.05$ level. *Conclusion:* Therefore the findings of the study revealed that knowledge regarding prevention of anaemia among adolescent girls were at average level. It revealed that the role of community health nurse plays vital role in promoting the level of knowledge on prevention and management of anemia among adolescent girls to rule out anemia.

Keywords: Anaemia; Pregnancy; Adolescent.

Introduction

Iron deficiency is thought to be the most common cause of anaemia globally, but some other nutritional deficiencies (including folate, vitamin B12 and vitamin A), acute and chronic inflammation, parasitic infections, and inherited or acquired disorderscan cause anaemia.[1] Blood is comprised of two parts: A liquid called the plasma and a cellular part. The cellular part contains several different cell types. One of the most important and the most numerous cell types are red blood cells.[3] The other cell types are the white blood cells and platelets. Only red blood cells are discussed in this article. The purpose of the red blood cell is to deliver oxygen from the lungs to other parts of the body. Red blood cells are

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produced through a series of complex and specific steps.[2] They are made in the bone marrow (inner part of the femur and pelvic bones that make most of the cells in the blood), and when all the proper steps in their maturation are complete, they are released into the blood stream.[1]

Statement of The Problem

A study to assess the level of knowledge on prevention and management of anaemia among adolescent (12–19 years) girls in selected area Puducherry.

Objectives

- To assess the level of knowledge on prevention and management of anaemia among adolescent girls.
- To associate the level of knowledge on anaemia among adolescent girls with selected demographic variable.

Materials and Methods

Quantitative non-experimental Descriptive research design was used. The targeted population is adolescent girls age group (12–19). Sixty subjects were collected using convenient sampling technique. The tool used to collect data is structured questionnaire prepared by the researcher.

Results

Table 1,2 showed the association between the level of knowledge with selected demographic variables. There was statistically significant association between the level of knowledge with selected demographic variables as age at $p > 0.05$ level.

Table 1: Frequency and percentage distribution of the level of knowledge regarding anaemia among adolescent girls

N = 60

Level of knowledge	Frequency (*n*)	Percentage (%)
Good knowledge	22	36.7
Average knowledge	32	53.3
Poor knowledge	6	10.0

Table 2: Association of level of knowledge regarding anaemia among adolescent girls with selected demographic variables

N = 60

Demographic variables	Good knowledge		Average knowledge		Poor knowledge		Chi-square value
	N	%	N	%	N	%	
Age							
10–12 years	1	1.66	2	3.33	5	8.33	13.029 df =6 $p = 0.043$* S
13–15 years	1	1.66	10	16.66	10	16.66	
16–18 years	1	1.66	16	26.66	5	8.33	
19 years	3	5	4	6.66	2	3.33	
Education							
5^{th}–6^{th}	0	0	1	1.66	2	3.33	7.706 df = 6 $p = 0.260$ NS
7^{th}–8^{th}	1	1.66	4	6.66	6	10	
9^{th}–10^{th}	0	0	9	15	7	11.66	
11^{th}–12^{th}	5	8.33	18	30	7	11.66	
Income							
Below 10000	2	3.33	9	15	9	15	2.326 df = 6 $p = 0.887$ NS
11000–15000	2	3.33	17	28.33	10	16.66	
16000–20000	1	1.66	3	5	2	3.33	
Above 21000	1	1.66	3	5	1	1.66	
Family type							
Nuclear family	4	6.66	25	41.66	11	18.33	4.641 df = 2 $p = 0.098$ NS
Joint family	2	3.33	7	11.66	11	18.33	

(Contd.)

Demographic variables	Good knowledge		Average knowledge		Poor knowledge		Chi-square value
	N	%	N	%	N	%	
Number of family members							
2–3 members	0	0	6	10	6	10	10.063 df = 6 p = 0.122 NS
4–5 members	4	6.66	23	38.33	12	20	
5–6 members	2	3.33	2	3.33	1	1.66	
More than 6 members	0	0	1	1.66	3	5	
Diet							0.733 df=2 p = 0.693 NS
Vegetarian	1	1.66	11	18.33	7	6.66	
Non-vegetarian	5	8.33	21	35	15	25	
Age of menarche							1.861 df = 4 p = 0.761 NS
9–11 years	0	0	2	3.33	3	5	
12–14 years	4	6.66	24	40	17	28.33	
15–17 years	1	1.66	5	8.33	2	3.33	
Menstrual pattern							5.455 df = 4 p = 0.244 NS
Not attained menarche	1	1.66	2	3.33	0	0	
Regular	5	8.33	20	33.33	17	28.33	
Irregular	0	0	10	16.66	5	8.33	
Deworming status							0.171 df = 2 p = 0.918 NS
Yes	4	6.66	19	31.66	14	23.33	
No	2	3.33	13	21.66	8	13.33	
Intake of iron tablets							2.718 df = 2 p = 0.257 NS
Yes	4	6.66	23	38.33	11	18.33	

Discussion

Out of 60 subjects, majority of them 53.3% has average knowledge on prevention and management of anaemia, 36.7% of them had good knowledge and 10% of them had poor knowledge. There was statistically significant association between the level of knowledge with selected demographic variables as age at $p > 0.05$ level.

Conclusion

Therefore the findings of the study revealed that knowledge regarding prevention of anaemia among adolescent girls were at average level. It revealed that the role of community health nurse plays vital role in promoting the level of knowledge on prevention and management of anemia among adolescent girls to rule out anemia.

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I, **Dinesh Kumar Kashyap**, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Sd/-

(Dinesh Kumar Kashyap)

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Knowledge of Swine Flu by Anganwadi Workers: An Overview

Nelson Jewas[1], Punam Pandey[2]

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Author's Affiliations: [1]PhD Scholar, College of Nursing, Himalayan University, Tinali, Itanagar, Arunachal Pradesh 791111, India. [2]Assistant Professor, College of Nursing, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh 221005, India.

Corresponding Author: Punam Pandey, Assistant Professor, College of Nursing, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh 221005, India.

E-mail: punampandey38@gmail.com

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Abstract

Context: Swine flu is an emerging disease in India and it is a major and high risk Viral Infection, whose preventive measures is needed to prevent spread of this infection. Moreover anganwadi workers should gain knowledge and should spread information about causative organism, its sign and symptoms and its prevention. *Aims:* (1) To assess existing knowledge of prevention & control of Swine Flu among Anganwadi workers in selected Anganwadi centers in Bhopal. (2) To evaluate the effectiveness of Structured Teaching Program on knowledge regarding prevention and control of Swine Flu among Anganwadi workers in selected Anganwadi centers in Bhopal. *Settings and Design:* structured teaching programme using different teaching methods and materials including the definitions of high risk, causes, signs and symptoms, treatment, management and complications and preventive measures of swine flu have been included in the study. *Methods and Material:* One group pre-test- post-test design was selected for this study. O1: Pre-test knowledge scores on prevention and control of swine flu. X: STP on prevention and control of swine flu. O2: Post-test knowledge scores on prevention and control of swine flu. *Setting of the Study:* Setting refers to the area where the study is conducted. This study was conducted on Selected Anganwadi centers in Bhopal. *Sample:* Anganwadi workers in selected Anganwadi centers in Bhopal. *Sample size:* A total number of 100 Anganwadi workers who met in the inclusion criteria were selected by using purposive sampling technique. *Statistical analysis used*: Scoring and Interpretation. The questions were phrased in a multiple choice form with 4 options as distracters and 1 correct response. The correct response is given a score of one mark and the wrong response is given a score of zero. The resulting knowledge score ranged as

- Adequate knowledge (76% to 100%)
- Moderate knowledge (51% to 75%)
- In adequate knowledge (≤ 50%).

Structured Teaching Program: The structured teaching program was developed based on the topic of the study, review of the related research publications, and non research literature. The following steps were adapted to develop the Structured Teaching Program.

- Development criteria check list
- Preparation of STP
- Establishment of Content Validity of STP

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• Development of Teaching Plan

• Translation of STP into Hindi language.

Results: Level of Knowledge-pre-test. The level of knowledge is categorized as Inadequate, Moderate, Adequate and the scoring of below 50%, 50-75% and above 75%. The number of respondents who are having inadequate knowledge belongs to 58 and obtained a percentage of 96.7%. Moderate category shows 3.3% with 2 respondents. Workers are not adequate in the knowledge prevention and controls of swine flu are evidenced by 0% level of knowledge. Level of Knowledge-post-test. The level of knowledge is categorized as Inadequate, Moderate, Adequate and the scoring of below 50%, 50-75% and above 75%. The number of respondents who are having adequate knowledge belongs to 24 and obtained a percentage of 40%. Moderate category shows 60% with 36 respondents. Anganwadi workers with inadequate knowledge regarding prevention and control of swine flu are evidenced to 0% level of knowledge. *Conclusions:* Knowledge on Prevention and control of swine flu among Anganwadi workers was inadequate before the administration of STP.

Keywords: Anganwadi workers STP effectiveness Swine flu.

Introduction

Respiratory tract infections are major causes of morbidity among people worldwide, particularly in developing countries. While the mortality due to acute respiratory tract infections is about 32–40% per 1,00,000 live births. In developing countries one person dies every seven seconds because of respiratory tract infections due to bacterial pathogens. Severe contagious diseases and viral agents are primary causative agents for respiratory infection. With recent outbreak of respiratory infections swine flu within the human population has caused a great deal of concern for health officials in India and aboard and now become a much publicized disease. The centre for disease control and prevention was the first to use the term "Swine Flue" after an initial analysis showed the virus had many of the first time Swine flue.[1]

For the first time swine flu was identified in Mexico on June 11th 2009. the world health organization identified that swine flue was a disease transmitted worldwide. The WHO had proclaimed H_1N_1 as a universal epidemic in June 2009, with H_1N_1 having been culpable for approximately 17,000 deaths till the commencement of 2010. American President, Barack Obama, had pronounced H_1N_1 to be a national crisis in October 2009. So, swine flue is considered as a pandemic disease. Swine flu influenza also called pig influenza, swine flu, pig flue is an infection by any one of the several of swine influenza virus (SIV) or S-OIV (swine–origin influenza virus) is any strain of the influenza family of viruses that is endemic in pigs. As of 2009 the known SIV strains include influenza and the subtype of influenza is known as H_1N_1, H_1N_2, H_3N_2 and H_2 H_3.[2]

Swine influenza virus is common throughout pig populations, worldwide transmission of the virus from pigs to humans, often resulting only in the production antibodies in the blood. It transmission does cause human influenza, it is called zoonotic swine flu. People who are in regular exposure to pigs are at increased risk of swine flu infection. The meat of an infected animal poses no risk of infection when properly cooked. During the mid 20th century, identification of influenza subtype become possible allowing accurate diagnosis of transmission of humans. Since then only 50 such transmissions have been confirmed. These strains of swine flu rarely pass from humans. Symptoms of zoonotic swine flu in humans are similar to those of influenza and of influenza like illness in general, namely chills, fever, sore throat, muscle pains, severe headache, coughing, weakness and general discomfort.[3]

Today the world is facing one of the dreadful disease which is swine flue. Swine flu caused by H_1N_1 virus. The H_1N_1 virus is a new influenza virus causing illness in people. This was first detected in April 2009 in the United States and other countries, including Mexico, Canada etc. Now in India it is spreading very fast day by day and is increasing the affected cases and deaths.[4]

The virus is spreading from person to person, as much the same like regular seasonal influenza viruses spread. To be specific, swine flue is a respiratory disease caused by a type. A which reflects pigs, until now not infected humans but later it dearly showed it spreads from person to person probably through respiratory route by droplets from coughing and sneezing.

The swine flue for this because laboratory testing showed many of gems in the H_1N_1 viruses were very similar to influence viruses that normally

occur in pigs in North America. But further study has shown two gems from virus that normally circulate in pigs in Europe and Asia those are avian genes quadruple reassortant virus. The outbreak intensified rapidly from that time and work and more countries have been reporting cases of illness from this virus.

With recent outbreak of respiratory infections swine flu within the human population has caused a great deal of concern for health officials in India and aboard and now become a much publicized disease. Anganwadi workers who are in direct contact with the community should have basic knowledge of swine flu as she will have to identify the sign and symptoms and she must ensure preventive measures of spread of swine flu. Swine flu is an emerging disease in India and it is a major and high risk Viral Infection, whose preventive measures is needed to prevent spread of this infection. Moreover anganwadi workers should gain knowledge and should spread information about causative organism, its sign and symptoms and its prevention.

Materials and Methods

One group pre-test–post-test design was selected for this study.

O_1: Pre-test knowledge scores on prevention and control of swine flu.

X: STP on prevention and control of swine flu.

O_2: Post-test knowledge scores on prevention and control of swine flu

The variables for the present study are as follows,

Independent Variables

Is considering being the variable that is believed to cause or influence the dependent variable. In the present study, the independent variable is the structured teaching program on prevention and control of swine flu.

Dependent Variables

In this study, the dependent variable is knowledge level of Anganwadi workers regarding prevention and control of swine flu.

Extraneous Variables

Age, religion, education, marital status, type of family, year of experience and previous knowledge regarding swine flu

Population

The target population for this study was Anganwadi workers in selected Anganwadi centers in Bhopal.

Setting of the Study

Setting refers to the area where the study is conducted. This study was conducted on Selected Anganwadi centers in Bhopal.

Sample

Anganwadi workers in selected Anganwadi centers in Bhopal.

Sample size

A total number of 100 Anganwadi workers who met in the inclusion criteria were selected by using purposive sampling technique.

Results

Level of Knowledge pre-test

The level of knowledge is categorized as Inadequate, Moderate, Adequate and the scoring of below 50%, 50–75% and above 75%. The number of respondents who are having inadequate knowledge belongs to 58 and obtained a percentage of 96.7%. Moderate category shows 3.3% with 2 respondents. Workers are not adequate in the knowledge prevention and controls of swine flu are evidenced by 0% level of knowledge.

Level of Knowledge post-test

The level of knowledge is categorized as Inadequate, Moderate, Adequate and the scoring of below 50%, 50–75% and above 75%. The number of respondents who are having adequate knowledge belongs to 24 and obtained a percentage of 40%. Moderate category shows 60% with 36 respondents. Anganwadi workers with inadequate knowledge regarding prevention and control of swine flu are evidenced to 0% level of knowledge.

Discussion

The present study was conducted to evaluate the effectiveness of STP on knowledge regarding knowledge regarding prevention and control of swine flu among Anganwadi workers in selected Anganwadi centers in Bhopal. In order to achieve the objectives of the study, one group pre-test and post-test design was adopted. Purposive sampling

technique was used to select the sample. The data was collected from 60 respondents before and after the STP by structured questionnaire. The finding of the study have been discussed with reference to the objectives, hypothesis and with the findings of other studies.

Description of demographic characteristics

Description of socio demographic variables reveals that maximum number of Anganwadi workers 46 (46.7%) belongs to 20–30 years, 24 (40%) belongs to 31–40 years, 14 (13.3%) are above 40 years. Most of them are Hindu 35 (58.3%), Muslim 25 (25%), Christian 10 (16.7%) others are 0 (0.00%). About education 3 (5.00%) are below 10^{th}, 36 (60%) had 10^{th} and 21 (35%) had PUC and above. Here, 44 (73.3%) Anganwadi workers belong to nuclear, 16 (26.7%) belong to joint family, 0 (0.00%) belong to extended. Most of the workers are married 38 (63.33%), Bachelors 15 (25.00%), divorced 3 (5.00%) and widower 4 (6.67%). Regarding years of experience in steel industry majority 35 (58.3%) had below 1 year, 21 (35%) had 1–3 years, 4 (6.7%) had above 3 years.

Conclusion

The conclusion drawn on the basis of the findings of the study includes

- Knowledge on Prevention and control of swine flu among Anganwadi workers was inadequate before the administration of STP.
- The STP was effective in increasing the knowledge of Anganwadi workers, i.e. overall and in all aspects in the post-test scores were high compared to pre-test scores.
- A paired *t*-test result (36.67*) indicated a statistically significant difference between the pre-test and post-test knowledge score on Prevention and control of swine flu for all the knowledge aspects under investigation ($p < 0.05$)
- A statistically significant association was observed in educational status with knowledge level of respondent on health hazards and its prevention, at 0.05 level of significance.
- Whereas there was no significant association between Age, religion, type of family, marital status and years of experience in Anganwadi.

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Conflict of Interest: None

Key Messages: Appropriate knowledge of swine flu is necessary for the anganwadi workers who serve and care the patients in the community**.**

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Assessment of Factors Contributing to Noncompliance with Tuberculosis Treatment among Tuberculosis Patients in Selected Areas

Poonam Ingalkar[1], Lata Sukare[2], Pascaline David[3]

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Author's Affiliations: [1]M.Sc. Nursing, [2]Professor and HOD, [3]Associate Professor, Department of Medical Surgical Nursing, V.S.P.M. Madhuribai Deshmukh Institute of Nursing Education, Digdoh Hills, Hinna Road, Nagpur, Maharashtra 440019, India.

Corresponding Author: Poonam Ingalkar, M.Sc. Nursing, Department of Medical Surgical Nursing, V.S.P.M. Madhuribai Deshmukh Institute of Nursing Education, Digdoh Hills, Hinna Road, Nagpur, Maharashtra 440019, India.

E-mail: poonamingalkar@gmail.com

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Abstract

Background: TB is a worldwide public health problem that is closely associated with poverty, malnutrition, overcrowding, substandard housing, and inadequate health care. Mortality and morbidity rates continue to rise; Mycobacterium Tuberculosis infects an estimated one third of the world's populations and remains the leading cause of the death from infectious disease in the world. According to WHO, an estimated 1.6 million deaths resulted from TB in 2005 (WHO, 2007). In 2005 there were 14, 093 reported cases of TB in the United States, a 3.8% decline from the previous year. However, two prevalent public health concerns remain about TB. First is the increase in the number of TB cases attributable to multi-drug resistant organisms (MDR-TB) and extensive drug-resistant organisms (XDR-TB). These forms of TB have been found worldwide and a threat to public health as a potential epidemic that is considered practically untreatable. *Objective:* To assess the factors contributing to noncompliance with tuberculosis treatment among tuberculosis patients in selected areas of the city. *Methodology:* A Non experimental study with descriptive research design is used among 100 Tuberculosis patients with noncompliance to tuberculosis treatment in selected areas of the city and are available at the time of data collection. The Purposive sampling technique is used. Data was collected on total four factors contributing to noncompliance these are patient related factors, health system related factors, disease and medicine related factors and socioeconomic related factors. The collected data was coded, analysed by using descriptive statistics and inferential statistics. *Result:* As perpatient related factors to noncompliance revels that majority of participants have knowledge regarding Antituberculosis drugs, which is given by health care worker. As per health care system related factors data revels that health care facilities are easily available and convenient for them. As per disease and medicine related factors data revels that all participant experience drug related side effect, these are nausea & vomiting & loss of appetite. All participants responded they did not feel better throughout the Antituberculosis treatment therapy. As per socioeconomic related factors data revels that majority of participant had financial problem as their job & salary affected because of illness & treatment. So majority of participant stopped Antituberculosis treatment. *Conclusion:* Non-compliance was found to be influenced by multiple factors like experiencing different side effects of Antituberculosis treatment, not feeling better throughout therapy, fear of social isolation and impact on job & salary which finally affect socioeconomic condition.

Keywords: Tuberculosis; Non-compliance; Antituberculosis treatment.

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Introduction

(TB) is one of the most prominent mycobacterial diseases known to humankind; the other is leprosy. Tuberculosis is an infectious disease caused by mycobacterium tuberculosis, it primarily affects the lung parenchyma.[1] It also may be transmitted to other parts of the body, including the meninges, kidneys, bones, and lymph nodes. Tuberculosis is the world's second most common cause of death from infectious disease, after HIV/AIDS.[2]

Background and Need of the study

TB is a worldwide public health problem that is closely associated with poverty, malnutrition, over crowding, substandard housing, and inadequate health care. Mortality and morbidity rates continue to rise; Mycobacterium tuberculosis infects an estimated one third of the world's populations and remains the leading cause of the death from infectious disease in the world. According to WHO, an estimated 1.6 million deaths resulted from TB in 2005 (WHO, 2007).[3]

In 2005 there were 14, 093 reported cases of TB in the United States, a 3.8% decline from the previous year. However, two prevalent public health concerns remain about TB. First is the increase in the number of TB cases attributable to multi-drug resistant organisms (MDR-TB) and extensive drug-resistant organisms (XDR-TB). These forms of TB have been found worldwide and a threat to public health as a potential epidemic that is considered practically untreatable.[4]

Non-adherence to treatment is the patient's inability or refusal to take TB medications according to prescribed by health professional. Similarly lost to follow up is a TB patient who did not start treatment or whose treatment was interrupted for 2 consecutive months or more. Hence, intensive case notification and observing patients while they are taking the medication only are not sufficient to prevent TB treatment non-adherence and lost to follow up. However, well understanding and intervening of associated factors which are influencing TB patients' tolerance ability and promote treatment non-adherence and lost to follow-up is corner stone to good treatment success.[5]

India is a country with highest burden of tuberculosis. If Tuberculosis detected earlier it should be treated completely. But Non–adherence to treatment is a biggest problem in our country, so the investigator is interested to find out the different factors which are contributing to noncompliance with Tuberculosis treatment.

Statement of the Problem

"A descriptive study to assess the factors contributing to noncompliance with tuberculosis treatment among tuberculosis patients in selected areas of the city."

Objectives

- To assess the factors contributing to noncompliance with tuberculosis treatment among
- Tuberculosis patients
- To associate the factors contributing to noncompliance to tuberculosis treatment with demographic variables

Operational definitions

- *Assess:* In this study assess means, to find out the factors contributing to noncompliance with tuberculosis treatment
- *Factors:* In this study, it refers to facts, or influence that contributes to noncompliance with Tuberculosis treatment.
- *Contributing:* In this study, it refers to any behavior, omission of condition that influence noncompliance with treatment
- *Noncompliance:* In this study, it refers to failure or refused to continue tuberculosis treatment.
- *Tuberculosis:* In this study, it refers to causing a infectious disease known tuberculosis
- *Patient:* In this study, it refers to patient who are diagnosed with tuberculosis and who are on Ant tuberculosis drugs but fails to continue treatment

Delimitation

Present study was delimited to:

- Patient who was noncompliance to tuberculosis treatment
- Adult patient
- Selected areas of Nagpur city

Conceptual framework

The conceptual framework selected for the study based on "Rosenstok's and Becker's Health Belief Models[6]"

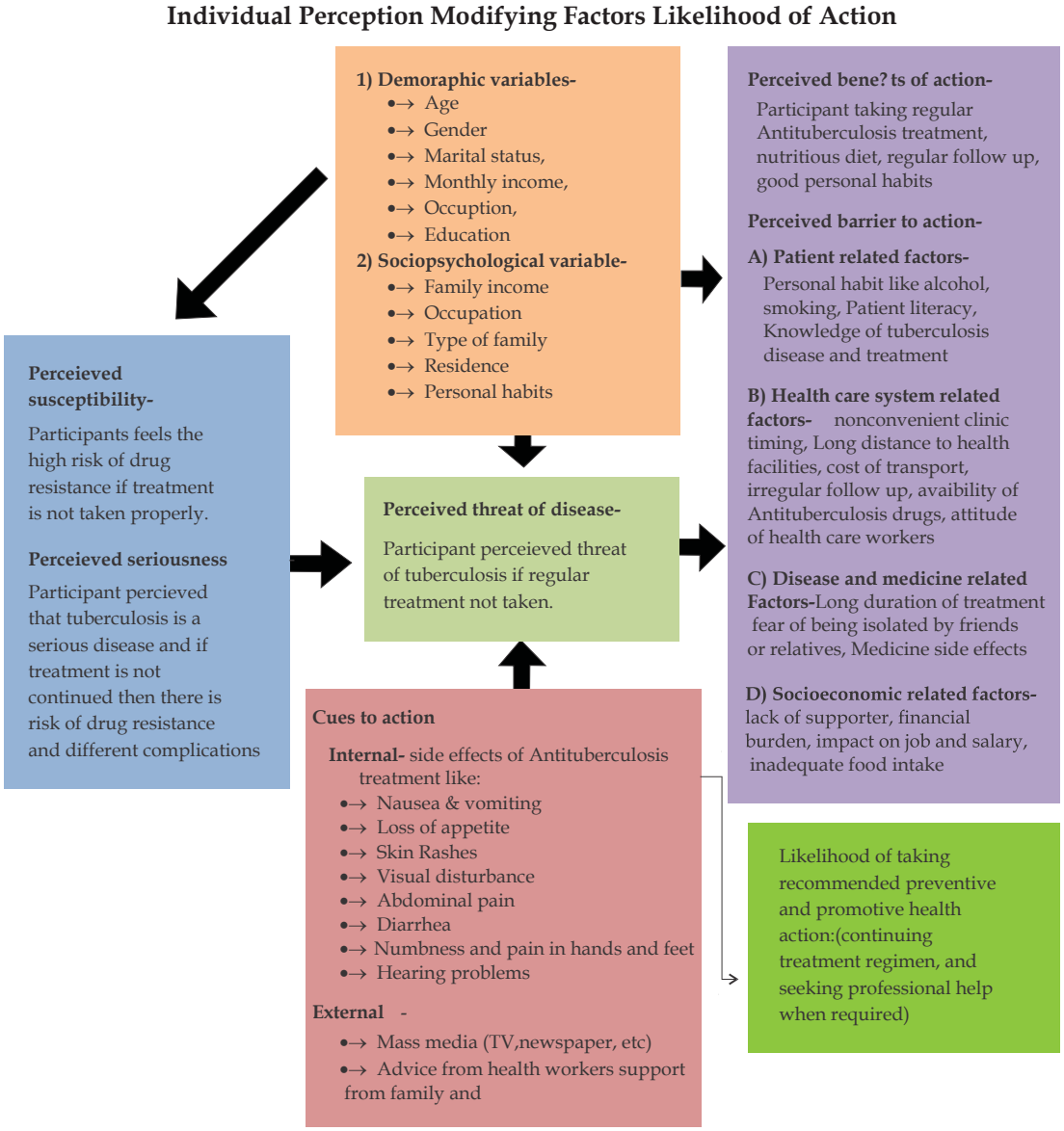

Fig. 1: Conceptual framwork based on rosenstok's and becker's health belief models.

Materials and Methods

Research approach: Quantitative research approach.

Research Design: Descriptive cross sectional research design

Setting of the study: Selected areas of Nagpur city.

Variables

Research variable: Factors contributing to noncompliance with tuberculosis treatment among tuberculosis patients.

Demographic variables: Age, gender, marital status, monthly family income (in rupees), occupation, Type of family, composition of family, residence.

Population: All Tuberculosis patients

Target Population: Tuberculosis patients with noncompliance to tuberculosis treatment

Accessible Population: Tuberculosis patients with noncompliance to tuberculosis treatment in selected areas of the city and are available at the time of data

collection.

Sample Size: 100 Tuberculosis patients, who fails to continue Tuberculosis treatment.

Sampling technique: Purposive sampling technique.

Sampling criteria

Inclusion criteria: Inclusive criteria was

Tuberculosis patients who are;

1. Not taking regular tuberculosis treatment
2. Willing to participate in the study
3. Available at the time of data collection

Exclusion criteria: Exclusion criteria was,

Tuberculosis patients who are;

1. On regular tuberculosis treatment
2. Completed tuberculosis treatment successfully

Tool and technique of data collection

The tools used in this study consist of 3 sections:

Section I: Semi structured questionnaire on demographic variable:

Section II: Questionnaire on Clinical data

Section II: Semi-structured questionnaire on Factors contributing to non-compliance include:

(a) Patient related factors

(b) Health care system related factors

(c) Disease and medicine related factors

(d) Socio economic related factors

Validity: For the content and construct validity of the tool was done by 27 experts. Tool was valid for the study.

Pilot study: Conducted for 10 days. The investigator approached the 16 sample individually. The pilot study was feasible in time, money, material, and resources.

Ethical: Permission was taken from higher authority from different tuberculosis center from city.

Procedure for data collection

1. Permission was taken from higher authority from different tuberculosis centre from city.
2. List and address of patient who are not taking regular treatment is collected from tuberculosis centre.
3. Investigator personally contacted the participant at their residential area.
4. Purposive sampling done to select the participants as a subject for study.
5. Before collecting the data, self-introduction was done by the investigator and the purpose of the study was explained.
6. Consent of the participants was taken.
7. Collection of the data by questionnaire schedule on demographic variables, clinical data, and data related to factors contributing to noncompliance.
8. The questionnaire was distributed and collected back.

Results

The analysis and interpretation is given in the following sections.

Section I: Description on demographic variable of

Table 1: Table showing percentage wise distribution of non-compliance tuberculosis patients according to their demographic characteristics

N = 100

S. No	Demographic Variables		Frequency (*n*)	Percentage (%)
1.	**Age (in years)**	20–30 years	41	41.0
		31–40 years	23	23.0
		41–50 years	16	16.0
		51–60 years	14	14.0
		61 and above	6	6.0
2.	**Gender**	Male	83	83.0
		Female	17	17.0

(Contd.)

S. No	Demographic Variables		Frequency (*n*)	Percentage (%)
3.	**Marital status**	Married	59	59.0
		Unmarried	38	38.0
		Divorced	0	0.0
		Separated	0	0.0
		Widow	3	3.0
4.	**Educational status**	Primary	1	1.0
		Secondary	28	28.0
		Higher secondary	62	62.0
		Graduate	9	9.0
		Post graduate	0	0.0
		Other	0	0.0
5.	**Occupational status**	Labour	21	21.0
		Farmer	0	0.0
		Service	7	7.0
		Self employed	21	21.0
		Unemployed	49	49.0
		Others	2	2.0
6.	**Monthly family income (₹)**	<10000 Rs	54	54.0
		₹10001–15000	44	44.0
		₹15001–20000	2	2.0
		>₹20000	0	0.0
7.	**Type of family**	Nuclear family	35	35.0
		Joint family	65	65.0
		Extended family	0	0.0
8.	**Residence**	Rural	23	23.0
		Urban	62	62.0
		Semi urban	15	15.0

the participant of noncompliance to tuberculosis treatment

Section II: Description on clinical data of participant of noncompliance tuberculosis patient

Table 2: Table Showing percentage and frequency wise distribution of noncompliance tuberculosis patients according to their clinical data

n = 100

S. No	Questions		Frequency (*n*)	Percentage (%)
1.	Do you have family history of tuberculosis?	Yes	22	22.0
		No	78	78.0
2.	Do you have history of any past medical illness?	Yes	22	22.0
		No	78	78.0
3.	If yes, then specify?	Diabetics	3	13.63
		Hypertension	6	27.27
		Thyroid	1	4.54
		Both diabetic and hypertension	1	4.54
		Cardiac	3	13.63
		Other	8	36.67
4.	Are you taking any medicine, other than Anti tuberculosis drugs?	Yes	23	23.0
		No	77	77.0

(Contd.)

S. No	Questions		Frequency (*n*)	Percentage (%)
5.	If yes, to the above question then which medicine you are taking? (specify)	Cardiac	3	13.04
		Psychiatric	6	26.09
		Anti –hypertensive	1	4.34
		Diabetic	3	13.04
		Other	10	43.48

Section III: Description on factors contributing to noncompliance to tuberculosis treatment among tuberculosis patient

A: Patient related factors

Table 3A: Table showing the frequency and percentage wise distribution on factors contributing to noncompliance to tuberculosis treatment among tuberculosis patient

n = 100

Sr. no	Questions		Frequency (*n*)	Percentage (%)
1.	Have you smoked cigrettes in the last 6 months?	Yes	2	2.0
		No	88	88.0
		Left	10	10.0
2.	Did you drink alcohol?	Yes	9	9.0
		No	50	50.0
		Left	41	41.0
3.	Do you have knowledge about Anti tuberculosis drugs?	Yes	87	87.0
		No	13	13.0
4.	If yes, from where you got information about Anti tuberculosis drugs?	Family	6	6.0
		Television	0	0.0
		Internet	0	0.0
		Health care workers	81	81.0
		Others	0	0.0
5.	Are you able to take Anti tuberculosis medicine on your own?	Yes	74	74.0
		No	26	26.0

B: Health care system related factors

Table 3B: Table showing the frequency and percentage wise distribution on factors contributing to noncompliance to tuberculosis treatment among tuberculosis patient

n = 100

Sr. No	Questions		Frequency (n)	Percentage (%)
1.	What would be the most convenient time for opening TB clinic?	8 am – 5 pm	34	34.0
		10 am – 5 pm	57	57.0
		2 pm – 8 pm	4	4.0
		24 hours	5	5.0
2.	Is the health care facilitiesfar away from your house?	Yes	8	8.0
		No	92	92.0
3.	How much does it cost you to travel to health clinic?	No cost	4	4.0
		Less than 100 rupees	96	96.0
		101–150 rupees	0	0.0
		More than 150 rupees	0	0.0
4.	Is your medicine easily available?	Yes	100	100.0
		No	0	0.0
5.	Does the health care worker explained you about the treatment modalities and duration of therapy?	Yes	100	100.0
		No	0	0.0

(Contd.)

Sr. No	Questions		Frequency (n)	Percentage (%)
6.	Who supervised you when you were taking your Anti tuberculosis drugs?	Family members	44	44.0
		Health workers	0	0.0
		Other	0	0.0
		None	56	56.0
7.	How would you rate the attitude of staff who attended you at the health centre?	Excellent	3	3.0
		Very good	33	33.0
		Good	64	64.0
		Poor	0	0.0
8.	How regularly do you follow up with your physician?	Every month	1	1.0
		Once in 3 month	16	16.0
		Once in 6 month	37	37.0
		Any other	46	46.0

C: Disease and medicine related factors

Table 3C: Table showing the frequency and percentage wise distribution on factors contributing to noncompliance to tuberculosis treatment among tuberculosis patient

n = 100

Sr. No	Questions		Frequency (n)	Percentage (%)
1.	For how much duration Anti tuberculosis treatment should be continue?	Less than 6 months	14	14.0
		One feels better then stop on your own	24	24.0
		Prescribed course is completed and health worker tells you to stop	61	61.0
		Life long	1	1.0
2.	Did you inform your family or friends that you were on Anti tuberculosis drugs?	Yes	68	68.0
		No	32	32.0
3.	If NO, why?	Fear of being isolated by friends or relative	12	37.5
		No one to trust	0	0.0
		Other	20	62.5
4.	Did you experience any side effects when you are taking Anti tuberculosis drugs?	Yes	100	100.0
		No	0	0.0
5.	If yes to above question, which side effects did you experience? (Mark more than one option)	a) Nausea & vomiting	21	21.0
		b) Loss of appetite	6	6.0
		c) Skin Rashes	3	3.0
		d) Visual disturbance	0	0.0
		e) Abdominal pain	0	0.0
		f) Diarrhea	0	0.0
		g) Numbness and pain in hands and feet	3	3.0
		h) Hearing problems	0	0.0
		i) Any other	0	0.0
		a + b	20	20.0
		a + b + e	3	3.0
		a + b + g	1	1.0
		a + c	8	8.0
		a + c + e	3	3.0
		a + c + g	2	2.0

(Contd.)

Sr. No	Questions		Frequency (*n*)	Percentage (%)
		a + d	2	2.0
		a+ e	12	12.0
		a + g	9	9.0
		b + c	2	2.0
		b + e	2	2.0
		b + g	1	1.0
		c + e	1	1.0
		c + g	1	1.0
6.	From the day you started taking your Anti tuberculosis drugs, how long did it take for you to feel better? (months)	Less than 2	0	0.0
		2–4	0	0.0
		5–6	0	0.0
		Did not feel better	100	100.0
7.	What was the reasons for stopping Anti tuberculosis treatment? (Mark more than one option)	a) Side effects	61	61.0
		b) Feeling well	0	0.0
		c) Too many tablets	0	0.0
		d) Stigma	0	0.0
		e) Far distance	0	0.0
		f) Treatment is costly	0	0.0
		g) Lack of family support	0	0.0
		h) No food	0	0.0
		i) Any other	0	0.0
		a + c	37	37.0
		a + e	2	2.0

D: Socioeconomic related factors

Table 3D: Table showing the frequency and percentage wise distribution on factors contributing to noncompliance to tuberculosis treatment among tuberculosis patient

n = 100

Sr. No	Questions		Frequency (*n*)	Percentage (%)
1.	Do you have financial burden because of Anti tuberculosis drugs treatment?	Yes	78	78.0
		No	22	22.0
2.	Did your job and salary affected after starting Anti tuberculosis drugs?	Yes	82	82.0
		No	18	18.0
3.	Have you stopped your treatment due to financial burden?	Yes	79	79.0
		No	21	21.0
4.	During the time of Anti tuberculosis treatment, is there adequate food intake?	Always	7	7.0
		Some time	86	86.0
		Never	7	7.0
5.	Do you have a treatment supporter?	Yes	90	90.0
		No	10	10.0
6.	If yes, from where you get support?	Family members	90	100.0
		Relatives	0	0.0
		Government	0	0.0
		NGO (Non-governmental organization)	0	0.0
		Other	0	0.0

Section IV: Descriptionon association of the factors contributing to noncompliance to tuberculosis treatment with selected demographic variable shows that

1) There is significant association of family income with patient related factors & health care system related factor.
2) There is significant association of education with patient related factor and socioeconomic related factor.
3) There is significant association of occupation with patient related factor and socioeconomic related factors.
4) There is significant association of place of residence with patient related factor, health care system related factor and disease and medicine related factor.

Discussion

The findings of the study was discussed with reference to the objectives stated and with the findings of the other studies in this section

Mohammed El-Muttalut and Mustafa Khidir Elnimeiri conducted a study to assess the factors contributing to non-compliance with treatment among tuberculosis patients-Kassala State-Sudan (2016). A cross-sectional study was conducted in Kassala State. The sample size mounted to 366 participants who were selected using simple random sampling technique. A standardized administered pre-tested, pre-coded questionnaire was used to collect the data. The questionnaire consisted of 10 sections with a total of 80 questions. A multivariate logistic regression analysis model was built using the enter method for the statistically significant variables at univariate analysis level taking *p*-value of 0.25 to determine the association between non-compliance and the study outcomes. 366 TB patients were included in this study, of whom 60 were treatment defaulters. TB patients aged 40 years and above, and those living in rural areas were found to be at higher risk of default with *p*-value 0.023 and 0.013 respectively. Lower education level and low income were also found to be significantly associated with treatment default with *p*-value 0.024 and 0.045 respectively. The study revealed that discontinuing treatment after feeling better (and wrongly perceiving it as cure) at the start of continuation phase was the most important predictor of treatment default with *p*-value 0.004. Non-compliance was found to be influenced by multiple factors including lack of patient knowledge and awareness about TB and its treatment (stopping treatment after feeling better), low education level, low income level and age and residence of the patient.[8]

Conclusion

Non-compliance was found to be influenced by multiple factors including experiencing side effects of Antituberculosis treatment and did not feel better throughout the Antituberculosis treatment and job and salary affected.

Implications of the Study

The findings of this study have implicated in nursing education, community and medicine practice and research.

Nursing Practice

In nursing clinical practice this research will help to find out other factors contributing to noncompliance tuberculosis treatment.

- This will help to find out the knowledge of participants and prevention of disease.
- This can help to find out the attitude of health care workers.
- This study can be used as an informative illustration for community health nurses working in community for caring for those clients receiving antituberculosis treatment.
- This will help to improve awareness of importance of continuation of tuberculosis treatment

Nursing Education

Nursing education promote clinical and classroom learning among nursing students. The results of the study can be used by nursing teachers as an informative illustration for nursing students while teaching the factors contributing to noncompliance tuberculosis treatment to tuberculosis patients.

Nursing Research

- Clinical research, based on biological, behavioral, and other types of investigation, provide scientific basis for the care of individual across the lifespan and occurs in any setting where nursing care is provided.
- The tool, technique and review of literature can provide an avenue for further research

studies. It certainly increases the body of knowledge and can be used as reference material for the future.

Nursing Administration

- Nursing administration to improve the nursing care provided by health care personnel, the nurse administrator can use the finding of this study as a basis for in-service education for the trained nurses.
- The nurse administrator should communicate this knowledge to the community area and reduces the factors contributing to noncompliance tuberculosis treatment.

Limitation

The study limited to:

- The study was limited to only non-compliance tuberculosis patients.
- The study was only limited to assessing the factors contributing to noncompliance, hence no intervention was implemented.

Recommendation

- A similar study can be replicated on a larger population for a generalization of findings.
- A similar study can be done using different research methodology.
- A similar study can be done to identify factors contributing to non-compliance to Tuberculosis treatment amongst pulmonary tuberculosis patients.
- A similar study can be done to assess the Quality life after Pulmonary Tuberculosis.
- A comparative study can be done between noncompliance and quality of life of Tuberculosis patient.

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Prevalence of Malnutrition among Geriatric Population

R Amutha[1], T Nanthini[2]

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Author's Affiliations: [1]M.Sc. Nursing, [2]Associate Professor, Department of Community, Health Nursing, College of Nursing, Mother Theresa Post Graduate & Research Institute of Health Sciences, Gorimedu, Puducherry 605006, India.

Corresponding Author: T Nanthini, Associate Professor, Department of Community, Health Nursing, College of Nursing, Mother Theresa Post Graduate & Research Institute of Health Sciences, Gorimedu, Puducherry 605006, India.

E-mail: nandhini_lect@yahoo.co.in

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Abstract

Worldwide, malnutrition is a major problem. Children, Pregnant mothers and Elderly are vulnerable to malnutrition due to physiological and functional changes. The intervention programs are directed towards children and pregnant mothers and often elderly people are neglected. But there has been a substantial rise in elderly population globally. The physiological changes of ageing like limited mobility, sensory impairment negatively affects the nutritional status. *Methodology:* A cross sectional descriptive survey method was used. A total number of 60 samples were selected by using purposive sampling technique and the data were collected by using Mini Nutritional Status Assessment (MNA) tool. *Results:* Out of 60 subjects, majority(68.4%) of them in the age group of 60–74 years, 70% of them were females, most of them were not educated and not working. Majority 49 (81.7%) of the geriatric were at the risk of malnutrition, 10 (19.7%) had malnutrition and only one in normal nutritional status. there was an significant association (p-value <0.05) between the level of nutritional status of geriatric population with comorbid condition as arthritis. *Conclusion:* The study revealed that the risk of malnutrition was high among geriatric people. As aging process increase immunity decrease and intake of food decrease hence they are at risk of getting malnutrition. The proper care and nutrition should be provided to geriatric people at their rest of their life. The government welfare measures should to reach every geriatric people. As a community health nurse should educate the family members and the community to give importance for geriatric people.

Keywords: Malnutrition; Geriatric people.

Introduction

Malnutrition is a major problem worldwide. Children, Pregnant mothers and Elderly are vulnerable to malnutrition due to their physiological and functional changes. Mostly the intervention programs are directed towards children and pregnant mothers and often elderly people are neglected. But there has been a substantial rise in elderly population globally. The physiological changes of ageing like limited mobility, sensory impairment negatively affects the nutritional status.[1] In contrast to younger age group, the energy needs decreases with age but the need of nutrients remains the same which further increases the risk of malnutrition among elderly.[2]

In India, the elderly (aged 60 years and above) constitute 7.7% of the total population of 1.04 billion and this number is increasing. The majority of the elderly population lives in rural India.

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With national health policy focusing on maternal health, child health and communicable diseases, the health status of the elderly has an urgent need. Since nutrition of the elderly affects immunity and functional ability, it is an important component of elderly care that warrants further attention.[3,4]

The few studies that have been done show that more than 50 % of the older population is underweight and more than 90 % has an energy intake below the recommended allowance. Malnutrition is determined in a variety of ways, including comparison of dietary intake records with nutritional recommendations for healthy elderly, history, and physical assessment, including degree of weight loss over time and biochemical status.[3]

Statement of the Problem

'A study to assess the prevalence of malnutrition among Geriatric People residing in selected areas at Puducherry'.

Objectives

- To assess the prevalence of malnutrition among geriatric people
- To find out the association between malnutrition among geriatric people with their selected demographic variables

Materials and Methods

A quantitative descriptive survey approach was undertaken to assess the prevalence of malnutrition among geriatric people. A total of 60 Geriatric people were selected by using non- probability purposive sampling technique. A mini nutritional status assessment (MNA) tool was used to measure the degree of malnutrition and their co-morbid conditions was assessed.

Results and Discussion

Out of 60 subjects, majority (68.4%) of them in the age group of 60–74 years, 70% of them were females, most of them were not educated and not working. Majority 49 (81.7%) of the geriatric were at the risk of malnutrition, 10 (19.7%) had malnutrition and only one in normal nutritional status. there was an significant association (p-value < 0.05) between the level of nutritional status of geriatric population with comorbid condition as arthritis.

Table 1 revealed that out of 60 subjects, majority (68.4%) of them in the age group of 60–74 years, 70% of them were females, most of them were not educated and not working.

Table 1: Frequency and percentage distribution of demographic variables

Demographic variables	Frequency (*f*)	Percentage (%)
Age		
60–74 years	41	68.4
75–84 years	17	28.3
Above 85 years	2	3.3
Gender		
Male	18	30.0
Female	42	70.0
Education		
Illiterate	31	51.7
Primary education	14	23.3
Secondary education	12	20.0
Degree	3	5.0
Occupation		
Working	11	18.3
Non- working	49	81.7
Type of family		
Nuclear family	31	51.7
Joint family	29	48.3
Socio- economic status		
Upper class	1	1.7
Upper middle class	9	15.0
Lower middle class	22	36.7
Lower class	28	46.7

(Contd.)

Demographic variables	Frequency (*f*)	Percentage (%)
Number of family members		
1	5	8.3
2	21	35.0
4	12	20.0
More than 4	22	36.0

Table 2 revealed that out of 60 samples, majority 49 (81.7%) of the geriatric were at the risk of malnutrition, 10 (19.7%) had malnutrition and only one in normal nutritional status.

Table 2: Frequency and percentage distribution of nutritional status among geriatric people

N = 60

Nutritional status	Frequency (*n*)	Percentage (%)
Normal nutritional status	1	1.7
At risk of malnutrition	49	81.7
Malnutrition	10	16.7

Table 3 showed that there was an significant association (p-value < 0.05) between the level of nutritional status of geriatric population with comorbid condition as arthritis.

Table 3: Association between the level of nutritional status among geriatric people with selected demographic variables

N = 60

Demographic variables	Normal nutritional status		At risk of malnutrition		Malnutrition		Chi-square value
	N	%	*N*	%	*N*	%	
Age							
60–74 years	0	0.00	33	55.0	8	13.4	3.397 df = 4 p = 0.494 NS
13–15 years	1	1.7	14	23.3	2	3.3	
16–18 years	0	0.0	2	3.3	0	0.0	
Gender							4.402 df = 2 p = 0.111 NS
Male	1	1.7	16	26.6	1	1.7	
Female	0	0.0	33	55.0	9	15	
Education							
Illiterate	1	1.7	25	41.7	5	8.3	1.607 df = 6 p = 0.952 NS
Primary education	0	0.0	12	20.0	2	3.3	
Higher secondary	0	0.0	10	16.7	2	3.3	
Degree	0	0.0	2	3.3	1	1.7	
Occupation							3.024 df = 2 p = 0.220 NS
Not working	1	1.7	38	63.3	10	16.7	
Working	0	0.0	11	18.3	0	0.0	
Type of family							2.557 df = 2 p = 0.279 NS
Nuclear family	0	0.0	24	40.0	7	11.6	
Joint family	1	1.7	25	41.7	3	5.0	
Socio economic status							
Upper class	0	0.0	0	0.0	1	1.7	10.863 df = 6 p = 0.093 NS
Upper middle class	0	0.0	8	13.3	1	1.7	
Lower middle class	1	1.7	15	25	6	10	
Lower class	0	0.0	26	43.3	2	3.3	
Number of family members							
One	0	0.0	4	6.7	1	1.7	9.152 df = 6 p = 0.165 NS
Two	0	0.0	14	23.3	7	11.6	
Four	0	0.0	12	20.0	0	0.0	
More than four	1	1.7	19	31.7	2	3.3	

(Contd.)

Demographic variables	Normal nutritional status		At risk of malnutrition		Malnutrition		Chi-square value
	N	%	*N*	%	*N*	%	
Comorbid condition: diabetes							1.555 df = 2 p = 0.460 NS
Yes	1	1.7	31	51.6	8	13.3	
No	0	0.0	18	30.0	2	3.3	
Comorbid condition: hypertension							1.555 df = 2 p = 0.460 NS
Yes	1	1.7	31	51.6	8	13.3	
No	0	0.0	18	30.0	2	3.3	
Comorbid condition: arthritis							6.137 df = 2 p = 0.04* NS
Yes	1	1.7	34	56.8	3	5	
No	0	0.0	15	25.0	7	11.8	
Comorbid condition: tuberculosis							3.726 df = 2 p = 0.155 NS
Yes	0	0.0	13	21.6	0	0.0	
No	1	1.7	36	60.0	10	16.7	
No	0	0.0	0				

Significant at *p < 0.05 level.

Conclusion

The investigator conclude from the study that the risk of malnutrition was high among geriatric people. The proper care and nutrition should be provided to geriatric people at their rest of their life. The government welfare measures should to reach every geriatric people. As a community health nurse should educate the family members and the community to give importance for geriatric people.

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Assessment of Knowledge on Febrile Seizures among Mothers of Under Five Children in Selected Hospital Chennai

S Mahalakshmi[1], M Hemamalini[2]

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Author's Affiliations: [1]Associate Professor, Shri Sathya Sai College of Nursing, Sri Balaji Vidyapeeth University, Ammapettai, Nellikuppam, Chengalpattu District, Tamil Nadu 603108, India. [2]Principal, Hindu Mission College of Nursing, Tambaram, Chennai, Tamil Nadu 600045, India.

Corresponding Author: S Mahalakshmi, Shri Sathya Sai College of Nursing, Sri Balaji Vidyapeeth University, Ammapettai, Nellikuppam, Chengalpattu District, Tamil Nadu 603108, India.

E-mail: mahavenkat08@yahoo.in

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Abstract

Introduction: Generally, the age between 6 months to 5 years of children affected by febrile seizures, the risk peaking arise in the age of second year of life. When the first febrile seizure occurs in an older child is to have more febrile seizures as they will spend less time in the age group at risk. *Objectives:* To assess the knowledge on febrile seizures among mothers of under five children. *Methodology:* Quantitative approach and descriptive research survey design was adopted for the study. The variables studied are research variable and demographic variables. The study was conducted for Pediatric outpatient Department at Hindu Mission Hospital, Kancheepuram District. The Accessible Population constitutes of five Children who attended the Pediatric outpatient Department in Hindu Mission Hospital. The Sample Size for this Present Study was 30. Non Probability purposive Sampling Technique was adopted for the Study. The tool which is used for the data collection was structured questionnaires developed by the investigator which consists of 2 sections which includes demographic variables and structured questionnaire on febrile seizures. *Results:* The results reveal that 57% (17) of Mothers had moderate knowledge, 43% (13) mothers had inadequate knowledge and none of the mothers had adequate knowledge on febrile seizure. *Conclusion:* The majority of mothers had moderate knowledge hence knowledge on febrile seizures among the under five mothers can be enriched through awareness program and training on first aid measures on seizures.

Keywords: Febrile seizures; knowledge; Mother; Mortality.

Introduction

Febrile seizures are convulsions or seizures in infants that are brought on by a febrile illness. The seizures may come before the fever to the infant. Most often during a febrile seizure, a child losses consciousness and shakes uncontrollable. Less commonly, a child becomes rigid or has twitches in only a portion of the body. Most febrile seizures last a minute some can be as brief as a few seconds, while others may last for more than 15 minutes. Approximately one in every 25 children affected by febrile seizure. Generally, the age between 6 months to 5 years of children affected by febrile seizures, the risk peaking arise in the age of second year of life. When the first febrile seizure occurs in an older child is to have more febrile seizures as they will spend less time in the age group at risk. Some of the factors appear to boost a child's risk to recurrent febrile seizures, including a family history of febrile

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seizures in a first- or second-degree relative, a young age, i.e. less than 18 months child at the first febrile seizure, having a lower peak temperature during the illness when the febrile seizure occurs and fever is recognized within an hour.[1]

Febrile seizures tend to run in families. The risk of having seizures with other episodes of fever depends on the age of your child. The younger children less than age of 1 year at the time of their first seizure have about 50% chance of having another febrile seizure. Children having the age of 1 year at the time of their first seizure have only a 30% chance of having a second febrile seizure. Between 2% and 5% of children have febrile seizures by their fifth birthday.[2]

In Western Europe similar rate of febrile seizures is found. In world febrile seizures varies between 5% and 10% for India, 8.8% for Japan, 14% for Guam, 0.35% for Hong Kong, and 0.5–1.5% for China. Children with simple febrile seizures do not have increased mortality risk. However, seizures that were complex, occurred before age of 1 year, or were triggered by a temperature of less than 39°C were associated with a 2-fold increased mortality rate during the first 2 years after seizure occurrence. Children with febrile seizures have a slightly higher incidence of epilepsy compared with the general population, i.e. 2% vs. 1%. Risk factors for epilepsy later in life includes complex febrile seizure. Family history of epilepsy or neurologic abnormality and developmental delay. Patients with two risk factors have up to 10% chance of developing a febrile seizures.[3]

In case of series analysis of a cohort of 3,23,247 US children born between 2004 and 2008, Hambidge et al. concluded that there was a delaying the first dose of Measles-Mumps-Rubella (MMR) or measles-mumps-rubella-varicella (MMRV) vaccine beyond the age of 15 months may cause more than double the risk of post vaccination seizures in the second year of their life. For infants, there was no association between vaccination timing and post vaccination seizures. In the second year of life, however, the incident rate ratio (IRR) for seizures within 7–10 days was 2.65 (95% confidence interval [CI], 1.99–3.55) after first MMR doses at 12 to 15 months of age compared with 6.53 (95% CI, 3.15–13.53) after first MMR doses at 16 to 23 months. For MMRV vaccine, the IRR for seizures was 4.95 (95% CI, 3.68–6.66) after first doses at 12 to 15 months compared with 9.80 (95% CI, 4.35–22.06) for first doses at 16 to 23 months.

The total population were recorded in the Korean Statistical Information Service database was compared with the population covered by NHI. If the populations were very similar and the number recorded as being covered by health insurance that was exceeded in the total population for few of the years. The number of patients with FS younger than 10 years were 38,659 in 2009, 43,522 in 2010, 34,888 in 2011, 45,624 in 2012, and 23,173 in 2013. The prevalence of FS in Korea in those younger than five years was 69.2/1000 (76.7/1000 for boys and 61.2/1000 for girls). The prevalence peaked among children who were aged two years on a last day of each calendar year and the age range of the peak prevalence included those aged 18 to 30 months. The occurrence rates in children younger than 4, 5 and 6 years were compared with the total occurrence rate in children younger than 10 years; these were 84.1, 90.7 and 94.4% respectively.[4]

Risk factors of recurrence of febrile seizures in children in a tertiary care hospital in Kanpur: One year follow up study out of 528 children, 174 (32.9%) had recurrence and 354 (67.1%) had a single episode of febrile seizures. Recurrence was more in children less than 18 months (41.3%) as compared to children ≥18 months (24.1%). Children have a temperature of 101°F during the seizure had a recurrence rate of 52.5% while recurrence was seen only 17.2% in the children with temperature ≥ 105°F. There was a significant declining trend of recurrence with increase in temperature. Recurrence was significantly more common in children with a family history of febrile seizures (45.5%) as compared to those without family history (27.8%). Multiple logistic regression analysis revealed that younger age at onset of first seizure, lower temperature during the seizure, small duration between the onset of fever and the initial seizure, and family history of febrile seizures were risk factors significantly associated with recurrence of febrile seizures in children. *Conclusion:* The younger age at first seizure occurs in short duration of fever before onset of first febrile seizure, lower temperature at onset and family history of febrile seizures are risk factors of recurrence of febrile seizures in children.[5]

Materials and Methods

Descriptive research survey design and Quantitative approach was adopted for this study. The variables studies are research variable which include knowledge on febrile seizure among the mothers with under five children, where as the demographic variables includes the Age of Child, Sex of Child, Child rank, Type of Family, Religion,

Mother's Age, Mother's Education, Mother's Occupation, Father's Age, Father's Education, Father's Occupation, Family Income. The study was conducted at Pediatric Outpatient Department at Hindu Mission Hospital, Kancheepuram District. The Accessible Population constitutes of under five Children who attended the pediatric outpatient Department in Hindu Mission Hospital. The Sample Size of this Present Study was 30. Non Probability purposive Sampling Technique was adopted for the Study.

Inclusion criteria

1. Mother's who were having under five children
2. Mother's who are all willing to participate in the study
3. Mother's who can understand Tamil and English Language

Exclusion criteria

1. Mother's who were absent on the day of data collection.
2. Mothers who were not cooperative.

The tool used for the data collection was structured questionnaires developed by the investigator which consists of 2 sections.

Section A

Demographic Data which consist of the item for obtaining information about the selected back grounds factors such as Age, Sex of Child, Child rank, Type of Family, Religion, Mother's Age, Mother's Education, Mother's Occupation, Father's Age, Father's Education, Father's Occupation, Family Income.

Section B

A structured questionnaire developed by the investigator was used to assess the knowledge on febrile seizure. A Structured Questionnaires consists of 20 Statements in 4 aspects Causes, Management, Prevention and Complication.

The Study was approved by ethical committee of Hindu Mission Hospital and Hindu Mission College of Nursing. The investigator explains the objectives and method of data collection. Data Collection was done within the given specific period of one week in Hindu Mission Hospital. The data collection was done during the day time self introduction about the researcher and details about study was explained to the samples and the consent was obtained. The confidentiality about the data finding was assured to participants. The participants to 15 minutes to complete the tool and their cooperation were good. The collected data was coded and statistical analysis was done.

Results

Results are given in Tables 1 and 2.

Table 1: Distribution of demographic variables of the mothers with under five children

N = 30

S. No	Demographic variables		Frequency (*f*)	Precentage (%)
1.	**Age**	0–1 year	9	30.00
		1–3 years	11	36.67
		3–4 years	1	3.33
		4–5 years	9	30.00
2.	**Sex of the Child**	Male	20	66.67
		Female	10	33.33
3.	**Child Rank**	1st Child	17	56.67
		2nd Child	12	40.00
		3rd Child	1	3.33
4.	**Type of Family**	Nuclear	12	40.00
		Joint	18	60.00
5.	**Religion**	Hindu	17	56.67
		Muslim	4	13.33
		Christian	9	30.00
6.	**Mother's age**	18–20 years	1	3.33
		21–25 years	7	23.33
		26–30 years	9	30.00
		31–35 years	13	43.33

(Contd.)

S. No	Demographic variables		Frequency (*f*)	Precentage (%)
7.	**Mother's Education**	Primary School	1	3.33
		High School	3	10.00
		Higher	5	16.67
		Secondary	21	70.00
		Graduate		
8.	**Mother's Occupation**	Unemployed	12	40.00
		Professional	7	23.33
		Self-employed	5	16.67
		Others	6	20.00
9.	**Father's Age**	20–25 years	1	3.33
		26–30 years	4	13.33
		31–35 years	14	46.67
		36–40 years	11	36.67
10.	**Father's Education**	Primary School	1	3.33
		High School	1	3.33
		Higher	2	6.67
		Secondary	26	86.67
		Graduate		
11.	**Father's Occupation**	Unemployed	0	0.00
		Professional	16	53.33
		Self-employed	10	33.33
		Others	4	13.33
12.	**Family Income**	Below 5000	1	3.33
		5001–15000	6	20.00
		15001–25000	11	36.67
		25001 above	12	40.00

Table 2: Assessment of level of knowledge regarding febrile seizer among mothers with under five children with their demographic variables

S. No	Level of knowledge (*f*)	Frequency (%)	Precentage
1.	Adequate (16–20)	0	0
2.	Moderate (10–15)	17	57
3.	Inadequate (<10)	13	43

Discussion

It was evidence that febrile seizure are associated with an increased risk of subsequent epilepsy and that epilepsy develops in 2 to 4% of children with a history of febrile seizure. Although it was accepted that a single brief simple FS is benign with no clinical consequences, the risk of developing epilepsy can be as greater than 57% in children with focal, prolonged and recurrent febrile seizure.

A prospective cohort study was performed using children presenting with first febrile seizure observed that developmental delay was associated with prolonged febrile seizure. There are greater frequencies of delays in reaching developmental motor milestones at baseline in children with long versus short FS. Thus, the children with prolonged FS are more likely to be neurologically abnormal than children with single, short, nonfocal febrile seizure.

In Addition, having more than one complex feature of a febrile seizure further increased the risk of developing subsequent unprovoked seizures. Risk factors for developing epilepsy after febrile seizure include neurodevelopment abnormality, complex FS, family history of epilepsy and duration of fever there is no evidence that preventing febrile seizure prevents the development of epilepsy.[6]

The focus of the study was to assess the knowledge on febrile seizure among mothers with under five children, Hindu Mission Hospital in Pediatric out Patient department. The results reveal that 57% (17) of Mothers had moderate knowledge, 43%(13) mothers had inadequate knowledge on febrile seizure

The similar study was conducted January 2017 in Department of Paediatric of a tertiary care hospital KIMS, Bangalore. 110 children with febrile convulsion in the age group of 6 months to 5 years were enrolled. Out of 110 children, 82 had single

convulsion and 28 had recurrent convulsions. Mean age of onset of first febrile convulsion was 20 months. About 50 (45.45%) had experienced convulsion with one-episode of fever. Only 46 (41.8%) of parents recognized convulsion. Others interpreted convulsion as shivering (20.9%), evil effect (7.2%), excessive cry tantrum (10.9%), fainting spell (8.18%) and lethargy (20%). 88 (80%) did not carry out any intervention prior to getting the child to hospital. Effect of convulsion on parents was fear of death (82.7%), fear of epilepsy (17.3%), fear of recurrence (34.5%). 85% parents did not know that convulsion can occur due to fever. 32% thought that traditional treatment would help. Only 38% had thermometer at home and 23% knew the normal range of body temperature. Preventive measures were known to be 44%.[7]

Conclusion

The distinct of the study was to assess the knowledge on febrile seizure among mothers with under five children, Hindu Mission Hospital in Pediatric out Patient department. The results revealed that 57% (17) of Mothers had moderate knowledge, 43% (13) mothers had inadequate knowledge on febrile seizure. As seizures in their child could be very frightening for the parents they should be counselled properly with particular emphasis on: (*i*) The benign nature of the febrile seizures; (*ii*) That febrile seizures do not lead to neurological problems or develop-mental delay; (*iii*) What they should do immediately if their child has another seizure; (*iv*) A doctor should be consulted if the seizure lasts for more than 15 min. or if the post ictal drowsiness persists for more than 30 min. Appropriate education and emotional support should be provided to parents. In situations where severe parental anxiety is associated with febrile seizures, intermittent therapy may be advised; continuous antiepileptic therapy was rarely used. Recent epidemiologic studies have also confirmed that the vast majority of children with febrile seizures have a benign prognosis and a normal long term outcome.[8]

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A Study to Assess the Level of Knowledge Regarding Use of Personal Protective Measures among the Street Sweepers

Shubhangi Kirnapure[1], Rajeshwari Kitey[2], Sanjivani Kolhe[3], Megha Korde[4], Yunita Kose[5], Deeplata Mendhe[6]

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Author's Affiliations: [1-5]BSc Final Year Student, [6]Associate Professor and HOD, Department of Community Health Nursing, Srimati Radhikabai Meghe Memorial College of Nursing, Sawangi Meghe, Wardha, Maharashtra 442004, India.

Corresponding Author: Deeplata Mendhe, Associate Professor and HOD, Department of Community Health Nursing, Srimati Radhikabai Meghe Memorial College of Nursing, Sawangi Meghe, Wardha, Maharashtra 442004, India.

E-mail: mendhedeeplata@gmail.com

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Abstract

Background: Street Sweepers are getting exposed to hazardous dust during their work. The health profile of the street sweepers and utilization of health services are not clearly known. Street sweepers play an important role in maintaining the health and hygiene in the communities. However, their job exposes them to various hazards while, little or no attention is paid to their health status. Street sweepers exposed to hazards directly and indirectly which can affect their health. *Aims:* The aim of the study was to explore the knowledge regarding use of personal protective measures among street sweeper. *Objective of the study:* To assess the level of knowledge regarding use of personal protective measure among street sweeper, to find the association between the level of knowledge regarding use of personal protective measure among street sweeper with selected demographic variation. *Methods and Material: Research design:* Descriptive study. *Setting of the study:* Setting is the physical location and condition in which data collection takes place. The study was undertaken in selected areas of Wardha. *Sample size:* 60. *Sampling technique:* Convenient sampling. *Results:* Majority of the samples 40% are from the age groups 31–40 was, 85% were from rural areas, 46.70% of them were educated up to primary standard, subject were males and females are equal, i.e. 50%, 76.70% of the street sweepers were married, 63.30% of them were belonging to other religion, 63.30% of the street sweepers were having monthly family income of ₹5000–10000, 53.30% from 10–20 years, 65% of the street sweepers were temporary, 86.70% of the street sweepers had information regarding personal protective measures and 43.30% street sweepers had information from co-workers. The study was done to assess the knowledge regarding personal protective measures among street sweeper. The result of the study shows that majority of street sweeper 53.33% were having average knowledge, 36.67% were having good knowledge, 8.33% were having poor knowledge and 1.67% were having excellent knowledge regarding use of Personal Protective Measures. There was significant association between religion and source of information and there is no significant association between age, residential area, education, gender, marital status, monthly income, length of service, major of employment, knowledge regarding Personal Protective Measures. *Interpretation and conclusions:* The analysis and interpretation of the data are organised under 3 sections as per objective of the study.

Keywords: Street sweeper; Personal protective measure; Knowledge.

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Introduction

Personal protective wear has become essential part of every street sweeper. The need for personal protective measure has increases from the Factories Act 1948. It is designed to protect street sweeper from serious work place injuries or illness resulting from contact with chemical, radiological, physical, electrical, mechanical or other work place hazards. The type of Personal Protective Measure include safety helmet, face mask, head cap, safety shoes, goggles, gloves, fire resistant coat, ear muffs and ear plugs, dust mask, safety belts, paper nose mask for protecting head, face, eyes, hands and arms, feet and whole body. A study of the knowledge regarding usage of personal protective measure was carried out and an attempt was made to create awareness among the sweepers about its importance. Several types of protective measure such as safety helmet, safety shoes, goggles, gloves, fire resistant coats etc are being used. A questionnaire based on their use was prepared and results were tabulated. Exposure to the pathogenic microorganisms harbored in blood, body fluids and other potentially infectious material can lead to occupationally acquired infections to sweeper. Personal protective measure is designed to protect the skin and the mucous membranes of the eyes, nose, and mouth of sweeper from exposure to blood or other potentially infectious material.[1-4]

Objective of the Study

1. To assess the level of knowledge regarding use of personal protective measure among street sweeper.
2. To find the association between the level of knowledge regarding use of personal protective measure among street sweeper with selected demographic variation.

Materials and Methods

Research design: Descriptive study.

Setting of the study: Setting is the physical location and condition in which data collection takes place. The study was undertaken in selected areas of Wardha.

Sample: Sample consists of subset of population to participate in research study.

Sample size: 60,

Sampling technique: Convenient sampling is the selection of the most readily available or object as participants in study.

Plan for data analysis: Data was analyzed by using descriptive inferential statistics.

Major findings of the study: The analysis and interpretation of the data are organised under 3 sections as per objective of the study.

Section A: Distribution of street sweeper according to their demographic variables.

Section B: Assess the knowledge regarding use of personal protective measures among street sweeper.

Section C: Association of level of knowledge score regarding use of personal protective measures in relation to demographic variables

Results

Section A: Distribution of street sweeper according to their demographic variables.

Table 1 shows that majority of the samples are from the age groups 31–40 was 40%, 85% were from rural areas, 46.70% of them were educated up to primary standard, 50% of the subject were males and females, 76.70% of the street sweepers were married, 63.30% of them were belonging to other religion, 63.30% of the street sweepers were having monthly family income of ₹5000-10000, 53.30% from 10–20 years, 65% of the street sweepers were temporary, 86.70% of the street sweepers had information regarding personal protective measures and 43.30% street sweepers had information from co-workers.

Table 1: Percentage wise distribution of street sweepers according to their demographic characteristics

N = 60

Demographic Variables	No. of street sweepers	Percentage (%)
Age (years)		
18–30 years	15	25.0
31–40 years	24	40.0

(Contd.)

Demographic Variables	No. of street sweepers	Percentage (%)
41-50 years	16	26.7
≥ s1 years	5	8.3
Area of residence		
Urban	9	15.0
Rural	51	85.0
Educational Level		
Illiterate	5	8.3
Primary	28	46.7
Secondary	20	33.3
Higher Secondary	7	11.7
Others	0	0.0
Gender		
Male	30	50.0
Female	30	50.0
Marital Status		
Married	46	76.7
Unmarried	11	18.3
Divorced	2	3.3
Widow	1	1.7
Religion		
Scheduled Caste	16	26.7
Muslim	4	6.7
Hindu	2	3.3
Others	38	63.3
Monthly Income(Rs)		
₹5000–10000	38	63.3
₹10000–20000	10	16.7
₹20000–30000	11	18.3
>₹30000	1	1.7
Length of service		
1–10 years	23	38.3
10–20 years	32	53.3
20–30 years	4	6.7
≥30 years	1	1.7
Nature of employment		
Temporary	39	65.0
Permanent	21	35.0
Information regarding personal protective measures		
Yes	52	86.7
No	8	13.3
Source of information		
Family	6	10.0
Friends	16	26.7
Co-workers	26	43.3
Mass Media	12	20.0

Section B: Assess the knowledge regarding use of personal protective measures among street sweeper.

The assessment of knowledge regarding use of personal protective measures was done with Likert scale. It was found that 8.33% of the street sweepers had poor level of knowledge score, 53.33% had average level of knowledge score, 36.67% had good and 1.67% of them had excellent level of knowledge score.

Minimum knowledge score was 3 and maximum knowledge score was 16. Mean knowledge score was 9.43 ± 2.78 and mean percentage of knowledge score was 47.16 ± 13.94.

Section C: Association of level of knowledge score regarding use of personal protective measures in relation to demographic variables

There was significant association between religion and source of information and there is no significant association between age, residential area, education, gender, marital status, monthly income, length of service, major of employment, knowledge regarding Personal Protective Measures.

Discussion

A qualitative study was conducted to the knowledge regarding use of personal protective measures focus groups were used to obtain street sweeper's opinion and knowledge regarding use of personal protective measures. Sixty street sweeper of Wardha were selected. The result of the study showed street sweepers were not satisfied with the knowledge regarding use of personal protective measures.

Conclusion

The following conclusion was drawn from the findings of the present study. After the detailed analysis, this study leads to the following conclusion.

The study was done to assess the knowledge regarding personal protective measures among street sweeper. The result of the study shows that majority of street sweeper 53.33% were having average knowledge, 36.67% were having good knowledge, 8.33% were having poor knowledge and 1.67% were having excellent knowledge regarding use of Personal Protective Measures. There was significant association between religion and source of information and there is no significant association between age, residential area, education, gender, marital status, monthly income, length of service, major of employment, knowledge regarding Personal Protective Measures.

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Knowledge on Importance of Calcium and Vitamin D among Menopausal Women

Silpa P[1], T Nanthini[2]

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Author's Affiliations: [1]M.Sc. Nursing, [2]Associate Professor, Department of Community, Health Nursing, College of Nursing, Mother Theresa Post Graduate & Research Institute of Health Sciences, Gorimedu, Puducherry 605006, India.

Corresponding Author: T Nanthini, Associate Professor, Department of Community, Health Nursing, College of Nursing, Mother Theresa Post Graduate & Research Institute of Health Sciences, Gorimedu, Puducherry 605006, India.

E-mail: nandhini_lect@yahoo.co.in

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Abstract

Calcium and vitamin D are widely used therapies for osteoporosis, Vitamin D is produced in response to the action of sunlight on skin. The Efficacy of use of calcium and Vitamin D in all post-menopausal women for the prevention of fracture in uncertain. To assess the knowledge of vitamin D and calcium is most important in menopausal women to prevent its complications. *Methodology:* A quantitative research design was used for this study. A cross sectional descriptive survey was used. A total no of 60 samples were by using the purposive sampling technique. The data was collected by using structured questionnaire developed by investigator. *Results:* The major findings of the study as out of 60 subjects, Majority 38 (63.3%) of the menopausal women's had moderately adequate level of knowledge, 18 (30%) had inadequate level of knowledge and 4 (6.7%) menopausal women's had adequate level of knowledge 4 (6.7%). There was statistically significant association ($p < 0.001$) between the level of knowledge with demographc variable as age, monthly income of family and $p < 0.05$ level as source of information about Vitamin D and calcium role in menopause has significant association. *Conclusion:* It was concluded that the knowledge of menopausal women regarding Vitamin D and calcium shows that the Majority of the menopausal women's had moderate adequate level of knowledge. So the community health personal motivate the menopausal women to promote to take calcium and Vitamin D intake during menopausal period to prevent from osteoporosis and major other health problem

Keywords: Knowledge; Vitamin D and calcium; Menopausal women.

Introduction

Menarche and menopause are the turning point in the life of a woman. "Menopause is a stage of life not a disease". The menopause is the time of women's life when reproductive capacity ceases. The post menopausal period is the time following menopause and peri menopausal is a term used to denote the period during which menopausal changes are occurring. The age range at which natural menopause occurs is wide, between the age of 40–55 years.[2,3]

Vitamin D calcium deficiency prevails in epidemic proportions all over the Indian subcontinent, with a prevalence of 70%–100% in the general population. In India, widely consumed

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food items such as dairy products are rarely fortified with Vitamin D.[4] Indian socio religious and cultural practices do not facilitate adequate sun exposure, thereby negating potential benefits of plentiful sunshine. Consequently, subclinical Vitamin D deficiency is highly prevalent in both urban and rural settings, and across all socioeconomic and geographic strata. Vitamin D deficiency is likely to play an important role in the very high prevalence of rickets, osteoporosis, cardiovascular diseases, diabetes, cancer and infections such as tuberculosis in India. Fortification of staple foods with vitamin D is the most viable population based strategy to achieve vitamin D sufficiency.[5,6]

Previous studies investigating osteoporosis knowledge amongst women from adolescence to post menopausal, in countries Turkey,[7] Australia,[8] USA.[2,10] although the existence of the disease is relatively high, knowledge about prevention, treatment and severity of its consequences is poor.

Statement of the Problem

A study to assess the level of knowledge on importance of calcium and Vitamin D among menopausal women at selected area at Puducherry.

Objectives

- To assess the level of knowledge regarding Vitamin D and calcium deficiency among menopausal women
- To find out the association between the level of knowledge on Vitamin D and calcium deficiency among menopausal women with selected demographic variable.

Materials and Methods

A quantitative descriptive survey was used to assess the knowledge on importance of calcium and vitamin D among menopausal women at selected area, Puducherry. The present study consists of 60 menopausal women, Purposive sample technique was used for collecting the sample. It consist of structured questionnaire to assess the level of knowledge related to Vitamin D and calcium for menopausal women.

Results and Discussion

Table 1 showed that majority of them 33 (55%) belongs to age group of 50–60 years. 35 (58.3%) belongs to rural and 25 (41.7%) belongs to urban Residency. 37 (61.7%) belongs to age of menopause between 45–50 years. and 23 (38.7%) between the age group of 51–55 years. The Source of Information about Vitamin D and calcium role in Menopausal as by Neighbours 20 (33.3%), Mass media 15 (25%) and 9 (15%) from family members.

Table 1: Frequency and percentage wise distribution of demographic variable among menopausal women

N = 60

S. No	Demographic variables	Frequency (N)	Percentage (%)
1	**Age**		
	40–50 years	27	45.0
	50–60 years	33	55.0
2	**Residential area**		
	Urban	25	41.7
	Rural	35	58.3
3	**Educational status**		
	High school	31	51.7
	Higher secondary	12	20.0
	Collegiate level	2	3.3
	Nil	15	25.0
4	**Occupation**		
	Home maker	42	70.0
	Private employee	13	21.7
	Government employee	5	8.3
5	**Monthly income of family**		
	₹5000-7000	31	51.7
	₹7001-15000	9	15.0
	More than ₹20000	20	33.3

S. No	Demographic variables	Frequency (N)	Percentage (%)
6	**Marital status**		
	Married	50	83.3
	Unmarried	10	16.7
7	**Age of menopause**		
	45–50 years	37	61.7
	51–55 years	23	38.3
	56–60 years	0	0.0
8	**Source of information about Vitamin D and calcium role in menopause**		
	Mass media	15	25.0
	Neighbours	20	33.3
	Family members	9	15.0
	Nil	16	26.7

Table 2 showed that 38 (63.3%) of the menopausal women's had moderately adequate level of knowledge, 18 (30%) had inadequate level of knowledge and 4 (6.7%) menopausal women's had adequate level of knowledge 4 (6.7%).

Table 2: Frequency and percentage wise distribution of assessment of the level of knowledge on importance of calcium and Vitamin D among menopausal women

N = 60

Level of Knowledge	Frequency (*N*)	Percentage (%)	Mean	Standard Deviation
Inadequate	18	30		
Moderate adequate	38	63.3	1.766	0.5634
Adequate	4	6.7		

Table 3 showed the association between the level of the knowledge among menopausal women in with their demographic variables. There was statistically significant between the level of knowledge ($p < 0.001$) with demographic variables as monthly income of family and $p < 0.05$ with the source of information about Vitamin D and calcium role in menopause.

Table 3: Association between the assessment of the level of knowledge among menopausal women with demographic variables

N = 60

S. No	Demographic variables	Level of knowledge						X^2	Df	*p*-value
		Inadequate		Moderately Adequate		Adequate				
		N	%	N	%	*N*	%			
1	**Age**									
	40–50 years	7	25.9	19	70.4	1	3.7	18.1	4	**0.001****
	50–60 years	11	33.3	19	57.6	3	9.1			
2	**Residential area**							2.34	2	0.309
	Urban	6	24	16	64	3	12			
	Rural	12	34.3	22	62.9	1	2.9			
3	**Educational status**							2.48	6	0.870
	High school	11	35.5	18	58.1	2	6.5			
	Higher secondary	4	33.3	7	58.3	1	8.3			
	Collegiate level	0	0	2	100	0	0			
	Nil	3	20	11	73.3	1	6.7			

(Contd.)

S. No	Demographic variables	Level of knowledge						X^2	Df	*p*-value
		Inadequate		Moderately Adequate		Adequate				
		N	%	N	%	*N*	%			
4	**Occupation**							4.70	4	0.319
	Home maker	13	31	25	59.5	4	9.5			
	Private employee	5	38.5	8	61.5	0	0			
	Government employee	0	0	5	100	0	0			
5	**Monthly income of family**							10.3	4	0.**035***
	₹5000–7000	12	38.7	19	61.3	0	0			
	₹7001–15000	3	33.3	6	66.7	0	0			
	More than ₹20000	3	15	13	65	4	20			
6	**Marital status**							1.22	2	0.543
	Married	14	28	32	64	4	8			
	Unmarried	4	40	6	60	0	0			
7	**Age of menopause**							0.788	2	0.674
	45–50 years	10	27	25	67.6	2	5.4			
	51–55 years	8	34.8	13	56.5	2	8.7			
	56–60 years	0	0	0	0	0	0			
8	**Source of information about Vitamin D and calcium role in menopause**							14.2	6	0.026*
	Mass media	8	53.3	7	46.7	0	0			
	Neighbors	6	30	14	70	0	0			
	Family members	3	33.3	4	44.4	2	22.2			
	Nil	1	6.2	13	81.2	2	12.5			

*-$p < 0.05$, significant and **-$p < 0.001$, highly significant

Discussion

A study was conducted to assess the knowledge on importance of calcium and Vitamin D among menopausal women in Lawspet at Puducherry with the objectives of to assess the knowledge regarding Vitamin D and calcium deficiency among menopausal women, to find out the association between the level of knowledge on Vitamin D and calcium deficiency among menopausal women with selected demographic variables.

The study findings shows that majority of them 33 (55%) belongs to age group of 50–60 years. 35 (58.3%) belongs to rural and 25 (41.7%) belongs to urban Residency, 37 (61.7%) belongs to age of menopause between 45–50 years. and 23 (38.7%) between the age group of 51–55 years. Source of Information about Vitamin D and calcium role in Menopausal Neighbours 20 (33.3%). Nil1 6 (26.7%) Mass media 15 (25%) and 9 (15%) from family members.

The first objectives of the study to assess the knowledge regarding Vitamin D and calcium deficiency among menopausal women Majority 38 (63.3%) of the menopausal women's had moderately adequate level of knowledge, 18 (30%) had inadequate level of knowledge and 4 (6.7%) menopausal women's had adequate level of knowledge 4 (6.7%).

The supported previous study is Pamela R von Hurt (2007) conducted descriptive study on Attitude and knowledge about osteoporosis risk prevention :a survey of New Zeland women, used 622 sample, result showed that there was moderate level of knowledge about osteoporosis risk factors among the women surveyed. A large percentage of subjects 77% thought that the calcium rich food contained too much cholesterol.[6]

Second objectives to find out the association between the level of knowledge on Vitamin D and calcium deficiency among menopausal women with selected demographic variables. There was statistically significant association at the level of $p < 0.001$ between the level of knowledge with demographc variable as age, monthly income of family and Source of information about Vitamin D and calcium role in menopause has significant association at the level of $p < 0.05$.

Conclusion

From this study, it was concluded that the knowledge of menopausal women regarding Vitamin D and calcium showed that the Majority of the menopausal women's had moderate adequate level of knowledge 38 (63.3%), 18 (30%) had inadequate level of knowledge and very less number of the menopausal women's had adequate level of knowledge 4 (6.7%). So the community health personal motivate the menopausal women to promote to take calcium and Vitamin D intake during menopausal period to prevent from osteoporosis and major other health problems.

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Sd/-

(Dinesh Kumar Kashyap)

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Effectiveness of Planned Teaching Programme on Knowledge Regarding Cirrhosis of Liver among Alcoholic Adult Males Residing in Selected Areas

Pallawi Bharat Narnaware[1], David Pascaline Johan[2], Sukare Lata V[3]

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Author's Affiliations: [1]M.Sc. Nursing, [2]Associate Professor, Professor and HOD, Department of Medical Surgical Nursing, V.S.P.M. Madhuribai Deshmukh Instiitute of Nursing Education, Digdoh Hills, Hingna Road, Nagpur, Maharashtra 440019, India.

Corresponding Author: Pallawi Bharat Narnaware, M.Sc. Nursing, Department of Medical Surgical Nursing, V.S.P.M. Madhuribai Deshmukh Instiitute of Nursing Education, Digdoh Hills, Hingna Road, Nagpur, Maharashtra 440019, India.

E-mail: pallawinarnaware@gmail.com

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Abstract

Introduction: The liver is the largest gland of the body, can be considered a chemical factory that manufactures, stores, alters, and excretes a large number of substances involved in metabolism. Cirrhosis is a chronic progressive disease of the liver characterized by extensive degeneration and destruction of the liver parenchymal cells. According to the National Institutes of Health (NIH), cirrhosis is the 12th leading cause of death due to disease in the United States. It's more likely to affect men than women. It is becoming more and more common with about 10 lakh new patients being diagnosed with liver cirrhosis every year in India alone. Excessive alcohol ingestion is the single most common cause of cirrhosis because alcohol has a direct hepatotoxic effect. *Background:* 'Alcoholic' is a term used to describe someone who suffers from alcoholism. According to the World Health Organization (WHO), globally, "3.3 million deaths every year result from harmful use of alcohol." Cirrhosis occur with greatest frequency among people with alcoholism. *Objective:* To assess the pre-test knowledge regarding cirrhosis of liver among alcoholic adult males. To assess the post-test knowledge regarding cirrhosis of liver among alcoholic adult males. To evaluate the effectiveness of Planned Teaching Programme on knowledge regarding cirrhosis of liver among alcoholic adult males. To associate the knowledge score with selected demographic variables. *Methodology:* This study was based on Quantitative approach. The research design used in this study was Pre experimental one group pre-test and post-test design. The sampling technique used in the study was non probability purposive sampling and sample size of 60 alcoholic adult males (Above the 18 years). *Result:* The analysis reveals that post-test mean knowledge score value whish was higher 16.95 with SD of ± 2.09 when compared with pre-test mean knowledge score value which was 6.08 with SD of ± 2.35. The calculated *t*-value 31.43 is greater than table value 2.00 at 0.05 level of significance. Thus the H_1 is accepted and H_0 is rejected. *Conclusion:* The study concluded that planned teaching programme was effective in improving knowledge regarding cirrhosis of liver among alcoholic adult males. age, marital status, areas of residence and monthly family income was associated with the knowledge of alcoholic adult males regarding cirrhosis of liver.

Keywords: Assess; Effectiveness; Knowledge; Cirrhosis of Liver; Alcoholic Ault Males.

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Introduction

The liver is the largest gland of the body, can be considered a chemical factory that manufactures, stores, alters, and excretes a large number of substances involved in metabolism. The location of liver is essential in this function because it receives nutrients–rich blood directly from the gastrointestinal (GI) tract and then either stores or transforms these nutrients into chemicals that are used elsewhere in the body for metabolic needs.[1]

Cirrhosis is a chronic progressive disease of the liver characterized by extensive degeneration and destruction of the liver parenchymal cells. The liver cells attempt to regenerate, but the regenerative process is disorganized, resulting in abnormal blood vessel and bile duct architecture. The over growth of new and fibrous connective tissue distorts the liver's normal lobular structure, resulting in irregular size and shape with impeded blood flow. Eventually, irregular, disorganized regeneration; poor cellular nutrition; and hypoxia caused by inadequate blood flow and scar tissue result in decreased functioning of the liver. Cirrhosis may have insidious, prolonged course.[2]

According to the National Institutes of Health (NIH), cirrhosis is the 12th leading cause of death due to disease in the United States. It's more likely to affect men than women.[3]

It is becoming more and more common with about 10 lakh new patients being diagnosed with liver cirrhosis every year in India alone.[4]

Alcohol related deaths and deaths caused by diseases due to alcoholism are a major cause for concern in the country. In 2012 alone about 3.3 million deaths in India were attributed to alcohol consumption. This amounts to some 5.9 percent of the global deaths that year. Most doctors and health agencies have repeatedly warned Indians of the disastrous health effects of alcohol consumption. Alcoholism is one of the leading causes of liver cirrhosis and failure.[5]

Excessive alcohol ingestion is the single most common cause of cirrhosis because alcohol has a direct hepatotoxic effect. There continues to be some controversy as to whether the cause is the alcohol or the malnutrition that frequently coexists with chronic ingestion of alcohol.[2]

Background and Need of the Study

'Alcoholic' is a term used to describe someone who suffers from alcoholism. According to the World Health Organization (WHO), globally, "3.3 million deaths every year result from harmful use of alcohol."[6]

Cirrhosis occur with greatest frequency among people with alcoholism. Although nutritional deficiency with reduced protein intake contribute to liver destruction in cirrhosis excessive alcohol intake is the major causative factor in fatty liver and consequences.[1]

Alcoholism, also known as alcohol use disorder (AUD), is a broad term for any drinking of alcohol that results in mental or physical health problems. The World Health Organization estimates that as of 2010 there were 208 million people with alcoholism worldwide (4.1% of the population over 15 years of age).[7]

Cirrhosis affected about 2.8 million people and resulted in 1.3 million deaths in 2015. Of these, alcohol caused 348,000, Hepatitis C caused 326,000, and Hepatitis B caused 371,000. In the United States, more men die of cirrhosis than women.[8]

Brij Sharma, Rishab Marwah, Sujeet Raina, Neetu Sharma, Madan Kaushik, Satinder Singh Kaushal, have conducted a study on the etiology of cirrhosis of liver in adults living in the Hills of Himachal Pradesh, India, Cirrhosis of the liver is an important cause of morbidity and mortality in India. The purpose of this study was to evaluate epidemiological data on the etiological profile of cirrhosis of the liver in adults in a tertiary care hospital in a northern hilly state of Western Himalayas. A hospital based, cross sectional, observational study was conducted in the department of Medicine and Gastroenterology in a tertiary care centre of Himachal Pradesh, located in northern India from 1st June, 2012 to 31st May, 2013. In total, 178 patients who were diagnosed with cirrhosis on the basis of history, physical examination, biochemistry and radiology, and of age >18 years were included in the study. Detailed history, examination and investigations were carried out in each case as per protocol. Alcohol was the leading cause of cirrhosis in our study (62.9%), Hepatitis B was the second (10.1%), Non-Alcoholic Steatohepatitis (NASH) was the third (7.9%), and autoimmune the fourth (3.9%) most common cause for cirrhosis. Hepatitis C was present in 2.8% of patients as a cause of cirrhosis. Wilson disease and cardiac cirrhosis were present in one patient each. In 9.6% the etiology was cryptogenic. The study identified alcohol as the leading cause of cirrhosis among people in the state. Measures for taking care of preventable risk factors are desired.[9]

Problem Statement

"An experimental study to assess the effectiveness of Planned Teaching Programme on knowledge regarding cirrhosis of liver among alcoholic adult males residing in selected areas of the city."

Objectives

1. To assess the pre-test knowledge regarding cirrhosis of liver among alcoholic adult males.
2. To assess the post-test knowledge regarding cirrhosis of liver among alcoholic adult males.
3. To evaluate the effectiveness of Planned Teaching Programme on knowledge regarding cirrhosis of liver among alcoholic adult males.
4. To associate the knowledge score with selected demographic variables.

Operational Definition

Assess: In this study assess means, the organized systematic continuous process of collecting data from alcoholic adult males regarding cirrhosis of liver.

Effectiveness: In this study effectiveness means, the desired changes brought about by the planned teaching programme on knowledge regarding cirrhosis of liver.

Planned teaching programme: In this study planned teaching programme means, systematically providing information regarding cirrhosis of liver among alcoholic adult males.

Knowledge: In this study knowledge means, responses obtained from the alcoholic adult males regarding their knowledge on cirrhosis of liver.

Cirrhosis of liver: In this study the cirrhosis of liver means, is a chronic degenerative disease in which normal cells are damaged and are then replaced by scar tissue.

Alcoholic Adult males: In this study alcoholic adult males means the males who are consuming alcohol every day and who are above 18 years of age.

Delimitation: Present study is delimited to alcoholic adult males residing in selected areas.

Hypothesis: Is tested at 0.05 level of significance

- H_0: there will be no significant difference between pre and post-test level of knowledge score regarding cirrhosis of liver among alcoholic adult males.
- H_1: there will be significant difference between pre and post-test knowledge score regarding cirrhosis of liver among alcoholic adult males.

Conceptual Framework

The conceptual framework selected for the study was based on Ersestine Wiedenbanch's Prespective Theory.

Review of Literature

In the present study the literature reviewed has been organized into the following categories:

1. Literature related to cirrhosis of liver.
2. Literature related to adult males knowledge on cirrhosis of liver.
3. Literature related to effectiveness of planned teaching programme.

Materials and Methods

Research approach: Quantitative research approach

Research design: Pre experimental one group pre-test and post-test research design

Setting of the study: Selected areas of the city

Variables:

Independent variables: Planned teaching programme on knowledge regarding cirrhosis of liver.

Dependent variables: Knowledge regarding cirrhosis of liver among alcoholic adult males.

Demographic variables: Age, marital status, Religion, Area of residence, Education status, Occupation, Types of family, Monthly family income, Consuming alcohol since, Frequency of alcohol consumption per day, awareness of cirrhosis of liver, sources of information.

Population:

Target population: All alcoholic adult males residing in selected areas.

Accessible population: Alcoholic adult males residing in selected areas of the city who were available at the time of data collection and who were fulfilling the inclusive criteria.

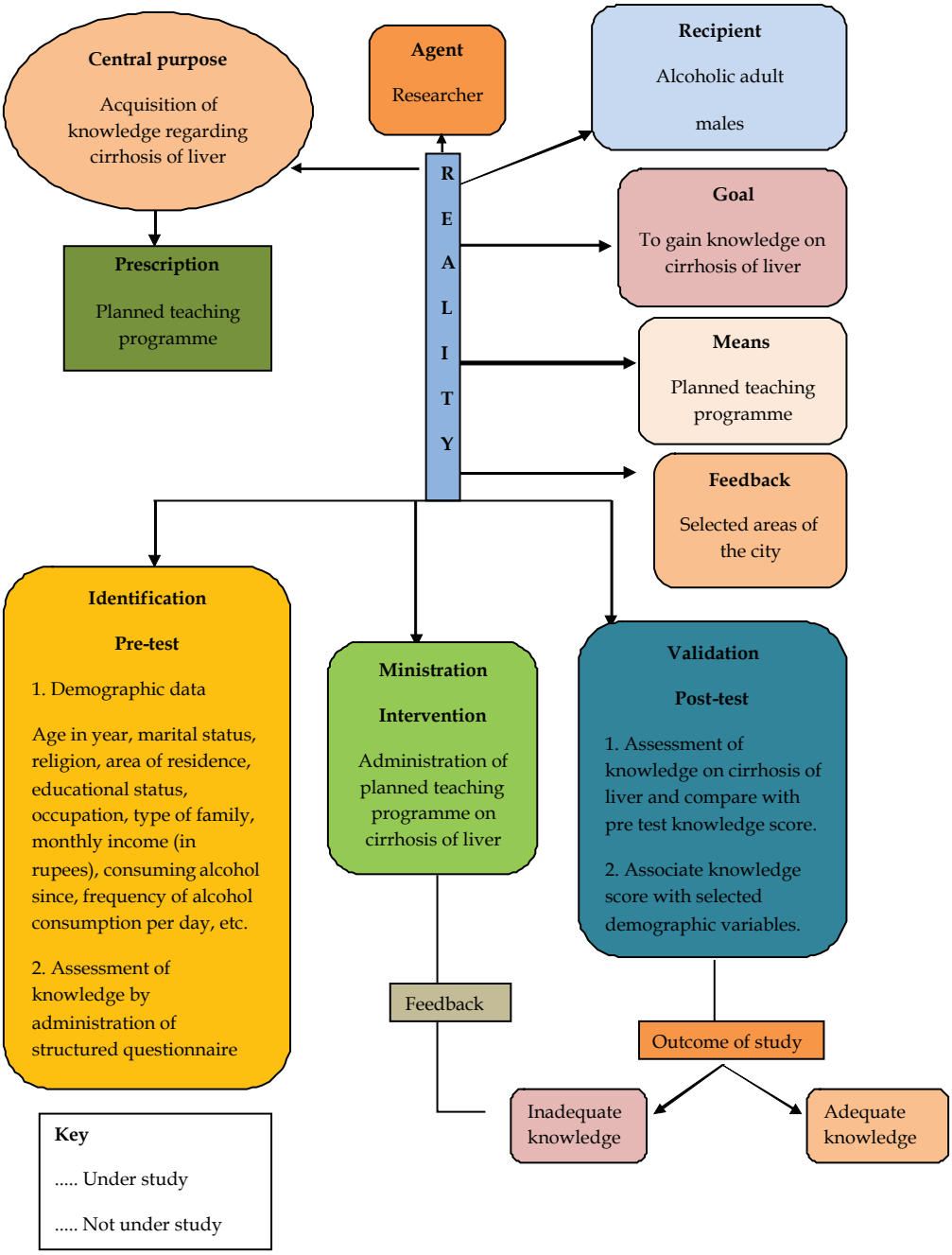

Fig. 1: Conceptual framework based on modified Widenbench perception theory.

Sample size: 60 alcoholic adult males

Sampling technique: Non probability purposive sampling technique.

Sampling Criteria:

Inclusive criteria: Inclusive criteria was, alcoholic adult males who are;

1. Above the 18 years of age
2. Able to read and write Hindi, English and Marathi
3. Willing to participate in study
4. Available at the time of data collection

Exclusion criteria: Exclusive criteria was, alcoholic adult males who are;

1. Less than 18 years of age

Tool and Technique of Data Collection

The tools used in this study consist of two sections

Section I

A Semi structured questionnaire on

demographic Variable.

B Semi structured questionnaire on medical data.

Section II

- Self structured Knowledge Questionnaires
- Self structured questionnaire on knowledge regarding cirrhosis of liver consist of 25 questions.
- Planned teaching programme

Validity: For the content and construct validity of the tool was determine by 20 experts; including medical-surgical nursing specialist, MD medicine, statistician etc.

Reliability: Karl Pearson's correlation coefficient formula was used. The correlation coefficient '*r*' of the questionnaire was 0.899, which is more than 0.8. Hence the questionnaire was found to be reliable.

Pilot Study: Permission was taken from concern authority. Pilot study was conducted from 04-11-18 to 11-11-18 for a period of 7 day. A sample of 6 alcoholic adult males was selected from the residential areas. The pilot study was feasible in term of time, money, material and resources.

Data Collection: The main study data was gathered from 12th December 2018 to 5th January 2019 Permission was obtained from the Sarpanch of concerned gram panchayat. The samples were approached in small group on a daily basis. Before giving the questionnaire self introduction was given by the investigator and the purpose of the study mentioned. Consent of the samples were taken. The pre-test questionnaire were distributed and collected back after 37 minutes. After collecting the pre-test score, the investigator administrated the treatment (planned teaching programme on cirrhosis of liver). After 7 days post-test was taken on the same subjects.

Results

Section I: Description on demographic variables of alcoholic adult males

After analysis of demographic variable of the sample the majority of sample 36.7% were 28-37 years age group, 63.3% were married, 50% were Hindu, the area of residence was equal 50% from Rural and 50% from urban, 48.3% were primary education, 35% were private service, 60% were lived in nuclear family, 63.3% had family monthly income between ₹10,001-15,000, 35% were period of consuming alcohol between 5-10 years, 45% were frequency of consuming alcohol per day one, 11.7% were aware of cirrhosis of liver, 71.4% the source of information were health worker.

Section II: Description on pre-test knowledge of alcoholic adult males regarding cirrhosis of liver

Section III: Description on the post-test knowledge of alcoholic adult males regarding cirrhosis of liver

Section IV: Description on the effectiveness of planned teaching program on knowledge of alcoholic adult males regarding cirrhosis of liver.

Section V: Description on association of knowledge scores with selected demographic variables.

Analysis revel that there is association of knowledge score with age, marital status, areas of residence, monthly family income and there is no association of knowledge score with any other demographic variable of alcoholic adult males.

Table 1: Table showing frequency and percentage wise distribution of alcoholic adult males according to their demographic characteristics

N = 60

S. No	Demographic Variables		Frequency (*f*)	Percentage (%)
1	**Age (in years)**	18–27 years	16	26.7
		28–37 years	22	36.7
		38–47 years	14	23.3
		≥48 years	8	13.3
2	**Marital Status**	Married	38	63.3
		Unmarried	19	31.7
		Divorced	2	3.3
		Separated	0	0.0
		Widower	1	1.7

(Contd.)

S. No	Demographic Variables		Frequency (*f*)	Percentage (%)
3	**Religion**	Hindu	30	50.0
		Muslim	2	3.3
		Christian	0	0.0
		Buddhist	22	36.7
		Others	6	10.0
4	**Area of residence**	Rural	30	50.0
		Urban Slum	0	0.0
		Urban	30	50.0
5	**Educational Status**	Primary	29	48.3
		Secondary	23	38.3
		Graduation	8	13.3
		Post Graduation	0	0.0
		Any other	0	0.0
6	**Occupational Status**	Govt. Service	4	6.7
		Pvt. Service	21	35.0
		Unemployed	4	6.7
		Self Employed	10	16.7
		Labourer	16	26.7
		Other	5	8.3
7	**Type of family**	Nuclear	36	60.0
		Joint	22	36.7
		Extended	2	3.3
8	**Monthly family income (₹)**	<₹10000	13	21.7
		₹10001–15000	38	63.3
		₹15001–20000	5	8.3
		≥₹20001	4	6.7
9	**Period of consuming alcohol**	<1 years	4	6.7
		1–5 years	15	25.0
		5–10 years	21	35.0
		>10 yrs	20	33.3
10	**Frequency of consuming alcohol per day**	One	27	45.0
		Two	18	30.0
		Three	11	18.3
		Four	4	6.7
11	**Awareness about cirrhosis of liver**	Yes	7	11.7
		No	53	88.3
12	**Source of information (*n* = 7)**	Family	1	14.3
		Friends	1	14.3
		Relatives	0	0.0
		Health Workers	5	71.4
		Mass Media	0	0.0
		Any Other	0	0.0

Table 2: Table showing comparison of pre-test and post-test grading score

N = 60

Grading	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Excellent	0	0.00	2	3.33
Very Good	0	0.0	41	68.33
Good	2	3.33	17	28.33
Average	37	61.67	0	0.00
Poor	21	35.00	0	0.00

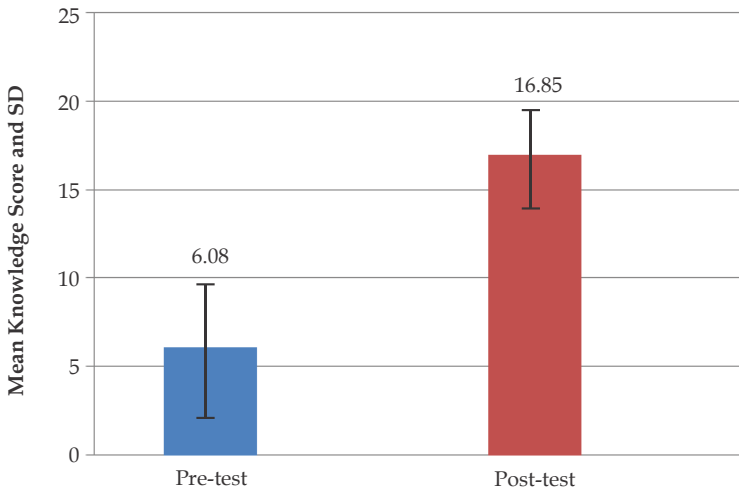

Fig. 2: Bar diagram representing effectiveness of planned teaching programme in knowledge score of pre-test and post-test of alcoholic adult males regarding cirrhosis of liver.

Discussion

Mr. Shivappa Maranabasari, M.Sc (N), have conducted a study to assess the knowledge on dietary management among patients with cirrhosis of liver The Study was conducted at Victoria Hospital, Lady Curzon & Bowring Hospital. The study involved Pre Experimental one group pre-test and post-test design, and purposive sampling technique was used to draw the samples 50 patients with cirrhosis of liver were interviewed using structured interview schedule. The study revealed that, Majority 33 (66%) of the respondents were in the age group of 35–54 years, 44 (88%) of the respondents were males. Majority of the respondents 42 (84%) were consuming alcohol. 44 (88%) of the respondents have no family history of hepatitis, 35 (70%) of the respondents have 0–12 months of duration of present illness. Regarding effectiveness of planned teaching programme, the overall mean per cent knowledge score in the pre-test was 38.80% and 72.60% in the post-test. The statistical paired *t*-test was significant at 5 percent level for all the aspects under study. There was no significant association between the knowledge scores and selected demographic variables except with age, and type of diet at 5% level ($p < 0.05$). The overall findings of the study clearly showed that the planned teaching programme was significantly effective in improving the knowledge scores of patients with cirrhosis of liver regarding dietary management.[11]

In above study it is shown that planned teaching programme was effective in increasing the knowledge of patient with cirrhosis of liver. In present study also planned teaching programme was effective in improving the knowledge of alcoholic adult males regarding cirrhosis of liver as post-test score was greater than pre-test in both study.

Smt. Radhikabai Meghe, M.Sc. Nursing, Department of Medical Surgical Nursing (February-2018), have conducted a study to assess the knowledge regarding alcohol induced cirrhosis of liver among male in selected rural area and to associate the knowledge score with selected demographic variables. Descriptive research approach was used in this study, among 60 male in rural area of Wardha. Structured knowledge questionnaire were used to collect the data. In this study from detail analysis it shows that (18.33%) had poor level of knowledge, (30%) were having average level of knowledge and (11.67%) were having good level of knowledge score and (40%) were having very good level of knowledge and (0%) were having excellent knowledge level. the mean score was 7.43 ± 2.410 and mean percentage of knowledge was 49.53. Only age and types of educational status significant association with demographic variable.[11]

Above study reveals that age and educational status was associated with the level of knowledge. While in present study also association was found between age, marital status, areas of residence, monthly family income.

Conclusion

The study reveals mean pre-test knowledge score was 6.08 and the mean post-test knowledge

score was 16.95. The calculated *t*-value 31.43 is greater than tabulated value 2.00 at 0.05 level of significance. Hence it is statistically interpreted that planned teaching program on knowledge regarding cirrhosis of liver was effective. Thus the H_1 is accepted and H_0 is rejected. Analysis also reveal that there is association of knowledge score with age, marital status, areas of residence, monthly family income while none of the other demographic variables were associated with knowledge score.

Implication of the Study

The findings of this study have implications for nursing practice, nursing education, nursing administration, and nursing research

Nursing Practice

- Health care services are an essential component of community health care nursing, the role of the personnel is to conduct the project and participate in national programs to update the knowledge regarding cirrhosis of liver among alcoholic adult males.
- It will also help the nurses to keep update knowledge regarding various aspects of cirrhosis of liver.
- When professional liability is recognized, it defines the parameters of the profession and the standards of professional conduct. Nurses should therefore enhance their professional knowledge.
- The planned teaching programme can be used for imparting knowledge regarding various aspects of cirrhosis of liver to health team members.
- Planned teaching programme would serve as a ready reference material for the health team members. The information is particularly useful for the nurses for educating the alcoholic adult males and other health team members the benefits of cirrhosis of liver.
- The study will help the nurses for coordinating health care services to health care professionals.

Nursing Education

- Nurse who are up to date with the knowledge regarding cirrhosis of liver are the better person to impart their knowledge to the nursing student which will ultimately update the knowledge regarding cirrhosis of liver.
- Now a day, much emphasis is given on comprehensive care in the nursing curriculum. So this study can be used by nursing teachers as an informative illustration for nursing students.
- Planned teaching programme could help educators to use it as a tool for teaching.
- Students must be given clinical field assignment, in which they must be given opportunity to interact with people and create awareness regarding cirrhosis of liver.
- Teacher training programs must also include the topic of cirrhosis of liver.

Nursing Administration

- Findings of the study can be used by the Nursing Administrator in creating policies and plans for providing education to the staff nurses and health professionals.
- It would help the nursing administrators to be plan and organize in giving continuing education to the nurses and to others for applying and updating the knowledge regarding cirrhosis of liver.
- In-service education must be conducted for the nurses to create awareness regarding cirrhosis of liver.
- The result of the study contributes to the body of knowledge of nursing.

Nursing Research

- The findings of the study have added to the existing body of the knowledge on cirrhosis of liver which will enhance the knowledge and would help to keep it updated.
- Other researchers may utilize the suggestions and recommendations for conducting further study.
- The tool and technique used has added to the body of knowledge and can be used for further references.

Limitation

- The sample size was small to generalize the findings of the study.
- The study was limited to measure the knowledge of alcoholic adult males residing in selected areas of the city.
- The tool for data collection was prepared by investigator herself. Standardized tool was not used.

Recommendations

- A similar study can be replicated on a larger population for a generalization of findings.
- A Study may be conducted to evaluate the effectiveness of planned teaching program versus information booklet on cirrhosis of liver.
- A comparative study can be done to assess the knowledge of cirrhosis of liver in rural and urban areas.
- A descriptive study can be conducted on the awareness of cirrhosis of liver among alcoholic adult males.
- A similar study can be carried out to evaluate the effectiveness of video assisted teaching programme on cirrhosis of liver.

Source of support: Nil

Acknowledgement: I give all thanks to God, for the constant blessings to me for the successfully completion of my research work. My sincere gratitude and respect to my Research Guide, Mrs. Pascaline David, Associate Professor, for her expert advice. My deepest appreciation to Mrs. Lata Sukare, Professor, for her valuable suggestions. My deep and sincere gratitude to my family my father Mr. Bharat Maroti Narnaware and my mother Mrs. Manorama Narnaware and my brother Mr. Abhay Narnaware for their continuous and unparalleled love, help and support and affection which they gave to see that I successfully complete my Masters degree. I thank all the experts who validated my tool. I thank the participants who spent their valuable time and energy to help make this research study successful.

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Occupational Stress and Yoga

S Suganthra Devi[1], Karaline Karunagiri D[2]

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Author's Affiliations: [1]Research Scholar, [2]Principal, Rani Meyyammai College of Nursing, Annamalai University, Chidambaram, Tamil Nadu 608002, India.

Corresponding Author: Karaline Karunagiri D, Principal, Rani Meyyammai College of Nursing, Annamalai University, Chidambaram, Tamil Nadu 608002, India.

E-mail: oprcon09@gmail.com

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Abstract

All the people round the world need to work hard to meet their daily needs which circumstances affect individual's physical and mental condition that leads to the reduction of individual's life qualities. Job stress was identified as an upcoming stressors that provoke for many physical, mental and social irrational consequences. Occupational stress is related to one's job which is a result of unexpected responsibilities and pressures that do not align with a person's knowledge, skills, or expectations, inhibiting his ability to cope. Job stress results from various interactions of the worker and the environment of the work they perform their duties. Location, gender, environment, and many other factors contribute to cause of stress. A combination of organizational change and stress management is useful in preventing stress at work and hence both the organizations and employees role in working out the strategies to overcome the occupational stress is crucial.

Keywords: Occupational stress; Workplace; Employee; Yoga; Mudras.

Introduction

Hard work among the People to meet their daily needs affect their physical and mental health resulting in reduction of their quality of life. Job stress was identified as emerging stressors which provokes for many physical and mental health consequences. It could be by overwhelming burdened of daily commitments or by a sense of social isolation; by feel sense of life's pointlessness or inundated for vague anxiety. Occupational stress is currently one of the most costly occupational health issues Cooper & Cart-wright (1994).

About one-third of all type workers reports high levels of stress due to personal reason and work environment. 20–30% of different sector workers reported that work-related stresses affect their physical and mental health.

Occupational Stress[1]

Occupational stress is defined as stress related to one's job Occupational stress results from unexpected job or other responsibilities and pressures in work environment that do not align with his knowledge, skills, expectations which inhibit his ability to cope with it. The International Labour Organization (ILO) considers occupational stress as one among the emerging health threat for employees which needs immediate attention.

World Health Organization (WHO) defines occupational stress as health problems with low motivation and low safety which has negative impacts on employees exposed to stress at work place and consequently, considerable unwanted costs for the employers.

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National Institute for Occupational Safety and Health (NIOSH) define occupational stress as "any harmful physical or mental response, occurring due to individual's incompatibility with his/her ability," which might lead to aggressive behaviors, occupational injuries, physical diseases and even to death

Causes of Occupational Stress[5]

Job stress results from various interactions between the worker and their work environment. Causes of occupational stress includes:

1. *Working conditions:* Stressful working conditions.
2. *Workload:* Quantitative, Qualitative and under load of work load.
3. *Long hours:* Increased working hours more than 40 hours per week.
4. *Status:* Status or level of a person like less powerful employees suffers more stress than powerful employees.
5. *Economic factors:* Economic factors like Pressure from investors, lack of trade and professional unions and Inter-company rivalries leading to workplace stress
6. *Workplace bullying:* Due to unwanted threat to employee's professional status, personal status, isolation among workers, inter–company rivalries.
7. *Workplace conflict:* It includes interpersonal conflict and role conflict of employees at work environment.[5]
8. *Sexual harassment:* Direct & indirect Women Sexual harassment at work place
9. *Occupational group:* Lower occupational groups are at higher risk of work-related ill health than higher occupational groups.
10. *Toxic work Environment:* Due to the nature of production or manufacture.
11. Negative Workload
12. Isolation and difficult relationships with administrators and/or coworkers

Effects of Occupational Stress

Occupational stress has negative effects on both organizations and for the employers. Occupational stress is the cause of 40% of turnover and 50% of workplace absenteeism Stressful working conditions results in behavioral, physical & psychological effects.

I. *Behavioral Effects:* Includes frequent absenteeism, poor decision making, accidents, organizational breakdown or even sabotage.
II. *Physical Effects:* Includes fatigue, headache, stomach upset, Body pain, gain or loss of weight, chronic mild illness, sleep disturbances and development of several chronic health problems like cardiovascular disease, musculoskeletal disorders& etc.
III. *Psychological Effects:* It include anxiety, irritability, alcoholism, feeling powerless and low morale.

Prevention of Occupational Stress

A combination of organizational change and stress management is useful approach for preventing stress at work & work place. Some among preventive measures includes.

- Ensuring employees workload with their capabilities and resources.
- Designing jobs to provide opportunities to use their skills.
- Clearly defining workers' roles and responsibilities.
- Giving workers opportunities to participate in important work decisions
- Improving the communication skill in work environment.
- Provide more opportunities for social interaction among workers.
- Avoid workplace discrimination at work place.
- Introducing a participative leadership style to involve as many subordinates as possible to resolve stress-producing problems.
- Encourage work-life balance through frequent counselling.
- Encouraging the workers to follow relaxation techniques like Yoga therapy, meditation, listening music, etc.

Yoga and Occupational Stress[6-9]

Yoga treat human indispositions as naturally as

possible, to alleviate pain and suffering through set of exercises, both physical and mental. Its primary aim is to restore simplicity and peace of mind free from confusion and distress. It gently rejuvenates the body. Few among the yoga to counteract against stress is

- **Pranayama (like** Naadisuthi and Bramari)
- **Muthras (**Apana vayu mudra and Varuna Mudra)
- **Meditation (Meditation** is a precise technique for resting the mind and attaining a state of consciousness, totally away from the normal waking state making us relaxed and inwardly focused. Best suitable type of meditation to relieve stress is Mindfulness meditation, Chocolate meditation and 5-Minutes meditation.[2–4]

Fig. 1: Apana vayu mudra.

Fig. 2: Varuna mudra.

Fig. 3: Naadisuthi pranayama.

Fig. 4: Brahmari pranayama.

Conflict of intrest: Nil

Ethical clearance: Obtained

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Novel Corona Virus: An Alarming Problem

P Jayanthi

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Author's Affiliations: Vice Principal, Shri Sathya Sai College of Nursing, Sri Balaji Vidyapeeth University, Ammapettai, Nellikuppam, Chengalpattu District, Tamil Nadu 603108, India.

Corresponding Author: P Jayanthi, Vice Principal, Shri Sathya Sai College of Nursing, Sri Balaji Vidyapeeth University, Ammapettai, Nellikuppam, Chengalpattu District, Tamil Nadu 603108, India.

E-mail: jayanthiarul2011@gmail.com

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Abstract

Novel corono virus is a very serious public health threat. Corona virus infection is a zoonotic viral disease. Centers for Disease Control and Prevention (CDC) reported that illnesses have ranged from people with little to no symptoms. The signs of infection include fever, cough, shortness of breath and difficulty in breathing. There is currently no vaccine to prevent coronovirus infection. The best way to prevent infection is to avoid being exposed to this virus.

Keywords: Novel corono virus; Middle east respiratory syndrome coronovirus; Severe acute respiratory syndrome corona virus.

Introduction

Novel corono virus is a very serious public health threat. Corona virus infection is a zoonotic viral disease. Corono viruses were first identified in the 1960s. They got this name because of their crown like shape. Coronavirus belongs to a large family of viruses and commonly found in many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between people such as with MERS (Middle East Respiratory Syndrome Coronovirus), SARS (Severe Acute Respiratory Syndrome corona virus), and now with 2019 Novel corono virus.

Corona virus spread among human through infected people coughing & sneezing, by touching an infected person's hand or face, or by touching things such as doorknobs that infected people have touched. Corona virus causes an infection in your nose, sinus or upper throat.

Signs & Symptoms

Novel coronavirus (named "2019-nCoV") that was first detected in Wuhan City, Hubei Province, China. The complete clinical picture of noval coronovirus is still not fully clear. Centers for Disease Control and Prevention (CDC) reported that illnesses have ranged from people with little to no symptoms[1].

According to the World Health Organisation, the signs of infection include fever, cough, shortness of breath and difficulty in breathing. In severe cases people will develop pneumonia, severe acute respiratory syndrome, kidney failure and even death. The incubation period of the coronavirus remains unknown. It could be between 10 and 14 days. The symptoms may appear in as few as 2 days or as long as 14 days after exposure[2].

Diagnosis

CDC has developed a real time Reverse Transcription-Polymerase Chain Reaction (rRT-PCR) test that can diagnose 2019-nCoV in respiratory

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and serum samples from clinical specimens.

Prevention

There is currently no vaccine to prevent coronovirus infection. The best way to prevent infection is to avoid being exposed to this virus. CDC recommends the following preventive actions which helps to prevent the spread of respiratory viruses:

- Wash hands often with soap and water frequently.
- Avoid touching your eyes, nose, and mouth with dirty hands.
- Avoid close contact with sick people.
- Stay home when you are sick.
- Cover your nose and mouth while coughing or sneezing[1].

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