| Jai Sri Gurudev |

FACULTY OF NURSING

ADICHUNCHANAGIRI COLLEGE OF NURSING

RESEARCH COMPENDIUM 2021-2022

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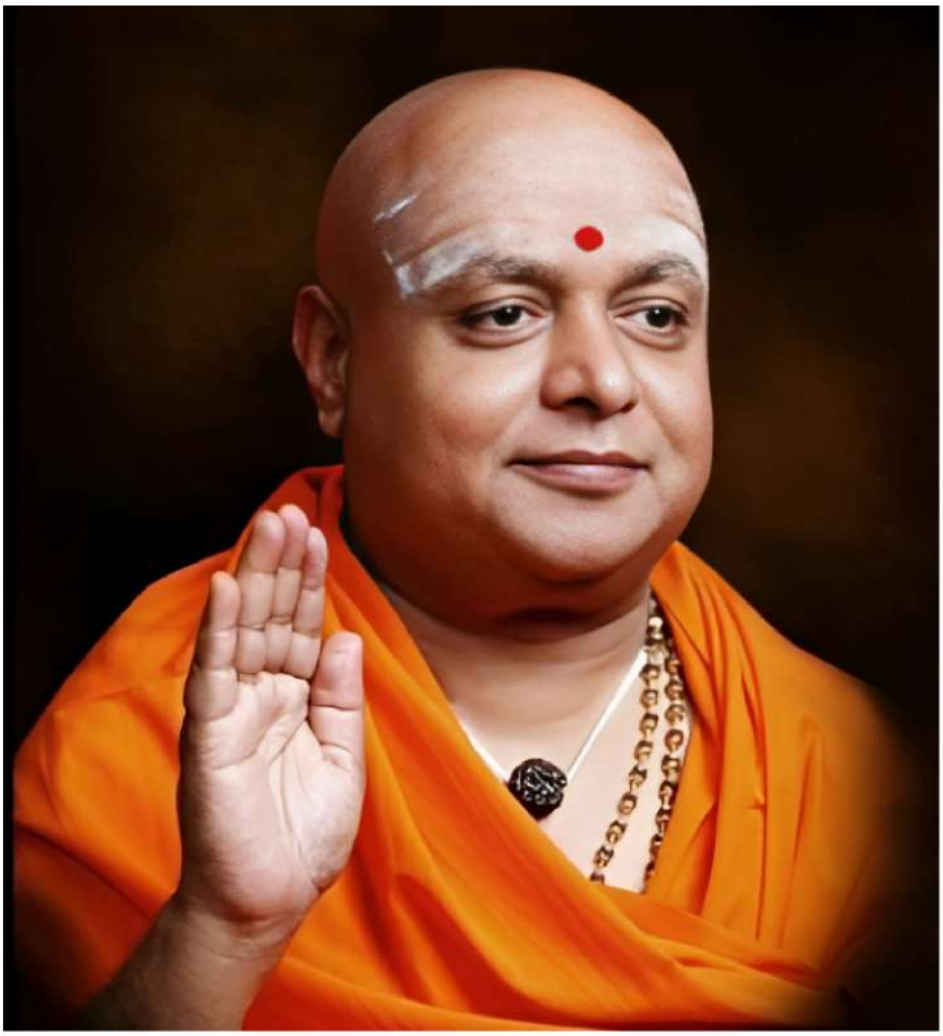
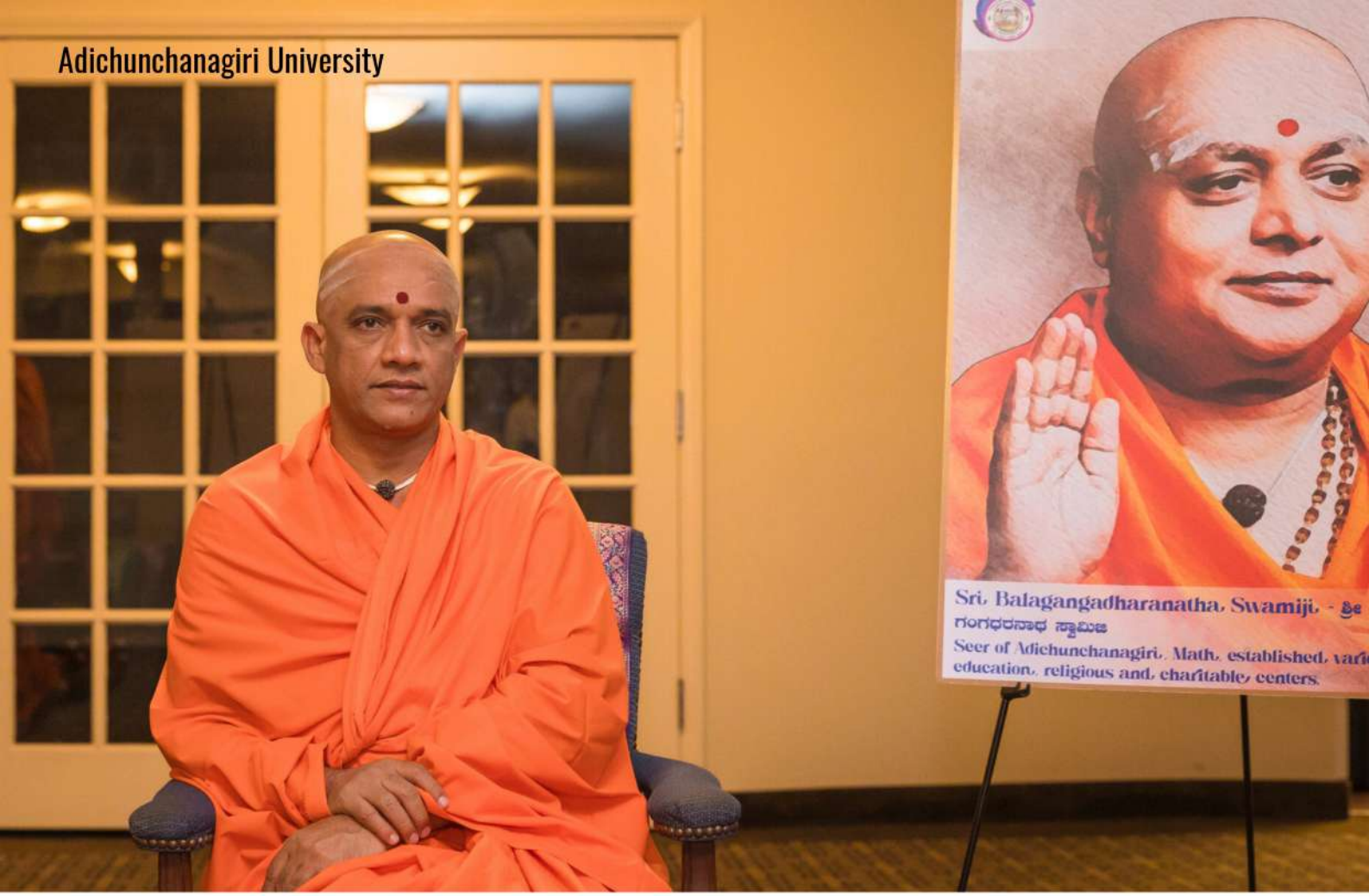


Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji assumed the holy chair of Sri Adichunchanagiri Mahasamsthana Math in 1974. Poojya Mahaswamiji was truly an enlightened soul. He treated all the people alike without discriminating on the basis of caste, creed, gender or social status. His approach towards handling different problems was truly scientific and logical. He implicitly understood the importance of education to the masses in alleviation of poverty.

Poojya Mahaswamiji was a great visionary with a perfect blend of science and spirituality. He was primarily instrumental in establishing Sri Adichunchanagiri Shikshana Trust that runs more than 500+ Educational institutions catering for about 130000 students across the country to impart quality education from primary to Professional Courses with a special focus on young people of semi-urban and rural areas.

Mahaswamiji had a vision of serving the humanity in eight fold areas of Adhyathmika (Spirituality), Anna (Free Food), Akshara (Knowledge), Arogya (Health), Ashraya (Shelter), Anukampa (Helping Hands), Aranya (Afforestation), Akalu (Cattle Protection) was exemplary and noteworthy.

He was rewarded and conferred with innumerable titles for his services in the field of Education, Health, Spiritual, Moral, Social, Cultural and Environmental activities. Most prominent among them are “Padma Bhushan, Doctor Honoris Causa, Saadhanaacharya, Akshaya Santha Sanatana, Dharmarathna, Seva Soorya, Vidya Samrat, Parisara Rathna, Abhinava Vivekananda, Rashtriya Ekatha Prashasthi” and so on.



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Continuing the Legacy of Enlightenment and Service

His Holiness Jagadguru Sri Dr. Nirmalanandanatha Mahaswamiji anointed as the 72nd Pontiff of Adichunchanagiri Mahasamsthana Math as successor to his Guru, Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji in the year 2013.

Poojya Mahaswamiji, unlike many other youngsters, had an inclination towards Spirituality, Science and Service rather than Materialism. He adapted an ascetic life in 1998 and underwent formal training in the traditional knowledge systems. His unquenchable thirst for knowledge is evident from his attitude in conferences and functions wherein he listens to the discourses on Vedas, Upanishads and other Shastras like an eager young student.

Poojya Mahaswamiji, aided by his educational background and interest in Engineering has incorporated Modern Technologies and revolutionized the functioning of all the Institutions of Shikshana Trust. He has taken up the initiative of introducing a computerized working environment in all the Academic and Administrative activities of the institutions.

The Vision of Poojya Mahaswamiji is to follow the footsteps of his Guru, working tirelessly to "Preserve, Promote, Pursue and Progress with Passion in the Path of his Patriarch". His Holiness was conferred with "Doctor Honoris Causa" (Honorary Doctor of Science) by the University of Mysore, Karnataka in 2016.

Principals Message

To achieve and sustain excellence in teaching and research, enrich local, national and international communities through our research, improve skills of alumni, and to publish academic and educational resources.

To achieve and promote excellence in publications and applied research, the college has taken the initiative to launch research compendium exclusively to publish faculties and students' research papers and articles. It will be an add-on to the enriched catalogue of college publications and academic literature.

Prof. Chandrashekar H C
Dean & Principal
Faculty of Nursing
ACU

Vice principal message

It gives me great pleasure to introduce the Research Manual prepared by our esteemed College of Nursing Research Cell. This comprehensive guide is a testament to our commitment to fostering a culture of research excellence within our institution.

Research plays a pivotal role in advancing healthcare practices and shaping the future of nursing. This manual not only provides invaluable resources and guidelines but also reflects our dedication to supporting our faculty and students in their research endeavours.

I encourage each of you to utilize this manual as a foundational tool in your research journey. Let us continue to innovate, collaborate, and contribute to the advancement of nursing knowledge.

Prof. Victoria Sarvand
Vice-Principal
Faculty of Nursing

Research coordinator

It is with great pleasure and enthusiasm that I introduce the College of Nursing Research Manual. This manual represents a collaborative effort by our dedicated Research Cell to provide comprehensive guidance and resources for conducting research in the field of nursing.

Research is not merely a requirement but a vital pathway to advancing our understanding and practice in healthcare. As Research Coordinator, I am honoured to witness the commitment and passion of our faculty, researchers, and students in pursuing scholarly inquiry that contributes to evidence-based practice and enhances patient outcomes.

This manual serves as a foundational tool for all stages of the research process—from conceptualization to dissemination. It offers clear explanations of research methodologies, ethical considerations, funding opportunities, and practical tips for writing proposals and manuscripts. Moreover, it underscores our commitment to fostering a supportive environment where creativity, rigor, and collaboration thrive.

Dr. Komala H K
Research Coordinator
Faculty of nursing
ACU

2021-22

Sl.No	Title of paper	Name of the author/s	Department of the teacher
1	Effectiveness structured teaching programme on knowledge regarding female foeticide among womens of reproductive age group	Ashwini, K. M., Arathi T.V.	OBG Nursing
2	A Succinct review article on nipah virus infection (NIV)	Dr. Balaji, M. S., Chandrashekar H C, Keshavamurthy C D, Ramy, R, Dipankar Maiti.	Medical Surgical Nursing
3	A Study to evaluate the effectiveness of self-instructional module on knowledge regarding maternal health benefits among antenatal mothers in selected rural areas, tumkur.	Eswarappa S, Balaji M S, Dayanand C, Shilpa Rani R.	Medical Surgical Nursing
4	"A Breviloquent review article on "IDIOT Syndrome"	Balaji M S, Ramya R, Keshavamurthy C D Chandrashekar H C, Dipankar maiti	Medical Surgical Nursing
5	Hypnotism-eucidaled review	Dipankar,Maiti. Ashwini K M, Sucharita Mandal	OBG Nursing
6	Effectiveness structured teaching programme on knowledge regarding female foeticide among womens of reproductive age group	Ashwini, K. M., Arathi,T.V.	OBG Nursing
7	monkey pox-Trending Mutating & out bursting diseases	Victoria Sarvand	OBG Nursing
8	Perception of human regarding informed consent before laparoscopic sterilization in selected PHCs	Komala H.K. Mrs. Arathi T V	Community Health Nursing
9	A Study to Associate The Effectiveness Of Awareness Programmes On Knowledge	Ms. Komala H K Dr. Krishna Chauhan	Community Health Nursing

	And Attitude Regarding Road Safety Measures Among Adolescents In Selected Schools And Colleges Of Mandya, Karnataka		
10	OSCE finest practice guidelines pertinency for nursing simulations	Victoria Sarvand	OBG Nursing
11	Effectiveness of self-instructional module on knowledge regarding the quality of life of End Stage Renal Disorder patients among staff nurses at a selected hospital,MANDYA	Shobha K.R. Ajna S	Medical Surgical Nursing
12	A study to assess the health problems faced by night duty staff nurses at AH & RC B.G. Nagara	Hemanth C K, Shilpa P M , Swamy PGN M, Mrs. Arathi T.V	Child Health Nursing
13	Effectiveness of STP on knowledge regarding psychotherapeutic approach on academic performance among I st Year BSc nursing students.	Hemanth C K, Shilpa P M, Swamy PGN, Mrs. Arathi T.V	Child Health Nursing
14	A study to evaluate the effectiveness of STP on levels of knowledge regarding first aid management among primary school teachers	P M Shilpa, Mr. P G N Swamy	Child Health Nursing
15	A review article on new born care	Mohini, Hemanth C K , Arathi T.V, Shilpa P M	Child Health Nursing

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Effectiveness of Structured Teaching Programme on Levels of Knowledge Regarding First Aid Management Among Primary School Teachers

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Abstract – *Aim of the study was to identify the effectiveness of structured teaching program (STP) in improvement of knowledge of primary school teachers on first aid management so that they can extensively use it at school premises to save children at any untoward circumstances. Pre experimental one group pre & post test design was used with 60 sample. There was a mean difference (15.4) between mean pre test knowledge scores (12.3 with SD 2.80) and mean post test knowledge scores (27.7 with SD 2.10). Significant difference was calculated using paired t test. Obtained t value is 36.11 which was higher than the table value of 3.66 (at P<0.05). There was an association found between pre test knowledge scores and variables such as age of sample and source of information used to get knowledge on first aid management (p<0.05). in conclusion it is important that every stakeholders must be aware of handling common emergencies during any epidemic or in any emergency situations to keep health environment around us.*

Keywords- *Effectiveness, STP, Knowledge, First Aid Management, School teachers*

Date of Submission: 08-09-2022 Date of Acceptance: 25-09-2022

I. Introduction

India is one of the biggest developing countries in the world. 73% of children aged 6-10 year go to primary school. It's 37% of total population come under this age group. The Future of our country depends on the children who will become leader of tomorrow. Children spend most of the time in school under the direct supervision of teachers. Schools are one of the common places of accidents & Injuries which are the major cause of illness, especially for primary school children. First aid is the initial care for ill and injured. It helps to manage the health problems of school children at earliest. Basic first aid knowledge helps the teachers to deal with emergency situations. First aid is all about using common sense in the hour of need. Preventing injuries by providing safe educational environment is one of the basic concerns. According to WHO, 950,000 children die in the world due to an injury each year & as per National Crime Record Bureau data, nearly 15-20% of deaths occur due to injury among children. A study conducted on public school teachers showed that only one third of them were trained in first aid & 87% of teachers expressed that emergency care training should be a part of teacher preparatory.

II. Related Work

Every time a health worker would not be available in the school where the accidents can take place at any point of time. It is needed or desired that the staff of the school should have knowledge so that they can be responsible to look after the minor ailments or accidents in the school. Student's safety is a major concern for the parents and the school staff. A study was conducted titled "First aid knowledge among health assigned teachers of primary schools". With non-experimental survey by using 40 samples from different schools through purposive sampling technique. It was found that 72.5% had average knowledge and 25% had good knowledge and 2.5% had poor knowledge. Majority of teachers were female (52.5%) from private schools and majority of educational status was post graduate 67.5%. The study results revealed that there was significant association (P>0.05) of teacher's qualification with the level of knowledge of First Aid Management

PROBLEM STATEMENT & OBJECTIVES

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON LEVEL OF KNOWLEDGE REGARDING FIRST AID MANAGEMENT AMONG PRIMARY SCHOOL TEACHERS IN SELECTED PRIMARY SCHOOLS AT MANDYA DISTRICT."

1. To assess pre-test levels of the knowledge of school teachers regarding the First Aid Management.
2. To evaluate the effectiveness of structured teaching program on knowledge scores of teachers regarding First Aid Management.
3. To find out association between the post-test level of knowledge regarding first aid management among school teachers with selected socio demographic variables.

HYPOTHESES:
H1 - There will be significant increase in post- test knowledge scores than pre test knowledge regarding first aid management among primary school teachers.
H2 - There will be significant association between post-test level of knowledge scores with selected demographic variables regarding first aid management among primary school teachers.

III. Methodology

Research Approach: Quantitative evaluative approach.
Research Design: Pre experimental one group pre test post test design
Setting: Selected primary schools at Mandya District. The setting was chosen on the basis of feasibility and availability of adequate samples
Sampling technique: Non probability convenient sampling technique
Sample size: 60 Primary school teachers
CRITERIA FOR SELECTION OF SAMPLES
Inclusion criteria: -
Teachers who
- Were working in the primary school
- Were willing to participate in the study.
- Were in the age group between 20 to 60 years

Exclusion Criteria: -
Teachers who
- Were sick or leave at the time of data collection
- Had already undergone first aid training within 6 months

VARIABLES:
- **Independent variable**: Structured Teaching Program.
- **Dependent variable**: Level of knowledge regarding First aid management

DESCRIPTION OF TOOL:
- The tool was divided into 2 sections, which consisted of Section A and Section B.

SECTION -A: Demographic Profile
- This section consists of 9 items pertinent to primary school teachers such as age gender, education, residence, years of teaching experience, marital status, if married number of children, previous knowledge regarding first aid management, if yes sources of information regarding first aid management.

SECTION -B: Level of Knowledge regarding First aid management.
- It consists of 30 self-administered knowledge questionnaire to assess the level of knowledge related to causes, signs and symptoms, types, and management of first aid emergencies such as bleeding, wound, fracture, foreign body aspiration (nose bleeding, ear bleeding, eye bleeding) dog bite, snake bite, honey bee sting.

Score Interpretation:
The tool consists of 30 questions each where a correct response was awarded a score of one mark and wrong response was given a score of zero
- Inadequate Knowledge - < 50 %
- Moderately adequate knowledge - 50-75 %
- Adequate Knowledge - >75%

PILOT STUDY:

After getting formal permission from the school headmaster, pilot study was conducted using 6 sample between 01.09.2021 to 07.09.2021 at selected BG Nagar primary schools in Mandya district. Pretest was given using self administered knowledge questionnaire followed by administration of intervention which composed of lecture and video clipping. The post test was conducted after 7 days of intervention by administering same self administered knowledge questionnaire.

VALIDITY AND RELIABILITY:

To determine the content validity, the tool was submitted to 5 experts from the specialty of child health nursing and biostatistics. After obtaining valuable suggestions, necessary modifications were made accordingly. The reliability of the tool was established by test and retest method & the r value was 0.92 which was found to be reliable.

DATA COLLECTION PROCEDURE:

Data collection for the main study was done from 08.09.2021 to 14.09.2021. Number of samples selected for the study was 60. On first day, pre test was given using self administered knowledge questionnaire followed by administration of structured teaching program. Post test was given after 8 days of intervention.

IV. RESULTS AND DISCUSSION

Table No. 1: Frequency & percentage distribution of primary school teachers according to their socio demographic variables.

N=60

Sl. No	Variables		Frequency (N)	Percentage (%)
01	Age in Years	21-30	27	45
		31-40	19	32
		41-50	11	18
		51-60	03	5
02	Gender	Male	21	35
		Female	39	65
03	Education	Diploma	8	13.3
		Graduate	38	63.4
		Post Graduate	14	23.3
04	Residence	Rural	57	95
		Urban	3	5
05	Teaching experience	< 5 Years	9	15
		6-10 years	24	40
		11-15 Years	17	28.3
		>15 years	10	16.7
06	Marital status	Unmarried	5	8.3
		Married	55	91.7
07	Number of children	One	11	18
		Two	35	58
		Three	14	24
08	Previous knowledge	Yes	55	91.6
		No	5	8.4
09	Source of information	Books	37	67.2
		Health workers	6	11
		Friends	4	7.2
		Mass media	8	14.6

Table 2: Frequency and percentage distribution of pre and post-test knowledge scores regarding first aid management.

N=60

KNOWLEDGE	**PRE-TEST**		**POST-TEST**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Inadequate knowledge	**44**	**73%**	**0**	**0**
Moderate knowledge	**16**	**27%**	**3**	**5**
Adequate knowledge	**0**	**0%**	**57**	**95**

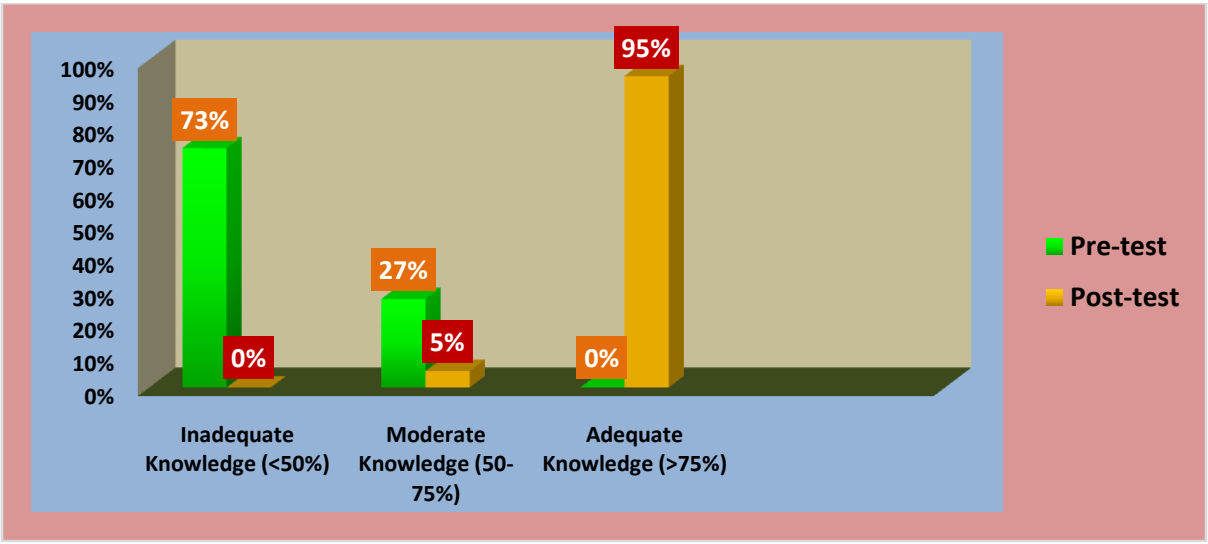

Diagram 1: Overall Pre test & post test knowledge scores of socio demographic variables

Above diagram represents that in the pre-test 44 (73%) teachers had inadequate knowledge, 16 (27%) teachers had moderately adequate knowledge and none of the teachers had adequate knowledge on first aid management. With regarding to the post - test 57 (95%) of the teachers had adequate knowledge, 3 (5%) had moderately adequate knowledge and none of the teachers had inadequate knowledge after structured teaching programme on first aid management.

Table 3: Paired 't' value of pre and post-test levels of knowledge regarding first aid management among primary school teachers.

n = 60

Level of Knowledge	Mean	Standard Deviation	Mean Difference	Paired 't' Test
Pre-test	12.3	2.80	15.4	36.11*
Post-test	27.7	2.10		

Statistically significant($p<0.05$)

Table 3 shows that pre-test knowledge mean score was 12.3with standard deviation of 2.80 and the post-test knowledge mean score was 27.7 with standard deviation of 2.10. The mean difference of pre and post-test knowledge was 15.4. As the calculated 't' test value is 36.11 was higher than the table value 3.66($p<0.05$). Hence there was significant improvement in knowledge regarding first aid management. Therefore, hypothesis 1 is accepted.

SECTION – C

Table 4 reflects analysis of association between pre and post-test levels of knowledge and selected demographic variables.

DEMOGRAPHIC VARIABLES	KNOWLEDGE SCORE (PRE-TEST)				df	Chi SQUARE VALU X2	INFERENCE
	IA	MA	A	TOTAL SCORE			
1) AGE					3	24.362	S
21 – 30	20	7	0	27			
31 – 40	13	6	0	19			
41 - 50	9	2	0	11			

51 - 60	3	0	0	3			
2) GENDER					1	1.195	NS
MALE	14	7	0	21			
FEMALE	31	8	0	39			
3) EDUCATION					2	1.074	NS
DIPLOMA	7	1	0	8			
GRADUATE	27	11	0	38			
PG	11	3	0	14			
4) RESIDENCE					1	0.09	NS
URBAN	2	1	0	3			
RURAL	42	15	0	57			
5) TEACHING EXPERIENCE					3	3.716	NS
<5 YEARS	7	2	0	9			
6 – 10 YEARS	15	9	0	24			
11 – 15 YEARS	14	3	0	17			
>15 YEARS	9	1	0	10			
6) MARITAL STATUS					1	0.654	NS
UNMARRIED	3	2	0	5			
MARRIED	42	13	0	55			
7) IF MARRIED NO OF CHILDRENS					2	2.034	NS
ONE CHILD	7	3	0	10			
TWO CHILD	26	6	0	32			
THREE CHILD	8	5	0	13			
8) PREVIOUS KNOWLEDGE REGARDING FAM					1	0.654	NS
YES	3	2	0	5			
N0	42	13	0	55			
9) IF YES, SOURSES OF INFORMATION					3	10.084	S
BOOKS	30	7	0	37			
HEALTH WORKERS	4	2	0	6			
FRIENDS	3	1	0	4			

MASS MEDIA	2	6	0	8			

Statistically significant ($p<0.05$)

Table 4 revealed that age and sources of information first aid management are statistically significant at $p<0.05$ level, whereas gender, education, residence, teaching experience, marital status, if married number of children, previous knowledge regarding first aid management are not statistically significant. Hence it is interpreted the difference in mean score values are true and the hypothesis H2 was accepted.

Discussion:

First objective of the study was to assess the pre-test levels of knowledge regarding first aid management among primary school teachers.

A self-administered questionnaires schedule was used to assess the levels of knowledge among primary school teacher regarding first aid management. In the pre-test 44(73%) teachers had inadequate knowledge, 16(27%) teachers had moderately adequate knowledge, no teachers had adequate knowledge regarding first aid management.

This study was supported by R.S.H. Eldosoky 2012 conducted a cross-sectional study in Qalubeya governorate, Egypt was to measure the incidence and types of school children injuries affecting rural area children aged up to 12 years and to assess their school teacher's knowledge on first aid management, and practices about first aid and its associated factors. An interview was completed by 150 rural area teachers to assess the level of knowledge, the incidence of school playground injuries in the previous 4 weeks was 38.3% (57.5% were boys). Cut wound, fractures, bleeding and foreign body aspiration were the common forms of school playground injuries. Teachers answered an average of 11.0 (SD 5.3) out of 29 questions correctly. Younger age of teachers, higher level of education, higher socio economic status, source of knowledge about first aid for school teachers was associated with post test score.

Second objective study was to assess the effectiveness of structured teaching programmed teaching on levels of knowledge regarding first aid management among primary school teachers.

The pre-test knowledge mean score was 12.3, standard deviation 2.80 and the post-test mean score was 27.7 and standard deviation was 2.10. The mean difference of pre and post-test knowledge was 15.4. The calculated paired 't; test value (36.11) was higher than the table value 3.8 which is significant at $P<0.05$ level. It shows that the structured teaching programmed is effective, hence hypothesis 1 is accepted.

Naimer.M (2015) conducted a descriptive study to assess check list primary school teacher's knowledge on first aid management. The first group between the age of6-14 years was given a traditional lecture about first aid management of common accidents of children during school day. School teachers participate also the same information by video teaching or lecture method and the same. At end group 2 asked to fill a structured knowledge questionnaire regarding first aid management of common childhood injuries for about 30 minutes, 45 minutes for each participant primary school teachers to be observed for re-demonstration of all the procedures that were involved in the observational checklists. Results: The study showed a statistical significant improvement in total knowledge score of primary school teachers undergoing video-assisted teaching method regarding first aids (28.68 ± 3.77) compared to teachers undergoing practice (12.77 ± 5.00). Also, there was statistical significant improvement in management skills of primary school teachers undergoing video-assisted teaching method (28.68 ± 3.77) compared to teachers.

Third objective of the study was to find out the association between pre- test levels of knowledge regarding first aid management among primary school teachers and selected demographic variables.

Chi- square' test was used to find out the association between levels of knowledge and selected demographic variables. The result reveals that age, sources of information regarding first aid management are associated at $p<0.05$ level, whereas gender, education, residence, teaching experience, marital status, if married no of children are not associated. Hence the H2 was accepted.

This study was supported by N. Joseph (2011) conducted a cross-sectional study among 50 primary school teachers, data was collected using a self-administered questionnaire. Based on the scores obtained in each condition requiring first aid, the overall knowledge was graded as good, moderate and poor. Only 11.2% (17/152) of the total student participants had previous exposure to first aid training. Good knowledge about first aid was observed in 13.8% (21/152), moderate knowledge in 68.4% (104/152) and poor knowledge in 17.8% (27/152) participants. Analysis of knowledge about first aid management in select condition found that 21% (32/152) had poor knowledge regarding first aid management for bleeding and 20.4% (31/152) for epistaxis and

foreign body in eyes. The level of knowledge and practices about first aid was good among majority of the primary school teachers. The study also identified the key areas in which first aid knowledge was improved. In primary school teachers. The study also identified the key areas in which first aid knowledge was improved in primary school teachers.

Conclusion:

NURSING IMPLICATION

The findings of the present study enabled to determine the effectiveness of programmed teaching on levels of knowledge regarding first aid management. Finding of the study have implications for nursing education, nursing administration and nursing research regarding first aid management.

NURSING EDUCATION

- Continuing nursing education programmes on effectiveness of first aid management among primary school teachers.
- Make available literature related to first aid management nursing institution.
- Adequate awareness on programmed teaching and the demonstration should be made on the first aid management in the curriculum.

NURSING RESEARCH

- Encourage further studies on first aid management such as chocking, fracture, bleeding, awareness, prevention of injury.
- Conduct more research to assess the prevalence of accidents and the research finding should disseminate the findings through conferences, seminars and journals.

NURSING ADMINISTRATION

- The nurse administrator has a vital role in creating increased awareness and increased knowledge on first aid management among primary school teachers, by preparing nurses.
- Paediatric and community nurses can be appointed in schools.

RECOMMENDATION

The study recommends the following for further research –

- The study can be done on large samples for better generalizations.
- A pre-experimental study of first aid management can be conducted among primary school teachers in different setting.
- Counselling programme based on first aid measures can developed.
- A comparative study can be done on rural and urban schools.

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Original Research Paper

Nursing

A SUCCINCT REVIEW ARTICLE ON "NIPAH VIRUS INFECTION (NIV)"

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Ramya R	Assistant Professor, Department of Obstetrics & Gynaecology, Adichun chanagiri College of Nursing, Adichunchanagiri University, B G Nagara, Karnataka, India.
Dipankar Maiti	Nursing Tutor, Sushrutha College of Nursing, Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka, India.

ABSTRACT WHO has identified NIPAH as one of the deadliest disease can cause epidemic situation in future after the Ebola epidemic for crucial research and expansion before and during an epidemic toward new diagnostic tests, vaccines and medicines. Nipah virus scientific name is *Nipah henipavirus*, is a bat-borne virus sourced Nipah virus infection in humans and some other animals, having exceedingly mortality rate. The symptoms start to appear within 5-14 days from the day of exposure to the virus. Preliminary symptoms are fever, headache, and drowsiness, shadowed by disorientation and mental confusion. Nipah virus (NiV) infection can be diagnosed during illness & also recoverable disease. NiV infection can be diagnosed by using different tests. All assumed cases of Nipah virus infection to be isolated. While some evidence supports the use of ribavirin, it has not yet been studied in people with the disease. Specific antibodies also very helpful in an animal model with probable benefit. Favipiravir, acyclovir, and remdesivir have been evaluated as potential antivirals against Nipah virus.

KEYWORDS : Nipah virus (NiV), & WHO.

INTRODUCTION:

The name "Nipah" designates the place, Sungai Nipah in Port Dickson, Negeri Sembilan, the source of the human case from which Nipah virus was first secluded.[1,2] WHO has identified NIPAH as one of the deadliest disease can cause epidemic situation in future after the Ebola epidemic for crucial research and expansion before and during an epidemic toward new diagnostic tests, vaccines and medicines.[3,4] **Nipah virus** scientific name is ***Nipah henipavirus***, is a bat-borne virus sourced Nipah virus infection in humans and some other animals, having exceedingly mortality rate. Several disease outbreaks caused by Nipah virus have arisen in South and Southeast Asia. Nipah virus belongs to *Henipavirus* genus along with the Hendra virus, which has also triggered disease outbreaks.

Like other henipaviruses, the Nipah virus genome is a single (nonsegmented) negative-sense, single-stranded RNA of over 18 kb, which is considerably longer than that of other paramyxoviruses1,2. The enveloped virus particles are flexible in shape, and can be filamentlike or spherical; they contain a helical nucleocapsid.[1] Six structural proteins are generated: M (matrix), N (nucleocapsid),F (fusion), G (glycoprotein), P (phosphoprotein) and L (RNA polymerase). The *P* open reading frame also encrypts three non-structural proteins, C, V and W. There are two envelope glycoproteins. The viral anti-receptor or attachment protein are created by assembling the G glycoprotein as a tetramer, which muddles to the receptor on the host cell. The F glycoprotein forms a trimer, which mediates membrane fusion.[5,6]

Incidence:

In the year 1998 the first cases of Nipah virus infection has been disclosed, when an outbreak of neurological and respiratory disease on pig farms in peninsular Malaysia caused 265 human cases, with 105 deaths.[7]

Between the middle of 1999 year, more than 265 human cases of encephalitis, including 105 deaths, had been reported in Malaysia, and 11 cases of either encephalitis or respiratory illness with one fatality were reported in Singapore.[8]

Mode of transmission:

Nipah virus (NiV) can blowout to people from:

- Direct contact with infected animals like bats or pigs or their body fluids (such as blood, urine or saliva)
- Consuming food products contaminated by body fluids of infected animals (such as palm sap or fruit contaminated by an infected bat)
- Close contact with a NiV infected person or their body fluids (including nasal or respiratory droplets, urine, or blood).[9]

Clinical Manifestation

The symptoms start to appear within 5-14 days from the day of exposure to the virus. Preliminary symptoms are fever, headache, and drowsiness, shadowed by disorientation and mental confusion. Respiratory issues can exist during the early stages. Coma symptoms can be finding within 24 to 48 hours. Inflammation of the brain (Encephalitis), is a hypothetically fatal complication of Nipah virus infection. Nipah patients who facing breathing difficulty are more likely than those without respiratory illness to spread the virus, as are those who are more than 45 years of age. The disease is suspected in symptomatic individuals in the context of an epidemic outbreak.[10,11,12]

Diagnosis:

Nipah virus (NiV) infection can be diagnosed during illness &

also recoverable disease. NiV infection can be diagnosed by using different tests. At primary stages of the illness, laboratory testing can be conducted by using real time polymerase chain reaction (RT-PCR) by taking swab samples from throat and nasal, cerebrospinal fluid, urine as well as blood. For advanced stage diagnosis enzyme-linked immunosorbent assay (ELISA) test is used.

Early diagnosis of NiV infection can be thought-provoking due to the non-specific early symptoms of the illness. Early detection as well as diagnosis of NiV infected individuals are very complicated as it can stay asymptomatically. To prevent transmission to other people also to manage outbreak response efforts.[13]

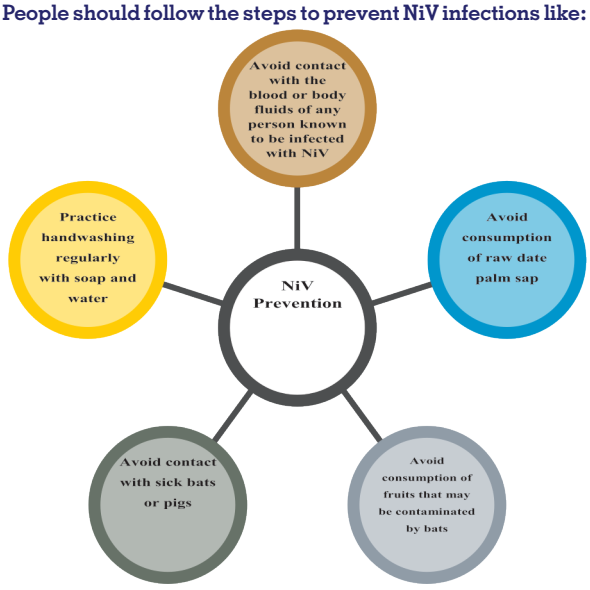
Treatment:

In the year 2020 one specific treatment of NiV has been invented. The mainstay of treatment is supportive care. Standard & specific infection control habits along with proper barrier nursing techniques are recommended to avoid the blowout of the infection from one person to another. All assumed cases of Nipah virus infection to be isolated. While some evidence supports the use of ribavirin, it has not yet been studied in people with the disease. Specific antibodies also very helpful in an animal model with probable benefit. Favipiravir, acyclovir, and remdesivir have been evaluated as potential antivirals against Nipah virus.[14,15,16,17.]

Prevention:

Nipah virus (NiV) infection has been infected to the countries Bangladesh, India, Malaysia and Singapore.

People should follow the steps to prevent NiV infections like:



Ethical clearance-

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

Source of funding- Self (review article)

Conflict of Interest – Nil

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ORIGINAL RESEARCH PAPER
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"A STUDY TO EVALUATE THE EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING MATERNAL HEALTH BENEFITS AMONG ANTENATAL MOTHERS IN SELECTED RURAL AREAS, TUMKUR."

Nursing

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ABSTRACT

Introduction: Maternal and child health refers to the promotive, preventive and curative and rehabilitative care of mothers and children. Antenatal care is the care of women during pregnancy the main aim of care is to achieve at the end if a pregnancy healthy mother and healthy baby.[1] Most of the Antenatal mothers don't know about the Different maternal health benefits scheme. Providing knowledge about the maternal health benefits scheme helps to live a better-quality life. The aim of the study was to find the effectiveness of Self-Instructional Module (SIM) on the knowledge regarding Maternal health benefit schemes among antenatal mothers. Methods: An evaluative approach with pre-experimental one group pre-test post-test design was used with purposive sampling technique to select the sample (N=50). A structured knowledge questionnaire was used to assess the Knowledge and SIM was administered to find its effectiveness. The collected data was analyzed by using Descriptive statistics like mean, median and standard deviation, and inferential statistics like paired and independent 't' test was included to test the hypothesis and Chi-square test was included to test the association of knowledge scores with demographic variables. Results: The mean percentage of post-test knowledge score (79.1 %) was higher than the mean percentage of pre-test knowledge score (46.5%). The calculated' value [t (49) = 52.39] is greater than the table value (0.05, 49df) = 1.96. It showed a significant difference between mean pre- and post- test knowledge scores. The calculated χ^2 values for age group, type of family, educational status, family income per month, Gravida of the mother were more than the table value and calculated χ^2 values were less than the table values for Source of information with their post-test knowledge scores. **Interpretation & Conclusion:** The findings of the study showed that there was a deficit in knowledge of Antenatal mothers before administration of SIM. The results indicated that the SIM is effective in increasing the knowledge of Antenatal mothers on Maternal health benefit schemes.

KEYWORDS

Effectiveness, SIM, Knowledge, Maternal health benefits schemes, Antenatal mothers.

I. OBJECTIVES OF THE STUDY

1. To assess the existing knowledge regarding maternal health benefit schemes among antenatal mothers.
2. To evaluate the effectiveness of Self-Instructional Module on knowledge regarding maternal health benefit schemes among antenatal mothers.
3. To find the association between the post-test knowledge scores and selected demographic variables of antenatal mothers with their selected demographic variables.

II. METHODOLOGY

Methodology of research organizes all the components of study in a way that is most likely to lead to valid answers to the problems to have been posed

Research approach:
The research approach employed in the present study is Quantitative Evaluative Research approach.

Research Design:
The design employed for the present study is a One group pre and posttest pre-experimental Research Design.

GROUP	PRETEST	INTERVENTION	POST TEST
Antenatal Mothers	Knowledge regarding Maternal Health Benefits	Self-Instructional Module	Knowledge regarding Maternal Health Benefits
	O1	X	O2

Key:
O1 = Assessment of pre-test scores
X = Structured Teaching Program
O2 = Assessment of post-test scores

Variables under study:
A concept which can take on different qualitative values is called a variable

Independent Variable
In the present study, independent variable was Self Instructional Module regarding the Maternal health benefit schemes.

Dependent Variable
In this study, the dependent variable was knowledge of regarding Maternal health benefit schemes.

Population:
In this study population comprise of Antenatal mothers staying at Bellavi village, Tumkur district.

Sample and sample size:
Sample- Sample is a subset of a population selected to participate in a research study. It is a position of the population which represents the entire population.

In this study samples were antenatal mothers.

Sample size- 50 Antenatal mothers who met the inclusion criteria formed the sample for the study.

Sampling technique:
Sampling technique is a process of selecting subjects who are representative of the population being studied. A purposive Sampling technique was used for the present study.

Selection and development of tool:
The instrument selected in research must be the vehicle that obtains the best data for drawing conclusions to the study. The tool act as an instrument to assess and collect the data from the respondents of the study.

Keeping in mind a self-instructional module was selected and developed. The main purpose behind developing this tool was need of the hour to educate the antenatal mothers. The tool was developed based on,

- Past clinical experience of the student investigator.
- Related review of literature (Books, Journals, Periodicals, and

articles published and unpublished research studies) was reviewed and used to develop the tool.
- Based on the concept of the study.
- Based on the opinions of the subject experts.
- Based on the objectives of the study, the blue print was prepared under 3 main areas namely knowledge, comprehension and application. The prepared items were subjected to content validation, pre-testing and estimation of reliability.

III. RESULTS

Presentation of Data

To begin with, the data was entered in a master sheet, for tabulation and statistical processing. In order to find the relationship, the data was tabulated, analyzed and interpreted by using descriptive and inferential statistics. The data is presented under the following headings.

Section I: Analysis of demographic characteristics of respondents under study.

Section II: Analysis of pre-test and post-test knowledge scores of respondents and effectiveness of Self-Instructional Module.

a) Analysis of pre-test knowledge scores.
b) Analysis of post-test knowledge scores.
c) Effectiveness of Self-Instructional Module on knowledge scores of whole tests.
d) Effectiveness of Self-Instructional Module on area wise knowledge scores.

Section III: Analysis of association between demographic variables with post-test knowledge scores.

Section-1

Analysis of demographic characteristics of respondents under study.

Table 1: Distribution of patient according to socio demographic variables by frequency and percentage

TABLE 1: Classification of Respondents by demographic characteristics N=50

Characteristics	Category	Respondents	
		Number	Percent
Age group (years)	Below 20	23	46.0
	21-30	20	40.0
	31-40	7	14.0
Religion	Hindu	50	100.0
	Muslim	0	0.0
Type of family	Nuclear	40	80.0
	Joint	10	20.0
Educational status	SSLC	18	36.0
	PUC	15	30.0
	Degree	13	26.0
	Post graduate	4	8.0
Family income/ month	Below Rs.5,000	5	10.0
	Rs.5,001-10,000	17	34.0
	Rs.10,001-20,000	17	34.0
	Above Rs.20,000	11	22.0
Gravida of the mother	Primi gravida	11	22.0
	Multi gravida	39	78.0
Source of information	Family members/Friends	10	20.0
	Mass media	40	80.0
Total		50	100.0

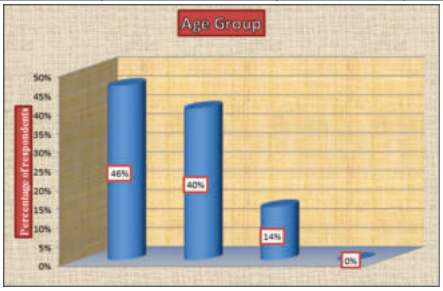

Figure 3: Classification of respondents according to age group (years)

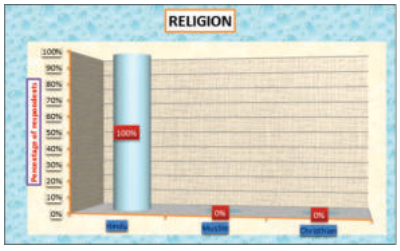

Figure 4: Classification of respondents according to Religion.

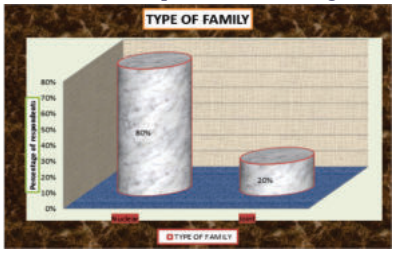

Figure 5: Classification of respondents according to type of family.

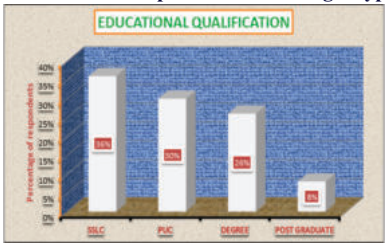

Figure. 6: Classification of respondents according to educational qualification.

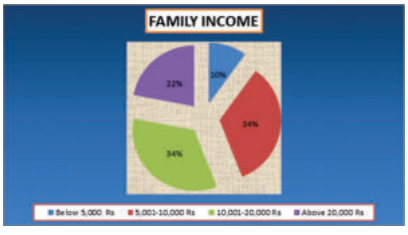

Figure 7: Classification of respondents according to family monthly income.

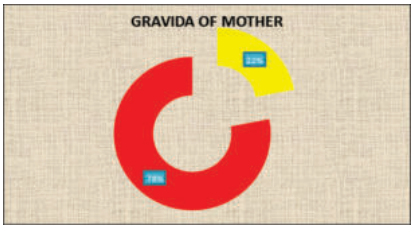

Figure 8: Classification of respondents according to Gravida ofmother.

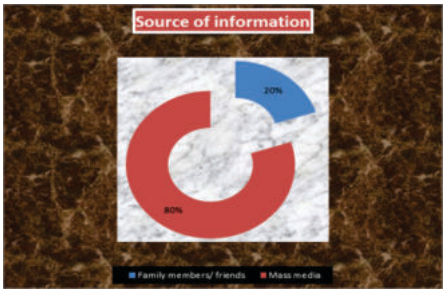

Figure 9: Classification of respondents according source of information.

Section Ii:

Analysis of pre-test and post-test knowledge scores of respondents and effectiveness of Self-Instructional Module.

a) Analysis of pre-test knowledge level

Table 2: Classification Of Respondent Pretest Knowledge Level On Maternal Health Benefits Schemes.

Knowledge Level	Category	Respondents	
		Number	Percent
Inadequate	≤ 50 % Score	37	74.0
Moderate	51-75 % Score	13	26.0
Adequate	> 75 % Score	0	0.0
Total		50	100.0

The Table 2 & Figure 10 shows the classification of respondent's knowledge according to their knowledge level in the pre-test. The data showed that, majority of the respondent's (74%) had inadequate knowledge, 26% had Moderate knowledge and none of them had the adequate knowledge.

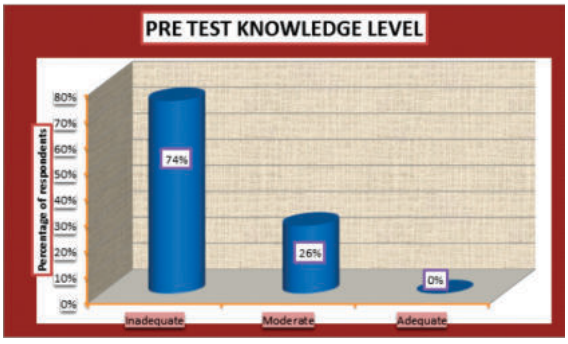

Figure.10: Classification of Respondents on Pretest Knowledge level on Maternal health benefits schemes

Table 3: Aspect wise Pretest Mean Knowledge scores of Respondents on Maternal health benefits schemes

No.	Knowledge Aspects	Statements	Max. Score	Respondents Knowledge			
				Mean	SD	Mean (%)	SD (%)
I	General information about antenatal period	3	3	1.64	0.52	54.7	17.3
II	General information about schemes	3	3	1.40	0.57	46.7	18.9
III	Maternal health benefits schemes	14	14	5.98	1.01	42.7	7.2
IV	Advantages of maternal health benefits schemes	10	10	4.94	1.07	49.4	10.7
	Combined	30	30	13.96	1.81	46.5	6.0

Table.3 reveals that the aspect wise mean percentage of pre-test knowledge scores of respondents in different aspects studied. The highest mean percentage 54.7± 17.3% of knowledge scores of respondents was found to be in the aspect of General information about antenatal period, followed by 49.4±10.7% in the aspect of Advantages of maternal health benefits schemes; 46.7.7± 18.9.7% in the aspect of General information about schemes, and least knowledge score of 42.7± 7.2% was found to be in Maternal health benefits schemes. The overall mean percentage of pre-test knowledge score of respondents was 46.5± 6.0%.

b) Analysis of post-test knowledge scores.

TABLE 4: Classification of Respondents of Posttest Knowledge level on Maternal health benefits schemes

Knowledge Level	Category	Respondents	
		Number	Percent
Inadequate	≤ 50 % Score	0	0.0
Moderate	51-75 % Score	17	34.0
Adequate	> 75 % Score	33	66.0
Total		50	100.0

The Table 4 & Figure 11 shows the classification of respondent's knowledge according to their knowledge level in the post-test. The data showed that, majority of the respondent's (66%) had adequate knowledge, 34% had Moderate knowledge and none of them had the inadequate knowledge.

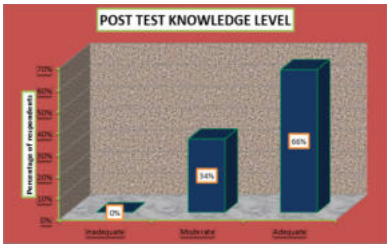

Figure 11: Classification of Respondents on Posttest Knowledge level on Maternal health benefits schemes

TABLE 5: Aspect wise Posttest Mean Knowledge scores of Respondents on Maternal health benefits scheme N=50

No.	Knowledge Aspects	Statements	Max. Score	Respondents Knowledge			
				Mean	SD	Mean (%)	SD (%)
I	General information about antenatal period	3	3	2.52	0.57	84.0	19.1
II	General information about schemes	3	3	2.42	0.57	80.7	19.0
III	Maternal health benefits schemes	14	14	11.06	0.95	79.0	6.8
IV	Advantages of maternal health benefits schemes	10	10	7.74	0.80	77.4	8.0
	Combined	30	30	23.74	1.60	79.1	5.3

Table.5 shows that the aspect wise mean percentage of post-test knowledge scores of respondents in different aspects of knowledge questionnaire. The highest mean percentage 84.0±19.1% of knowledge scores of respondents was found to be in the aspect of in the aspect of General information about antenatal period; followed by 80.7±19.0% in the aspect of General information about schemes; 79.0±6.8% in the aspect of Maternal health benefits schemes; and least knowledge score of 77.4±8.0% was found to be in the aspect of Advantages of maternal health benefits schemes. The overall mean percentage of post-test score of respondents was 79.1± 5.3%.

c. Effectiveness of Self-Instructional Module on Knowledge Scores of Whole test

Table 6: Over all Pretest and Posttest Mean Knowledge on Maternal health benefits schemes

Aspects	Max. Score	Respondents Knowledge				Paired 't' Test
		Mean	SD	Mean (%)	SD (%)	
Pre test	30	13.96	1.81	46.5	6.0	52.39*
Post test	30	23.74	1.60	79.1	5.3	
Enhancement	30	9.78	1.32	32.6	4.4	

* Significant at 5% level,
t (0.05,49df) = 1.9

Table.6 depicts the overall pre-test mean of knowledge score of respondents on Maternal health benefit schemes 46.5 ± 6.0% and post-test mean was 79.1±5.3% with an enhancement 32.6.4±4.4%. The calculated paired't' test value of (t = 52.39*) is greater than the table value at 0.05 level of significance which indicates that there is a significance between pre-test and post-test knowledge scores of whole test of respondents. Hence the stated research hypothesis H1 is accepted. It was concluded that the Self-Instructional Module was effective in increasing the knowledge of antenatal mothers regarding maternal health benefit schemes. (Fig.12)

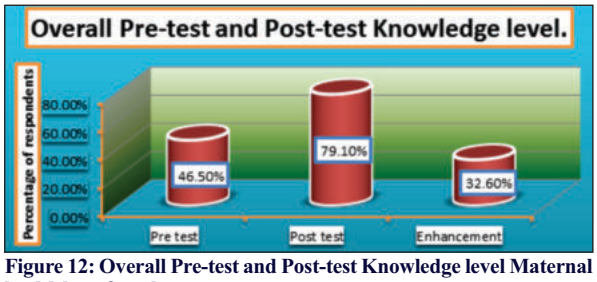

Figure 12: Overall Pre-test and Post-test Knowledge level Maternal health benefits schemes

Table 7: Classification of Respondents on Knowledge level on Maternal health benefits schemes

Knowledge Level	Category	Classification of Respondents				χ^2 Value
		Pre test		Post test		
		Number	Percent	Number	Percent	
Inadequate	≤ 50 % Score	37	74.0	0	0.0	70.53*
Moderate	51-75 % Score	13	26.0	17	34.0	
Adequate	> 75 % Score	0	0.0	33	66.0	
Total		50	100.0	50	100.0	

* Significant at 5% level, χ^2 (0.05,2df) = 5.991

Table.7 dipicts that in pretest 74.0% of them had inadequate knowledge, 26.0% of them had moderate knowledge and none of them had adequate knowledge. In posttest none of them had inadequate knowledge, 34.0% had moderate knowledge and 66.0% had adequate knowledge. With chi square value of (χ 2 = 70.53*) and significant at 5% level. (Fig.13)

Figure. 13: Classification of Respondents on Knowledge level on Maternal health benefits schemes.

d. Effectiveness of Self-instructional module on Aspect wise knowledge scores

Table 8: Aspect wise Mean Pretest and Posttest Knowledge on Maternal health benefit schemes. N = 50

No.	Knowledge Aspects	Respondents Knowledge (%)						Paired 't' Test
		Pre test		Post test		Enhancement		
		Mean	SD	Mean	SD	Mean	SD	
I	General information about antenatal period	54.7	17.3	84.0	19.1	29.3	21.7	9.55*
II	General information about schemes	46.7	18.9	80.7	19.0	34.0	22.6	10.64*
III	Maternal health benefits schemes	42.7	7.2	79.0	6.8	36.3	8.9	28.84*
IV	Advantages of maternal health benefits schemes	49.4	10.7	77.4	8.0	28.0	11.7	16.92*
	Combined	46.5	6.0	79.1	5.3	32.6	4.4	52.39*

* Significant at 5% level,

t (0.05,49df) = 1.96

Table.8 reveals the highest mean percentage in the aspect of General information about antenatal period, mean pretest was found to be 54.7±17.3% and mean post test score was 84.0± 19.1% with the enhancement of 29.3±21.7% and significant (t=9.55*) at 0.05 level. In the aspect of General information about schemes, mean pretest was found to be 46.7±18.9% and post test score was 80.7±19.0% with the enhancement of 34.0±22.6% and significant (t=10.64*) at 0.05 level. In the aspect of Maternal health benefits schemes, mean pretest was found to be 42.7±7.2% and mean post test score was 79.0± 6.8% with the enhancement of 36.3%±8.9% and significant (t=28.84*) at 0.05 level and in the aspect of Advantages of maternal health benefits schemes, mean pretest was found to be 49.4±10.7%, and mean post test score was 77.4± 8.0% with the enhancement of 28.0±11.7% and significant (t=16.92*) at 0.05 level. The overall mean percentage in pretest was 46.5±6.0%, posttest was 79.1±5.3% with the enhancement of 32.6%± 4.4% and significant (t= 52.39*) at 0.05 level. The calculated paired't' test values based on pre-test and post-test knowledge scores of all the aspects were more than the table value at 0.05 level of significance with 49 degrees of freedom. It indicates that mean differences between mean pre-test and post-test knowledge scores are significant at 0.05 level for all the aspects. Hence the stated research hypothesis H1 was accepted for all aspects of knowledge. (Fig.14)

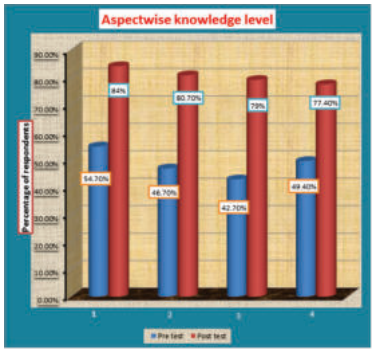

Figure 14: Aspect wise Mean Pretest and Posttest Knowledge scores on Maternal health benefits schemes.

Section III:

Analysis of association between demographic variables with post-test knowledge scores.

TABLE 9: Association between Demographic variables and Posttest Knowledge level on Maternal health benefits schemes

Demographic Variables	Category	Knowledge Level				χ^2 Value	P Value
		Moderate		Adequate			
		N	%	N	%		
Age group (years)	Below 20	3	13.0	20	87.0	9.95*	P>0.05
	21-30	9	45.0	11	55.0		
	31-40	5	71.4	2	28.6		
Type of family	Nuclear	10	25.0	30	75.0	7.22*	P>0.05
	Joint	7	70.0	3	30.0		
Educational status	SSLC	10	55.6	8	44.4	7.90*	P>0.05
	PUC	5	33.3	10	66.7		
	Degree	2	15.4	11	84.6		
	Post graduate	0	0.0	4	100.0		
Family income/ month	Below Rs.5,000	4	80.0	1	20.0	12.50*	P>.05
	Rs.5,001-10,000	3	17.7	14	82.3		
	Rs.10,001-20,000	9	52.9	8	47.1		
	Above Rs.20,000	1	9.1	10	90.9		
Gravida of the mother	Primi gravida	7	63.6	4	36.4	5.52*	P>0.05
	Multi gravida	10	25.6	29	74.4		
Source of information	Family members/Friends	3	30.0	7	70.0	0.09 NS	P<0.05
	Mass media	14	35.0	26	65.0		
Combined		17	34.0	33	66.0		

* Significant at 5% Level,

NS: Non-significant

The association between age group and posttest knowledge level of respondents on Maternal health benefits schemes. In the age group of below 30 years, 13% of the respondents had moderate knowledge and 87% of the respondents had adequate knowledge. In the age group of 31-40 years, 45% of the respondents had moderate knowledge and 55.0% of respondents had adequate knowledge. In the age group of 41-50 years, 71.40% of the respondents had moderate knowledge and 28.6% had adequate knowledge. The post-test knowledge scores of respondents by age group are subjected to χ2 test. There exists a significant association in (χ2=9.95), between age group and post test knowledge level of respondents (Fig.15).

Association between educational status and post test knowledge level of respondents, in SSLC respondents 55.6% had moderate knowledge and

44.4% of the respondents had adequate knowledge. In PUC respondents 33.3% of respondents had moderate knowledge and 66.7% of the respondents had adequate knowledge. In Degree respondents 15.4% of the respondents had moderate knowledge and 84.6% of the respondents had adequate knowledge. Among Postgraduate respondents, all of them had adequate knowledge. The post-test knowledge scores of respondents by educational status are subjected to $\chi 2$ test. There exists a significant association ($\chi 2$=7.90) between educational status and knowledge level of respondents (Fig.16).

Association between Gravida of the mother and posttest knowledge level of respondents, Among Primi gravida respondents 63.6% of the respondents had moderate knowledge and 36.4% of the respondents had adequate knowledge. In Multi gravida respondents, 25.6% of the respondents had moderate knowledge and 74.4% of the respondents had adequate knowledge. There exists a significant association ($\chi 2$=5.52) between educational status and knowledge level of respondents (Fig.17).

Association between type family and posttest knowledge level of respondents, in nuclear family respondents 25.0% of the respondents had moderate knowledge and 75.0% of the respondents had adequate knowledge. In joint family respondents, 70.0% of the respondents had moderate knowledge and 30.0% of the respondents had adequate knowledge. There exists a significant association ($\chi 2$=7.22) between educational status and knowledge level of respondents (Fig.18).

Association between family income and posttest knowledge level of respondents, in the group of family income below 5,000 Rs, 80.0% of the respondents had moderate knowledge and 20.0% of the respondents had adequate knowledge. In the group of family income in between 5,001-10,000 Rs 17.7% of the respondents had moderate knowledge and 82.3% of the respondents had adequate knowledge. In the group of family income in between 10,001-20,000 Rs, 52.9% of the respondents had moderate knowledge and 47.1% of the respondents had adequate knowledge. In the group of family income in between above 20,001 Rs, 9.1% of the respondents had moderate knowledge and 90.9% of the respondents had adequate knowledge There exists a significant association ($\chi 2$=12.50) between educational status and knowledge level of respondents (Fig.19). Were more than the table values at 0.05 level of significance, hence the stated research hypothesis H2 is accepted with regard to above mentioned demographic variables but the calculated χ^2 values with regard to source of information (χ^2 =0.09, P>0.05); were less than the table values at 0.05 level of significance, hence the stated research hypothesis $H^2$is rejected.

V. CONCLUSION

This study has given a broad area of personal and professional experience for student researcher in applying steps of research process and in overcoming difficulties and problems faced during the study. There was good co-operation from Antenatal mothers, District Health Officer and village members. The respondents were satisfied and happy with the information they received. The study reveals that SIM could be used as an effective teaching strategy.

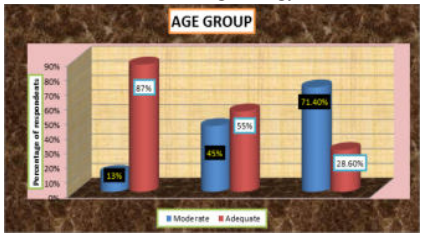

Figure 15: Association between Age group and Posttest Knowledge level on Maternal health benefits schemes.

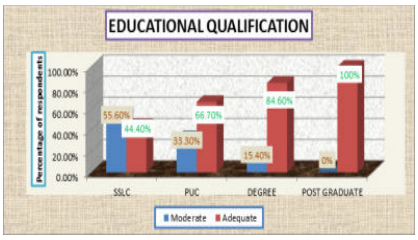

Figure.16: Association between Educational Qualification and Posttest Knowledge level on Maternal health benefits schemes.

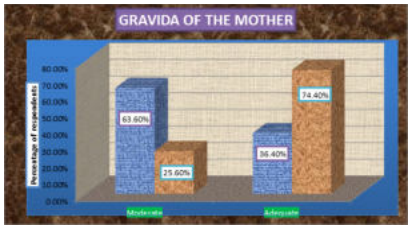

Figure 17: Association between Gravida of the motherland Posttest Knowledge level on Maternal health benefits schemes

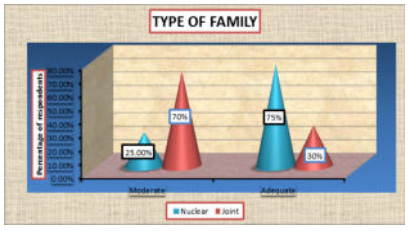

Figure 18: Association between Type of Family and Posttest Knowledge level on Maternal health benefits schemes.

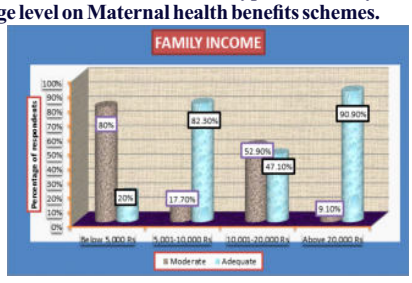

Figure.19: Association between Family Income and Posttest Knowledge level on Maternal health benefits schemes

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A BREVILOQUENT REVIEW ARTICLE ON "IDIOT SYNDROME"

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A BREVILOQUENT REVIEW ARTICLE ON "IDIOT SYNDROME"

Nursing

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ABSTRACT

Internet uses for medical information has both its pros & cons effects. The positive effect of using internet in the field of medical information is that, it can lead to an intelligent discussion with the doctor, and can lead to early diagnosis and prevention of a harmful condition. Self-diagnosis and self-treatment by using Dr. Google may assist for some time, but occasionally it may go wrong and may affect the patient's health seriously and blindly trusting end up with invite trouble. When a person blindly trusts the information provided on the internet, and stops treatment, it is called cyberchondria, or IDIOT. Adjusting with cyberchondria requires some self-compassion and a willingness to respond in a new way to health anxiety. Professional help is accessible for those with persistent or recurrent symptoms or excessive anxiety.

KEYWORDS

Internet Derived Information Obstruction Treatment, Cyberchondria, & MBCT.

INTRODUCTION:

In this modern & digital era everyone is addicted with internet irrespective to the age & sex, has a smart phone, tablet or laptop. Internet uses for medical information has both its pros & cons effects. The positive effect of using internet in the field of medical information is that, it can lead to an intelligent discussion with the doctor, and can lead to early diagnosis and prevention of a harmful condition. But on the other hand, the negative effects are obstructing the treatment, treatment may go wrong, and it may affect the patient's health utterly. Presently, many people after searching in internet self-diagnose the condition and take treatment by himself before consulting the physician. But the hard truth is that the partial knowledge about any medical condition or a drug is always harmful. Self-diagnosis and self-treatment by using Dr. Google may assist for some time, but occasionally it may go wrong and may affect the patient's health seriously and blindly trusting end up with invite trouble.[1] People with depression or anxiety are more prone to experience cyberchondria. It is also prevalent in people who have had a loved one die.[2] Cyberchondria is a growing alarm among many healthcare practitioners as patients can now research any and all symptoms of a rare disease, illness or condition, and manifest a state of medical anxiety.[3,4]

Definition

Numerous definitions of cyberchondria have been proposed and they all include unnecessarily or repeated online searches for health-related information and anxiety about health.[5]

IDIOT syndrome is also recognized by means of cyberchondria, and expands with 'Internet Derived Information Obstruction Treatment'. When a person blindly trusts the information provided on the internet, and stops treatment, it is called cyberchondria, or IDIOT (Internet Derived Information Obstruction Treatment) Syndrome.[1]

Causes & Inductions (triggers) for Cyberchondria

Cyberchondria get triggers from various angles, ranging from single traumatic events to chronic unmanaged stress.[6]

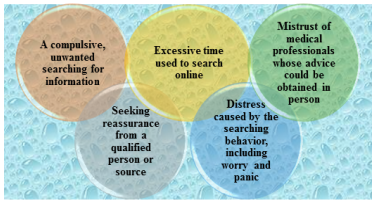
Signs of Cyberchondria

Key features of cyberchondria that the person uncertainties about having a serious illness in spite of having minimal (**EMADS**) or no symptoms.

E ---Excessive time used to search online
M ---Mistrust of medical professionals whose advice could be obtained in person.
A ---A compulsive, unwanted searching for information
D---Distress caused by the searching behaviour, including worry and panic
S---Seeking reassurance from a qualified person or source.[7]

Emblematic signs that might be experienced in cyberchondria include:

- Authentic symptoms are minor or even absent
- Spend hours together even for minor disorders
- Dreadful of having at least one number illness, and possibly several
- Searching online causes more due fear and anxiety instead of relief
- Experience an accelerated heart rate or sweating or other anxiety-related symptoms while surfing in goggle platform
- Jumped to the foulest conclusions about the current health status
- Worry excessively about the condition even suffering from minor health issues
- Found that online is accurate and truthful.
- People with cyberchondria exhibit five characteristic traits:[8]



6 Tactics for Coping with Cyberchondria

Adjusting with cyberchondria requires some self-compassion and a willingness to respond in a new way to health anxiety. Professional help is accessible for those with persistent or recurrent symptoms or excessive anxiety. In addition to considering professional help, there are a numerous coping skill that are helpful in getting through an episode of cyberchondria.

Six coping strategies that work well for those with cyberchondria:

1. Avoid Self-Shaming

Many individuals with cyberchondria feel uncomfortable or ashamed about their inclination to believe that they have a serious illness. This awkwardness can worsen the anxiety and even exacerbate the physical, stress-related symptoms.

2. Be Empathetic to Yourself

Health-related fears are more affective to make panic situation. Such fears can be difficult to understand but they are valid feelings.

3. Practice Relaxation techniques

Self-taught relaxation skills like deep breathing exercises, guided imagery, and muscle-tension relaxation exercises etc are much more effective to cope with Cyberchondria.

4. Challenge thought of being ill

Should point out the concern mainly affecting towards surfing in online & self-analysis to get rid of that.

5. Consult with Physician

Consult with doctor about the experienced anxiety. Should get a medical opinion if concerns persist rather than jump to conclusions about the worst-case scenarios.

6. Realize the Bigger Picture

Firstly, should understand about the availability of misleading information in google. Some of those are intentionally presented in a way to grab attention along with increase fear.

When & how to seek Professional Help

Cyberchondria can be diagnosed and treated by various healthcare professionals, including psychologists, psychiatrists, and social workers. The person should start with their primary care physician in order to rule out underlying physical causes. There may be a referral to a medical specialist if the physician notes any significant symptoms.

It is possible to have cyberchondria as well as a legitimate medical condition. This could occur when the person's anxiety about the medical condition is out of proportion to the seriousness of the illness.

After addressing any presenting symptoms, the primary care physician will likely refer the person to a mental health specialist. That provider will make recommendations about the form of therapy that will be helpful.

Taking out a loving one

When a loved one suffers from cyberchondria, it may be helpful to provide information which reduces their awkwardness about their health anxiety. Many people with cyberchondria feel shame or embarrassment which only deteriorates their level of anxiety. Getting help from a mental health provider is much better option to be accepted.

Here are some tips for getting help for a loved one with cyberchondria:

- Encourage to speak out actual problems
- Encourage to get help from mental health care professional
- Offer support of a skilled therapist
- remind the appointments with therapist.
- Acknowledge that online surfing is a common matter
- PEW data illustrates that 61% of the population has done some searching online.9

Therapeutic measures for Cyberchondria & Underlying Conditions

Research has been done to regulate the effectiveness of psychotherapy for the symptom recognized as "health anxiety." The following are some types of therapy which have been acknowledged as effective treatments for health anxiety.

Mindfulness Based Cognitive Therapy (MBCT)

Mindfulness Based Cognitive Therapy (MBCT) has been proved to be a useful addition to "usual services" for patients with health anxiety. Patients who taken part in MBCT in addition to usual services showed meaningfully lower health anxiety than those who received only the customary or so-called services. This enhancement was apparent immediately after treatment and also at a one-year follow-up assessment.[10]

Rational Emotive Behaviour Therapy

Rational Emotive Behaviour Therapy is very helpful in learning to respond appropriately to harmless or ambiguous signals from one's body. Clients acquire distraction techniques to help them refocus on thoughts unrelated to their health anxiety or symptoms. They also learn relaxation techniques to manage the anxiety and its physical manifestations.[11]

Pharmacotherapy

Medications like selective serotonin reuptake inhibitors (SSRIs) have been useful in dealing the obsessive thoughts involved in Cyberchondria and Anxiety Disorder. The basis for this treatment is the similarity between Cyberchondria/ Illness Anxiety Disorder and OCD. The same medications which are helpful in treating OCD may be helpful in reducing the obsessive and compulsive aspects of cyberchondria.[12]

CONCLUSION:

The first negative adverse effect of being dependant on Dr. Google is that searching for information based on symptoms can be dreadful for the emotional state. Using Google, or other tools, can feel worse and increase the anxiety level. While looking for up a disease Google surfing can also produce a second nasty adverse effect. List of possible symptoms on almost any web site can be found which can sometime cause lot of confusions. As many of the warning sign or symptoms are equitably common and will overlap with a lot of possible problems which may have nothing to do. But create panic situation and feels sicker.

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

Source of funding- Self (review article), No financial support was provided relevant to this article.

Conflict of Interest- Have no conflict of interest relevant to this article.

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RTOS Health monitoring system with blood oxygen saturation analytics.

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Abstract

This project presents an implementation of low power consumption, real-time remote bio-signals monitoring system based on the internet of thing technology wearable, portable wearable, portable,This implementation provides an improved step-in remote health monitoring field. Numbers of people, who require health care increase year by year and the conventional bio-signals monitoring systems require patients' attendance in person inside hospitals. This might cause an inefficient situation to take care of the patients during this pandemic, especially those who have critical and unstable health conditions. Therefore, internet technology along with modern electronic devices could offer promising solutions in this field. Based on that, this project utilizes a mobile application and web dashboard as IoT platforms to monitor remotely the live ECG signal, heart rate, SPO2, Blood pressure and the body temperature of patients. The signals are measured and processed by using a high-speed microcontroller. The main contribution of this paper is sending an electrocardiogram (ECG signal) to a smart mobile phone to be watched by a doctor. This assists in heart diseases diagnosing before the worst case can happen. Finally, the obtained results of this project are illustrated on both smartphone and web dashboard as well.

INTRODUCTION

In this day and age, it is now difficult for one to be conscious about their health. As health care goes unnoticed and untreated, people become more susceptible to health issues. Healthcare is the maintenance and monitoring of health through prevention, diagnosis and treatment. This is delivered by health and medical professionals such as doctors and nurses. However, in many sectors of the world, such healthcare is still unavailable despite improvement in both technology and healthcare. The other problem is the added expenditure of post-operative and post-hospitalization care. After the patient is discharged, follow-up at home is equally important and necessary to ensure the well-being of the patient. At home, continuous monitoring of health conditions provides caretakers visibility into the patients' path to recovery. Therefore, careful consideration must be taken for complete recovery. The process of noting down the health conditions at regular

intervals is prone to user error. For example, it is possible that one forgets to take the reading at the required time, or it is also possible that a wrong entry is made. It is also important to administer medicine to the patient at the scheduled time. However, the possibility of providing the wrong pill or forgetting to administer medicine is high. These tasks can be simplified by developing a system that notifies them regarding their medication. Adoption of Internet of Things (IoT) in healthcare can significantly improve patient-care and reduce user errors. IoT is a system of interconnected devices and sensors that is capable of exchanging data. This allows them to make smart decisions. With the growth and advancements made in the area of Internet of Things, better and improved healthcare is now possible and easily accessible.

The integration of IoT in healthcare can drastically reduce fatalities, and ensure a focused attention towards patients. With the integration of IoT in healthcare, it is possible to make quicker and accurate diagnosis regarding diseases and finding the best cure for it. The idea of the proposed work is to construct a real-time health monitoring system using Internet of Things (IoT) along with a smart phone application and web dashboard. The system consists of sensors that monitors different health factors such as blood pressure, electrocardiogram (ECG), pulse rate, body temperature and oxygen saturation (SpO2). The application presents the information from the sensors at regular intervals in a simplified manner that is understandable by all.

OBJECTIVES

The main aim of the proposed system is to provide efficient, Low cost and accurate remote human body monitoring using IoT. we have focused on the data readability of the sensors where anybody can easily can identify the status of the health without any prior technical knowledge. Giving care and health assistance to the bedridden patients at critical stages with advanced medical facilities have become one of the major problems in the modern hectic world. In hospitals where many patients whose physical conditions must be monitored frequently as a part of a diagnostic procedure, the need for a cost-effective and fast responding alert mechanism is inevitable. Proper implementation of such systems can provide timely warnings to the medical staffs and doctors and their service can be activated in case of medical emergencies.

MOTIVATION

In rural hospitals, the facilities for health caring are limited. The poor quality of health management enables issues in health care system Everyone should get the knowledge of own health as easy and early as possible. Also, it should be worth for each. Latest report of The India Spend analysis of data says that the 500,000 doctor's shortage in India. WHO defines the doctor patient ratio will be 1:1000 which has been failed in India In developing countries there is lack of resources and management to reach out the problems of individuals.

In this COVID-19 pandemic daily routine checkup of the patient in hospitals who is not affected by the corona may be expose to virus and affects his health. For this purpose, various systems which give easy and assured caring unit has been developed. This system reduces time with safely handled equipment

LITERATURE SURVEY

Internet of Things (IoT) in healthcare has a multitude of benefits such as better patient-care, reduced user errors and smart decision making. A study [1] proposed the development of a healthcare system that allows guardians and doctors to oversee the health conditions of patients remotely through Internet.

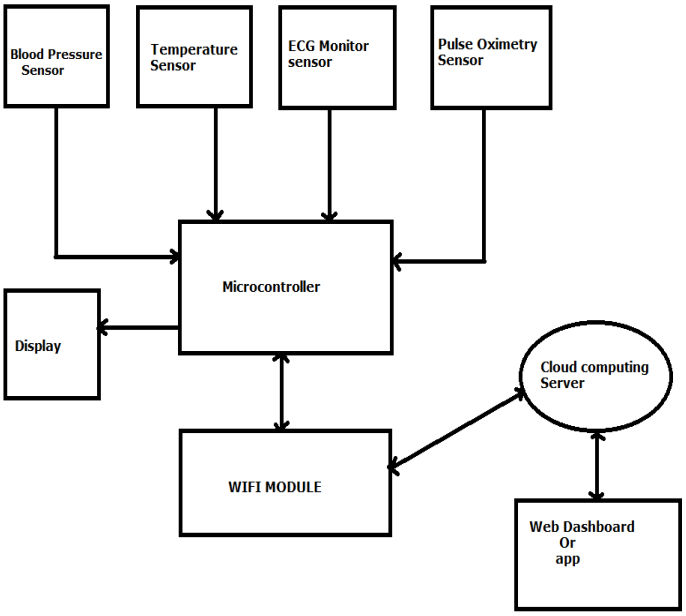
The system was developed using the E-Health Sensor Shield Kit, Phi gets Interface Kit and Arduino. The system also included a web interface using JavaScript, HTML5 and PHP. Study [3] suggested the development of system that monitors temperature and heartbeat using Arduino.

Acute health conditions might lead to sudden death. Many people die suddenly around the world because of dysfunction in one or more body organs. Before that happen, these organs produce abnormal signs. These signs, which called bio-signals, can be detected and collected via sensors. Based on the search scope, the remote healthcare systems based on IoT technology depends on microcontroller and gateway to upload data. Arduino microcontroller family is used frequently in this field. Some projects utilize NODEMCU which is ESP8266 based board [4].While others utilize Arduino UNO with ESP9266 module [5]. Other projects make matching between one of Arduino boards and Raspberry Pi board. The processing is performed by the Arduino board and the Raspberry Pi is the gateway [6].

Moreover, projects depend on Raspberry Pi for processing and uploading data to the IoT server [7]. However, some projects depend on the Arduino board for processing purposes and utilize the smartphones as gateway [8]. Sensors connected to the microcontroller via wires like most of the projects [4-7] or via a wireless protocol such as the HC-06 Bluetooth module [8].

PROPOSED METHODOLOGY

The objective of this system is to record the various sensor information and display it to the users in a simple user-friendly manner. The recorded information which can be accessed through the app and web dashboard will indicate whether the reading is within the normal limits. It will also notify the user and the contacts regarding the medication requirements such as dosage, intake time etc. In this section, the components in the architecture will be elaborated.



The proposed system comprises of sensors that monitor different health parameters, namely pulse rate, blood pressure, electrocardiogram (ECG), body temperature and oxygen saturation (SpO2). The components used are described as below.

a) Blood Pressure Sensor: BPS-BTA is a non-invasive sensor developed to measure human blood pressure. It is capable of measuring systolic, diastolic and mean arterial pressure using the oscillometer technique. Monitoring blood pressure is important because as it goes higher, there is more strain on the arteries thereby making it weaker. Due to these reasons, the chances of a stroke, heart attack, dementia is possible.

b) Pulse oximetry Sensor and body Temperature sensor: MAX30102 Pulse Oximeter is used in the proposed design to measure the temperature and oxygen saturation. Pulse oximeter is a non-invasive test which employs a probe that can be secured to a finger or earlobe. It measures the oxygen saturation level in blood. Normal oxygen saturation levels are between 95 and 100 percent. Low oxygen saturation levels below 90 percent can cause cells to be strained and damaged. Pulse oximeter is used to monitor the health conditions of a patient with problems that affect blood oxygen levels such as anemia, heart attack, heart failure etc.

c) ECG Sensor: AD8232 ECG is adopted to measure the heart's electrical activity at rest. ECG (Electrocardiogram) provides information such as the heart rate and rhythm. It can also provide information regarding the enlargement of the heart due to high blood pressure (hypertension), signs of decreased oxygen delivery to the heart, increased thickness of heart muscle and also reveal indications of a previous heart attack

d) WIFI Module: Wi-Fi Module is an economical Wi-Fi microchip. Its integration with TCP/IP protocol stack allows microcontroller to access Wi-Fi. This is integrated onto the microcontroller board.

Working of the System

Microcontroller is connected with the components of the sensing unit, WIFI Module, and is powered by an external battery. The sensors are attached onto the patient's body. The system proposed will work as a real-time monitoring system. According to the adjustments such as time interval between each reading made in the application, the readings of the sensors are recorded by the application and displayed on the display. The processed data are sent to the web dashboard and android, iOS application using cloud computing where the each and every data is stored and can be monitor.

In case an emergency event is triggered, the application will send a notification and alarm of the situation. The mobile application will also provide an interface which notifies the user and the contacts of the medication that needs to be taken, according to the time specified. The application records these details and sends it to the web dashboard and to the applications accordingly.

Advantage of this project

1. IOT Monitoring proves really helpful when we need to monitor & record and keep track of changes in the health parameters of the patient over the period of time. So, with the IOT health monitoring, we can have the database of these changes in the health parameters. Doctors can take the reference of these changes or the history of the patient while suggesting the treatment or the medicines to the patient.
2. Hospital stays are minimized due to Remote Patient Monitoring.
3. Hospital visits for normal routine checkups are minimized.
4. Patient health parameter data is stored over the cloud. So it is more beneficial than maintaining the records on printed papers kept in the files. Or even the digital records which are kept in a particular computer or laptop or memory device like a pen- drive. Because there are chances that these devices can get corrupt and data might be lost. Whereas, in the case of IOT, the cloud storage is more reliable and does have minimal chances of data loss.

Applications

- Remote human health analysis.
- All health details of patient will be stored in cloud computing system.
- Patients are monitored from distinct places by knowing the patient health records.
- It is also used to check the health of a person with any condition that affects blood oxygen levels, such as:
    - Heart attack.
    - Heart failure.
    - Chronic obstructive pulmonary disease (COPD)
    - Anemia.
    - Lung cancer.
    - Asthma.

- Pneumonia.

EXPECTED OUTCOME

The sensors details are displayed on the LCD display locally, and On the android Or iOS through internet of things. The sensors details can be stored in CSV format

Hardware and software Requirements

Hardware Requirements

1. **Blood Pressure sensor**

Features

- Intelligent automatic compression and decompression
- Easy to operate, switching button to start measuring
- 60 store groups memory measurements
- Can read single or all measures
- 3 minutes automatic power saving device
- Intelligent device debugging, automatic power to detect
- Local tests for: wrist circumference as 135-195mm
- Large-scale digital liquid crystal display screen, Easy to Read Display
- Fully Automatic, Clinical Accuracy, High-accuracy
- Power by External +5V DC
- Serial output data for external circuit processing or display.

Specification

- Working Voltage: +5V, 200mA regulated

- Output Format: Serial Data at 9600 baud rates (8 bits data, No parity, 1 stop bits). Outputs three parameters in ASCII.

Sensing unit wire length is 2 meters

2.Pulse Oximeter and Temperature Sensor (MAX30102)

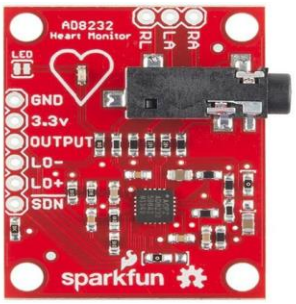
MAX30102 is an integrated pulse oximetry and heart-rate monitor sensor solution. It integrates two LEDs (IR and Red), a photodetector (visible + IR), optimized optics, and low-noise analog signal processing to detect pulse oximetry and heart-rate signals. It is fully configurable through software registers, and the digital output data is stored is stored in a 32-deep FIFO within the device.

Features

- Integrated Cover Glass for Optimal, Robust Performance
- Ultra-Low Power Operation for Mobile Devices
- Programmable Sample Rate and LED Current for Power Savings
- Low-Power Heart-Rate Monitor (< 1mW)
- Ultra-Low Shutdown Current (0.7µA, typ)
- Fast Data Output Capability
- High Sample Rates
- Robust Motion Artifact Resilience
- High SNR
- -40°C to +85°C Operating Temperature Range

3.ECG Monitoring Sensor (AD8232)

AD8232 ECG Module integrated with AD8232 IC from Analog Devices, which is a single-chip designed to extract, amplify, and filter biopotential signals for biopotential measurement applications (like ECG and others). ECGs can be extremely noisy so that the AD8232 Single Lead Heart Rate Monitor acts as an op-amp to help obtain a clear signal from the PR and QT Intervals easily.



Features of the AD8232 ECG Module

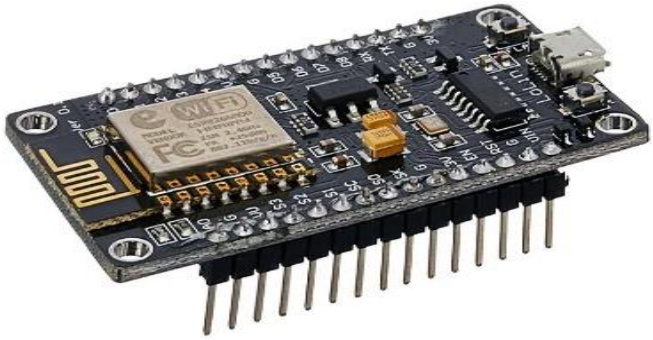
- Fully integrated single-lead ECG front end.
- Common-mode rejection ratio: 80 dB (dc to 60 Hz).
- Two or three-electrode configurations.
- Qualified for automotive application.
- Single-supply operation: 2.0 V to 3.5.
- Fast restore feature improves filter settling.

4. ARDUINO DUE

ARDUINO DUE board is one of most powerful development boards in ARDUINO series. DUE board not only has tons of features it also has terrific processing speed making it suitable for advanced applications. DUE could be considered as professional board considered UNO as beginner board. DUE board also developed on ARM controller series where as others boards are developed on ATMEGA controller series.

5. WIFI MODULE(ESP12E)

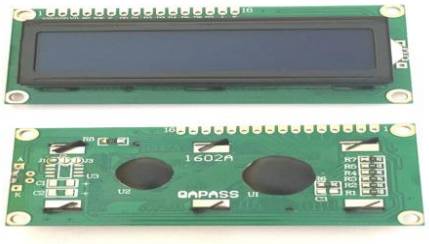
NodeMCU is an open-source Lua based firmware and development board specially targeted for IoT based Applications. It includes firmware that runs on the ESP8266 Wi-Fi SoC from Espressif Systems, and hardware which is based on the ESP-12 module.



Specifications & Features

- Microcontroller: Tensilica 32-bit RISC CPU Xtensa LX106
- Operating Voltage: 3.3V
- Input Voltage: 7-12V
- Digital I/O Pins (DIO): 16
- Analog Input Pins (ADC): 1
- UARTs: 1
- SPIs: 1
- I2Cs: 1
- Flash Memory: 4 MB
- SRAM: 64 KB
- Clock Speed: 80 MHz
- USB-TTL based on CP2102 is included onboard, Enabling Plug n Play
- PCB Antenna
- Small Sized module to fit smartly inside your IoT projects

6.Display



Features of 16×2 LCD module

- Operating Voltage is 4.7V to 5.3V
- Current consumption is 1mA without backlight
- Alphanumeric LCD display module, meaning can display alphabets and numbers
- Consists of two rows and each row can print 16 characters.

- Each character is built by a 5×8-pixel box
- Can work on both 8-bit and 4-bit mode
- It can also display any custom generated characters
- Available in Green and Blue Backlight

Software Requirements

1. Arduino IDE

A program for Arduino may be written in any programming language with compilers that produce binary machine code for the target processor. Atmel provides a development environment for their microcontrollers, AVR Studio and the newer Atmel Studio. The Arduino project provides the Arduino integrated development environment (IDE), which is a cross-platform application written in the programming language Java. It originated from the IDE for the languages Processing and Wiring. It includes a code editor with features such as text cutting and pasting, searching and replacing text, automatic indenting, brace matching, and syntax highlighting, and provides simple one-click mechanisms to compile and upload programs to an Arduino board. It also contains a message area, a text console, a toolbar with buttons for common functions and a hierarchy of operation menus.

A program written with the IDE for Arduino is called a sketch. Sketches are saved on the development computer as text files with the file extension. ino. Arduino Software (IDE) pre-1.0 saved sketches with the extension. pde. The Arduino IDE supports the languages C and C++ using special rules of code structuring. The Arduino IDE supplies a software library from the Wiring project, which provides many common input and output procedures. User-written code only requires two basic functions, for starting the sketch and the main program loop, that are compiled and linked with a program stub main () into an executable cyclic executive program with the GNU toolchain, also included with the IDE distribution. The Arduino IDE employs the program avrdude to convert the executable code into a text file in hexadecimal encoding that is loaded into the Arduino board by a loader program in the board's firmware.

2. BLYNK SERVER

There is need to control the processor board like Arduino Raspberry Pi using apps. Blynk is an app with IOS and Android platforms which will make this possible. Here by simply dropping widgets on mobile screen we can establish graphic interface for another project using Blynk digital dash board and it is very simple to use. This app will not true to some specific board instead it is a supporting hardware of our choice.

Whenever the processor board are used linked to internet through Wi-Fi or Ethernet, Blynk will get is online and ready for "internet of your things".

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EFFECTIVENESS STRUCTURED TEACHING PROGRAME ON KNOWEDGE REGARDING FEMALE FOETICIDE AMONG WOMENS OF REPRODUCTIVE AGE GROUP

Obstetrics & Gynaecology

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ABSTRACT

Introduction: Female foeticide occurs all over India, from the rural villages to urbanized cities. The most effective way to end female foeticide is to understand why and how it exists and take measures as a society to fix this problem. **Objectives**: 1.To assess the pretest level of knowledge regarding female foeticide among reproductive age group women.2.To assess the post-test level of knowledge regarding female foeticide among women of reproductive age group after administration of structured teaching program.3.To evaluate the effectiveness of structure teaching Programme on knowledge regarding female foeticide women of reproductive age group.4.To find out the association between the pre-test level of knowledge with their selected demographic variables. **Methodology:** Pre experimental design with one group pretest- post-test design was adopted for this study.30 samples were selected by using convenient sampling technique. A self-structured questionnaire tool was used to collect the data. **Results:** Comparison of pre-test and post-test knowledge score of reproductive age group women of sample group and the differential score is 4. And the difference between pre- test and post-test standard deviation is - 0.8. And the difference between pre-test and post-test standard deviation is - 0.8. The pretest and posttest knowledge score was analysed by using student paired t test. There was association between the pretest level of knowledge with selected demographic variables. **Conclusion:** There is a need to create an awareness on prevention of female feticide among women's especially in rural areas in the country.

KEYWORDS

Gender discrimination is an important social context and it starts in the nuptial stage of female fetus death before its arrival in the outside world. In India a strong fondness for sons over daughter. People desire smaller families with comparatively greater sons by abuse medical technology. It is one of the main motives for declining sex ratio.

In rural areas where most people do not have access to sex determination facilities the rate of female infanticide is alarming, "Infanticide" is the killing of a child after birth. In India there are many shocking instances of female infanticide by strangulation, poisoning, dumping in garbage bins, drowning, burying alive, starvation and over exposure to elements. A startling fact is that often the mother or other female members in her network actively participate in the execution of these heinous killings.

OBJECTIVES OF THE STUDY

- To assess the pretest level of knowledge regarding female foeticide among reproductive age group women.
- To assess the post-test level of knowledge regarding female foeticide among women of reproductive age group after administration of structured teaching program.
- To evaluate the effectiveness of structure teaching Programme on knowledge regarding female foeticide women of reproductive age group.
- To find out the association between the pre-test level of knowledge with their selected demographic variable.

Research Approach/ Design

In this study Quantitative Research Approach and One Group pre-test post-test research design will be adapted for the study to assess the knowledge regarding female foeticide among women of reproductive age group.

Variable Under Study

Independent Variable: -In this study, independent variable refers to the structure teaching program regarding female feticide.

Dependent Variable: - Knowledge of reproductive age group women's aged 18 – 45 years regarding female foeticide and its preventive measures.

Population

In the present study the population comprised of selected village reproductive age group women's in 18 – 45 years in selected villages.

Sample And Sample Size

Sample: In this study sample were reproductive age group womens aged between 18 – 45 years in selected villages.

Sample size: 30 reproductive age group womens of 18 – 45 years.

Sampling technique: Non probability – convenient sampling technique was adopted for the present study.

Criteria For Selecting The Sample

Inclusion criteria –

- Reproductive age group women's who are willing to participate in the study.
- Reproductive age group women's who are present at the time of study.
- Reproductive age group women's who know to read and write Kannada.

Exclusion criteria –

- Reproductive age group women's those who are absent and critically ill at the time of study.
- Reproductive age group women's who are pregnant.
- Reproductive age group women's who are not able to co-operate at the time of data collection

Description Of The Instrument

- The tool consists of structured questionnaire and socio demographic Performa. It consists of 2 parts –
- **Section A: -** Demographic variables
- **Section B: -** Knowledge questionnaire prevention and management of female foeticide.

RESULTS

Overall Pre-test Knowledge Score

NO OF QUESTIONS	MEAN SCORE	MEAN %	STANDARD DEVIATION
20	10.5	52.5%	2.7

This table shows the pre-test knowledge mean score is 10.5, mean percentage is 52.5% and standard deviation is 2.7.

Overall Post-test Kowledge

NO OF QUESTIONS	MEANS SCORE	MEANS %	STANDARD DEVIATION

20	14.5	72.5%	2.2

This table shows the post-test knowledge mean score is 14.5, mean percentage is 72.5% and standard deviation is 2.2.

Comparison Of Knowledge Score

	MEAN SCORE	STANDARD DEVIATION
Pre-test	10.5	2.7
Post-test	14.5	2.2
Difference score	4	0.8

This table shows comparison of pre-test and post-test knowledge score of reproductive age group women of sample group and the differential score is 4. And the difference between pre- test and post-test standard deviation is - 0.8. And the difference between pre-test and post-test standard deviation is - 0.8.

Mean, Standard Deviation And Paried 't' Test

	MEAN	SD	PAIRED 't' TEST	P VALUE
Pre-test	10.5	2.7	13.79* S	P<0.05
Post-test	14.5	2.2		

Reproductive age group womens regarding female foeticide with age of reproductive age group womens, education, occupation, monthly income, type of family have significant association with demographic variables like education, occupation, monthly income and type of family.

CONCLUSION:

Female feticide is one of the social stigma in developing countries. Today we are looking a lot of decline in the female sex ratio due to advanced technologies in determining the sex of the baby. So the awareness program should be launched in each part of the country to make the women about their rights and about the ill effects of abortions. Women should know their rights regarding adoption, maintenance, marriage, property, employment and education.

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Monkeypox-Trending Mutating & Out Bursting Disease

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ABSTRACT

Monkey pox is a trending as well as mutating viral disease condition spreading all over the world especially the African countries. Monkeypox is a transmittable disease caused by the monkeypox virus that can occur in certain animals as well as humans. The name monkeypox initiates from the preliminary discovery of the virus in monkeys in a Danish laboratory in 1958. The first human case was identified in a child in the Democratic Republic of the Congo in 1970.The time from acquaintance to onset of symptoms is usually 7 to 14 days. The West African clade, which has so far been distinguished in the cases reported in Europe, has been observed to have a case casualty rate of about 3.3% in Nigeria. Till now there is no official confirmed cases of Monkeypox have been reported in India. Monkeypox commences with fever, headache, muscle aches and ends with exhaustion. Some other clinical manifestations are swollen lymph nodes, chills, fever, headache, muscle aches, backache, exhaustion etc. Vaccination in contrast to smallpox was verified through several observational studies to be about 85% effective in avoiding monkeypox.

Keywords: Ankara strain, Lymphadenopathy, Orthopoxvirus, Pustules, Scabs, Variola, Zoonosis

INTRODUCTION

Monkeypox is a viral zoonosis (a virus spread to humans from animals) with symptoms almost similar to those seen in the past in smallpox patients, even if it is clinically less severe and unique. With the abolition of smallpox in 1980 and consequent cessation of smallpox vaccination, monkeypox has risen as the most significant orthopoxvirus for public health. Monkeypox principally occurs in central and west Africa, often in propinquity to tropical rainforests, and has been progressively appearing in urban areas.

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Animal hosts include an assortment of rodents and non-human primates.[1]

Monkeypox is a transmittable disease caused by the monkeypox virus that can occur in certain animals as well as humans. Symptoms starts with muscle pains, fever, headache, swollen lymph nodes, and feeling tired. This is trailed by a rash that forms blisters and crusts over. The time from acquaintance to onset of symptoms is usually 7 to 14 days.The duration of symptoms is stereotypically two to four weeks .There is no ethnical connection known for harlequin disorder.[2] Higher occurrence may be come across in cultures where parental consanguinity is common.[3]

Monkeypox virus is a type of Orthopoxvirus, a genus which includes cowpox, vaccinia, camelpox and variola viruses. The virus is the leading Orthopoxvirus affecting human populations since smallpox abolition, confirmed by the WHO in the year 1980. Clinical recognition, diagnosis, and prevention still keep on challenges in the resource-poor endemic areas where monkeypox is found. Furthermore, foundational ecological studies are essential to better understand the animal species intricate in transmission and maintenance of the virus, and to further inform prevention measures.[4]

METHODOLOGY

We performed a PubMed, Google Scholar, Cochrane quest in May 2022 by using the phrases Monkey pox, Monkey virus, Monkey pox pathophysiology, Monkey pox treatment, MPV, MPXV, VARV, CPX VACA etc. The search borne almost 42 papers, including reviews, case reports, case series, and clinical studies. After excluding the 12 non-English reports without an English abstract, we encompassed the remaining 30, irrespective of publication date.

OUTBREAK

Cases of monkeypox in non-endemic countries reported to WHO between 13 to 21 May 2022 as at 13:00

Country	Confirmed	Suspected
Australia	1-5	-
Belgium	1-5	1-5
Canada	1-5	11-20
France	1-5	1-5
Germany	1-5	-
Italy	1-5	-
Netherlands	1-5	-
Portugal	21-30	-
Spain	21-30	6-10
Sweden	1-5	-
United Kingdom	21-30	-
United States of America	1-5	-
Total	**92**	**28**

Cases of monkeypox in widespread countries between the time period of 15 December 2021 to 1 May 2022.

Country	Time period	Cumulative cases	Cumulative deaths
Cameroon	15 December 2021 to 22 February 2022	25	<5
Central African Republic	4 March to 10 April 2022	6	<5
Democratic Republic of the Congo	1 January to 1 May 2022	1238	57
Nigeria	1 January 2022 to 30 April 2022	46	0

EPIDEMIOLOGY

Monkeypox is an erratic disease due to infection with monkeypox virus. Monkey pox was first revealed in 1958 when explosions of a pox-like disease befell in monkeys kept for research. The first human case was documented in 1970 in the DRC and since then the infection has been informed in a number of central and western African countries. No further country separate West and Central Africa has reported similar outbreaks. As of **16 May**, a total of 14 monkeypox cases have been reported in the UK since 2018, 7 of which have been reported in May 2022.On **7 May 2022**, a monkeypox case was recognized in an individual with recent travel history to Nigeria. On **14 May**, 2 additional cases, with no known links to the case proclaimed on 7 May, were reported in individuals from the same household. On dated **16 May**, 4 further monkeypox cases were reported in England. These cases have no identified connections with the cases informed on **7** and **14 May**. Contact tracing and investigations are ongoing to identify where and how the cases reported on **14** and **16 May** acquired their infection. **May and June 2021**, 3 monkeypox cases were testified from within the same family; the directory case had recent travel history to

Nigeria. In the month of **December 2019**, a person in England was long-established to have monkeypox after recently travelling from Nigeria to the UK. In **September 2018**, 2 cases of monkeypox were identified in persons who had recently voyaged from Nigeria to the UK. The cases were epidemiologically distinct. The third monkeypox case was reported in **September 2018**. Travel related monkeypox cases have also been reported in the US in **2021**, Singapore in **2019**, Israel in **2018** and Benin in **1978**.[6]

BACKGROUND

This is the first time that chains of communication are reported in Europe without known epidemiological associations to West or Central Africa. These are also the first cases international reported among MSM. The clinical manifestation of monkeypox is typically mild. The West African clade, which has so far been distinguished in the cases reported in Europe, has been observed to have a case casualty rate of about 3.3% in Nigeria. Mortality is higher among children and young adults and immunocompromised persons are especially at risk of severe disease. Most people recuperate within weeks.[7]

The virus is called monkeypox because investigators first detected it in laboratory monkeys in 1958, but it is thought to diffuse to people from wild animals such as rodents or from other infested people. The number of cases noticed outside of Africa in the past week alone — which is almost certain to increase — has already exceeded the total number detected outside the land since **1970**, when the virus was first found to cause illness in humans. This rapid blowout is what has scientists on high alert.[8]

INDIA'S POSITION

Till now there is no official confirmed cases of Monkeypox have been reported in India. Though, keeping in mind the safety of Indians BMC has issued guidelines for the isolation and management of suspected cases of monkeypox. Nevertheless, the disease can prove fatal with the strain causing the current outbreak killing one in 100 infected.[9]

ORIGIN OF THE NAME

The name monkeypox initiates from the preliminary discovery of the virus in monkeys in a **Danish laboratory in 1958**. The first human case was identified in a child in the **Democratic Republic of the Congo in 1970**.[4]

RISK ASSESSMENT

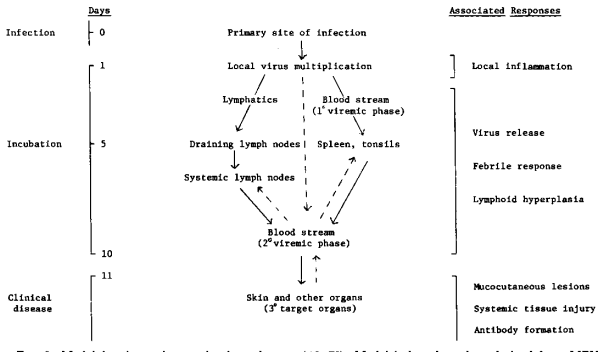
Widespread monkeypox disease is customarily geographically inadequate to West and Central Africa. The identification of established and so-called cases of monkeypox without any travel history to an endemic area in multiple countries is nonconforming. Hence, there is an urgent need to elevation awareness about monkeypox and undertake wide-ranging case finding and separation (as long as with supportive care), contact drawing and supportive care to limit further onward transmission. Whereas one vaccine (MVA-BN) and one specific conduct (tecovirimat) were agreed for monkeypox, in 2019 and 2022 correspondingly, these countermeasures are not yet extensively available.

With a number of countries in several WHO districts reporting cases of monkeypox, it is highly likely that other countries will identify cases. The situation is evolving and WHO imagines there will be more cases of monkeypox identified as surveillance expands in non-endemic countries.[4]

CAUSE

Monkeypox virus reasons the disease in both humans and animals. It was first recognized by Preben von Magnus in 1958 as a pathogen of crab-eating macaque monkeys (Macaca fascicularis) being used as laboratory animals, when two outbreaks of a smallpox-like disease arose in colonies of monkeys kept for research. The crab-eating macaque is often used for neurological researches. The virus is split into Congo Basin and West African clades, corresponding the geographical areas.[10]

PATHOPHYSIOLOGY



TRANSMISSION

Spread of the monkeypox virus among human beings is limited, but it can happen through close skin contact, air droplets, bodily fluids, and virus-contaminated objects.

CLINICAL FEATURES

Monkeypox commences with fever, headache, muscle aches and ends with exhaustion. The main variance between symptoms of smallpox and monkeypox is that monkeypox causes lymph nodes to swell (lymphadenopathy) whereas smallpox does not. The incubation period (time from infection to symptoms) for monkeypox is usually 7−14 days but can array from 5−21 days. The illness instigates with:

- Swollen lymph nodes
- Chills
- Fever
- Headache
- Muscle aches
- Backache
- Exhaustion

Within first 1 to 3 days (occasionally longer) after the arrival of fever, the patient develops a rash, often beginning on the face then spreading to other parts of the body. Lesions progress through the subsequent stages before falling off:

- Macules
- Pustules
- Papules
- Vesicles
- Scabs

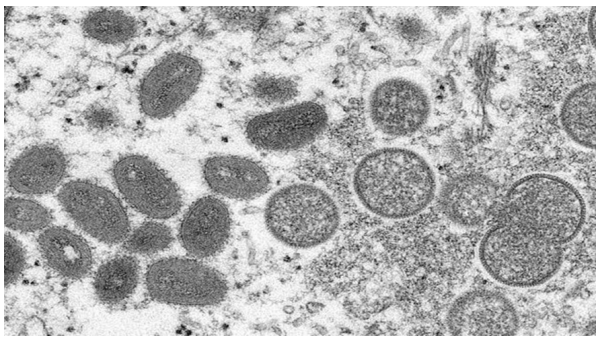
The illness archetypally lasts for 2−4 weeks. In Africa, monkeypox has been revealed to cause death in as many as 1 in 10 persons who contract the disease.[12]

DIAGNOSIS

Clinical discrepancy diagnosis must deliberate other rash illnesses such as measles, chickenpox, bacterial skin infections, syphilis, scabies and medication-associated allergies. Lymphadenopathy during the prodromal

a) early vesicle, 3mm diameter
b) small pustule, 2mm diameter
c) umbilicated pustule, 3-4mm diameter
d) ulcerated lesion, 5mm diameter
e) crusting of a mature lesion
f) partially removed scab

CLINICAL FEATURES



DIAGNOSIS

stage of illness can differentiate monkeypox from chickenpox or smallpox. Diagnosis can be confirmed by testing for the virus.

PCR testing of samples from skin lesions is the preferred laboratory test. To infer test results, information is compulsory on date of onset of fever, date of onset of rash, date of specimen collection, existing stage of rash, and patient age.[13]

DIFFERENTIAL DIAGNOSIS

- Smallpox
- Generalized vaccinia
- Disseminated zoster
- Chickenpox
- Yaws
- Scabies
- Disseminated herpes simplex
- Syphilis
- Bacterial skin infections
- Rickettsial pox
- Measles
- Eczema herpeticum
- Drug-associated eruption[14]

COMPLICATIONS

Monkeypox is generally a self-limited disease with the warning signs lasting from 2 to 4 weeks. Underlying insusceptible deficiencies may lead to inferior outcomes. Although vaccination counter to smallpox was protective in the past, today persons younger than 40 to 50 years of age may be more liable to monkeypox due to termination of smallpox vaccination campaigns globally after purge of the disease. Complications of monkeypox can consist of subordinate infections along with bronchopneumonia, sepsis, encephalitis, and infection of the cornea with following loss of vision. The extent to which asymptomatic infection may happen is unknown.

TREATMENT

Treatment for monkeypox is mainly supportive. The illness is usually mild and most of those infected will recover within a few weeks without treatment. Vaccination against smallpox can be used for both pre and post exposure and is up to 85% effective in preventing monkeypox. People vaccinated against smallpox in childhood may experience a milder disease.[5]

Vaccination

Vaccination in contrast to smallpox was verified through several observational studies to be about 85% effective in avoiding monkeypox. Therefore, prior smallpox immunization may result in milder illness. Indications of prior vaccination against smallpox can generally be initiate as a scar on the upper arm. At the present time, the unique (first-generation) smallpox vaccines are no longer accessible to the general public. A still new-fangled vaccine based on a modified attenuated vaccinia virus (Ankara strain) was permitted for the prevention of monkeypox in 2019. This is a two-dose vaccine for which availability remains partial. Presently, there is **no confirmed, safe treatment** for monkeypox virus infection. [11]

PREVENTION

Rising awareness of risk factors and educating people about the events they can take to lessen exposure to the virus is the main prevention strategy for monkeypox. Scientific studies are now underway to evaluate the practicability and appropriateness of vaccination for the prevention and control of monkeypox. Some countries have, or are evolving, policies to offer vaccine to persons who may be at risk

such as laboratory employees, rapid response teams and health workers. We can prevent monkeypox virus infection by some following particular steps by:

- Evading contact with sick animals (especially sick or dead animals).
- Avoiding contact with bedding and other materials soiled with the virus.
- Should wash hands with soap and water after coming into contact with an infected animal.
- Thoroughly cooking all foods containing animal meat or parts.
- Evading contact with people who seems to be disease-ridden with the virus.
- Using PPE when caring for people infected with the virus.

HOW MONKEYPOX RELATES TO SMALLPOX

The clinical presentation of monkeypox look like that of smallpox, a related orthopoxvirus contagion which has been eradicated. Smallpox was more simply transmitted and more often deadly as about 30% of patients died. The last case of certainly acquired smallpox occurred in 1977 and in 1980 smallpox was avowed to have been eradicated worldwide after a global campaign of vaccination and containment. To confirm global preparedness in the event of re-emergence of smallpox, newer vaccines, diagnostics and antiviral agents are being established.[14]

KEY FACTS

- ✓ Vaccines used during the smallpox eradication programme also provided protection against effect of monkeypox. Newer vaccines have been established of which one has been approved for prevention of monkeypox
- ✓ Monkeypox is triggered by monkeypox virus, a member of the Orthopoxvirus genus in the family Poxviridae.
- ✓ Monkeypox is generally a self-limited disease with the symptoms lasting from 2 to 4 weeks. Severe cases can occur. In recent times, the case casualty ratio has been around 3–6%.
- ✓ Monkeypox virus is conveyed from one person to another by close contact with lesions, body fluids, respiratory droplets and soiled materials such as bedding.
- ✓ Monkeypox is a viral zoonotic ailment that occurs mainly in tropical rainforest areas of central and west Africa and is rarely exported to other provinces.
- ✓ An antiviral agent developed for the action of smallpox has also been approved for the treatment of monkeypox.
- ✓ The clinical presentation of monkeypox looks like that of smallpox, an associated orthopoxvirus infection which was professed eradicated worldwide in 1980. Monkeypox is less transmissible than smallpox and causes a smaller amount of severe illness.
- ✓ Monkeypox typically presents clinically with fever, rash and swollen lymph nodes and may lead to a range of medical complications.[15]
- ✓ Monkeypox is a viral zoonotic disease that arises primarily in tropical rainforest areas of Central and West Africa and is sporadically exported to other regions.
- ✓ Monkeypox can be transmitted from Animal to Humans as well as human to human. The virus comes in the body through broken skin (even if not visible), respiratory tract, or mucous membranes (eyes, nose, or mouth).
- ✓ Human-to-human transmission is thought to occur mostly through large respiratory droplets usually requiring a continued close contact.
- ✓ Incubation period is generally 7-14 days but can range from 5-21 days and the person is usually not transmissible during this period.
- ✓ An infected person may transmit the disease from 1-2 days before appearance of the rash and persist contagious nature till all the scabs fall off.[8]

CONCLUSION

Still, we have not able to come out from the severe panic and deadly effect of the COVID-19. But presently Monkey pox is the trending and widely spreading virus causing panic for the people all over the world. So, we, authors have tried to cover the associated information about this viral infection. We assume that the readers will get adequate information as well as interest about this treading disease condition.

LIST OF ABBREVIATIONS

WHO - World Health Organization

MPV - Monkeypox virus

BMC - Brihanmumbai Municipal Corporation Public Health Department

MSM - Men who had sex with men

VARV - Variola Virus

PPE -Personal Protective Equipment

VIG - Vaccinia Immune Globulin

VACA -Vacuolating Cytotoxin

MVA-BN- Modified Vaccinia Ankara Bavarian Nordic Strain

DRC - Democratic Republic of the Congo

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CONFLICT OF INTEREST

Have no conflict of interest relevant to this article

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OSCE Finest Practice Guidelines—Pertinency for Nursing Simulations

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OSCE Finest Practice Guidelines—Pertinency for Nursing Simulations

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ABSTRACT

OSCEs are a form of simulation and are often collective but may be determinative. This educational tactic requires robust design based on sound pedagogy to assure practice and evaluation of holistic nursing care. The OSCE, first used in the 1970s, is an assessment of capability carried out in a well-planned, arranged and objective way. Summative OSCEs are often used at the end of courses or programmes or on accomplishment of a module to test students in contradiction of set objectives and learning consequences. OSCE is used in different areas like history taking skills, interpersonal and communication skills, Mental Health Assessment, clinical diagnosis making, clinical problem-solving skills etc. Preparation is vital and increases students' self-confidence in performing skills during the OSCE and in clinical areas. The OSCE examination entails of about 10-15 stations, each of which requires about 4-5 minutes. The number of stations and time consumed on each station may vary based on needs of evaluation. Thus, using 15 stations of 4 minutes separately, 15 students can complete the examination within 1 hour. The OSCE style of clinical evaluation, given its obvious advantages, specifically in terms of objectivity, standardization and resourcefulness of clinical scenarios that can be measured, shows superiority over so called clinical assessment methods especially in medical fields majorly in nursing practices.

Keywords: Response Stations, Assessment, Procedure Stations, Simulations, BLS, Peak Expiratory Flow Rate.

BACKGROUND

OSCE have been used for many years within healthcare programmes as a degree of students' and clinicians' clinical performance. OSCEs are a form of simulation and are often collective but may be determinative. This educational tactic requires robust design based on sound pedagogy to assure practice and evaluation of holistic nursing care. As part of a project testing seven OSCE including BPGs across three sites, the BPGs were applied to an existing simulation activity. The aim of this study was to determine the pertinency and value of the OSCE including BPGs in an existing influential simulation.[1]

INTRODUCTION

OSCE is a modern type of examination often used in health science (e.g. medicine, dentistry, nursing, pharmacy and

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physiotherapy) to assess clinical skill performance and competence in skills such as communication, clinical examination, medical and nursing procedures or prescription, exercise prescription, joint mobilization or manipulation techniques and interpretation of results.

As per **Harden** the OSCE is an approach to the assessment of clinical competence in which the components of competence are assessed in a planned or structured way with attention being paid to the objectivity of the examination.

METHODOLOGY

We performed a PubMed, Google Scholar, Cochrane quest in May 2022 by using the phrases OSCE, Modern Clinical Evaluation techniques, Nursing Evaluation Techniques etc. The search borne almost 49 papers, including reviews, case reports, case series, and clinical studies. After excluding the 15 non-English reports without an English abstract, we encompassed the remaining 34, irrespective of publication date.

HISTORY

The OSCE, first used in the 1970s, is an assessment of capability carried out in a well-planned, arranged and objective way (Harden and Gleeson, 1979). It is well established within medicine and is used progressively in nurse education (Nulty et al, 2011).

The valuation of knowledge and skills plays an important part in student nurses' evolution though pre-registration programmes because they need to demonstrate competency and self-confidence in the performance of clinical skills (Nursing and Midwifery Council, 2007).

OSCEs are used to analyse, clinical skills in both pre-registration and postgraduate programmes (Rushforth, 2007; Major, 2005). The NMC has published essential skills clusters in response to the poor acquisition of clinical skills within nursing, and suggested using OSCEs for evaluating student nurses for medicines supervision in particular in 2007.[2]

EVIDENCE FOR OSCE

The pyramid of capability (Miller, 1990) is a framework that classifies the stages of skills students should achieve. In continuing up the pyramid to "shows how", students reveal their knowledge and understanding by carrying out in a simulated setting such as an OSCE.

OSCEs may be used as a collective or determinative assessment and on their own or with another form of evaluation. Summative OSCEs are often used at the end of courses or programmes or on accomplishment of a module to test students in contradiction of set objectives and learning consequences. Where they are used as a formative assessment, the feedback provided helps students to advancement (Taras, 2005; Alinier, 2003). Formative OSCEs also help to concoct students for placements, inspire them to engage with their learning and help them to accomplish their learning outcomes (Nulty et al, 2011).

The NMC (2010) says programme providers for pre-registration nurse education must confirm "the outcomes, capabilities and aptitudes of the approved programme are tested using valid and unswerving assessment methods". OSCEs assess students' psychomotor, cognitive and affective skills in a simulated environment and various tools score their performance.[2]

PURPOSES

According to Boursicot, Ware and Hazllet(2011)-

- ❍ Measures clinical skills
- ❍ Match assessment to intended constructs
- ❍ Promote planned interaction between student and examiner
- ❍ Make structured marking scheme possible
- ❍ Present all candidates with the similar test
- ❍ Promote objectivity

USES OF OSCE

- ✓ History taking skills
- ✓ Interpersonal and communication skills

- ✓ Mental Health Assessment
- ✓ Clinical diagnosis making
- ✓ Clinical problem-solving skills
- ✓ Patient education
- ✓ Health promotion
- ✓ Acting securely and appropriately in a crucial clinical situation
- ✓ Basic and advanced nursing care procedures practices

STEPS IN IMPLEMENTING OSCE

- ❖ Have set of clear objectives
- ❖ Identify the practical aspects
- ❖ Select the task
- ❖ Set up situations
- ❖ Assign scores for each sub tasks
- ❖ Set up situations
- ❖ Conduct after orienting students and examiners
- ❖ Make notes of the process and review
- ❖ Analyse the results and use the same for student assessment

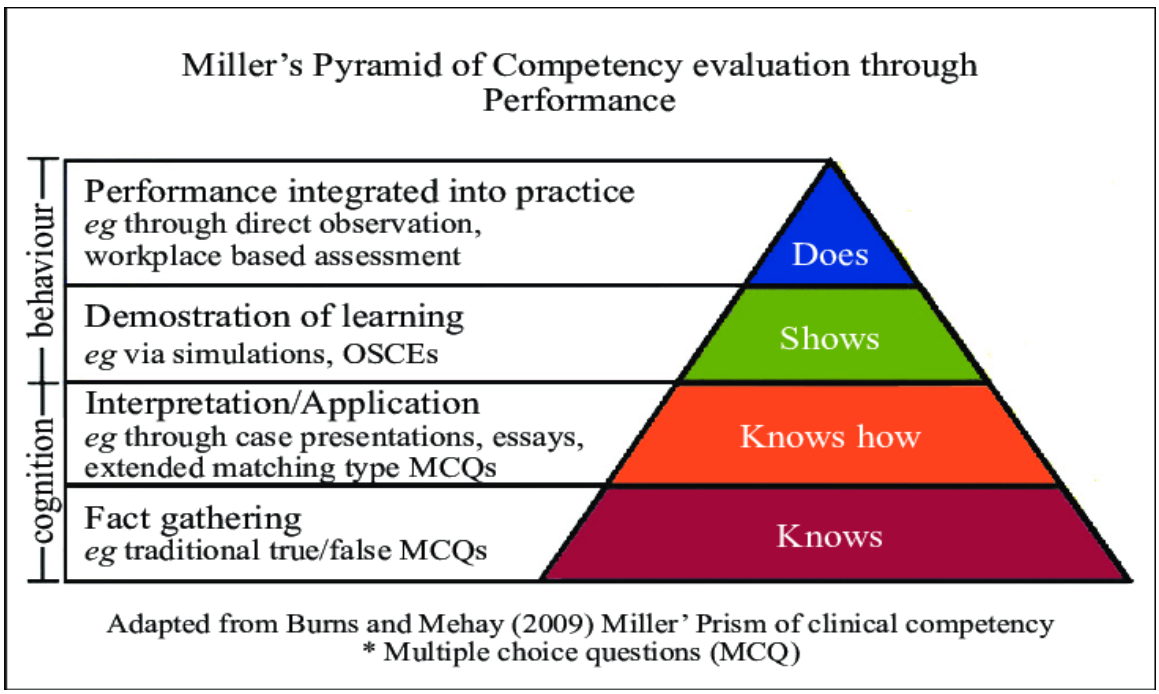
OSCE INVOLVES

The OSCE is made up of six distinct stations using replicated patients in a clinical setting. Four stations are considered to test the candidate's knowledge and understanding of assessment, planning, implementation and evaluation of care. The remaining two stations test clinical skills. Typical skills which we could be tested on, within a nursing scenario comprise but are not limited to:

- ❖ Vital Signs
- ❖ Peak Expiratory Flow Rate
- ❖ Wound care
- ❖ Safe Disposal of Sharps
- ❖ Medication Administration
- ❖ Urinary Catheterisation
- ❖ Hand Hygiene
- ❖ Calculating Drug Dosages
- ❖ Intramuscular and Subcutaneous Injections
- ❖ BLS

COMPONENTS OF OSCE

- ❖ The examination coordinating committee
- ❖ The examiners examination site
- ❖ The examination coordinator
- ❖ Lists of skills, behaviours and attitudes to be assessed
- ❖ Criteria for scoring the assessment



❖ Examination stations
- Time and time allocation between stations
- Anatomic models for repetitive examinations
- Couplet station
- Examination questions
- Examination station circuit
- Patient(real/simulated)
- Time keeper/Time clock and time signal
- Contingency plans
- Environment of exam station
- Assessment of the performance of the OSCE
- Viva-Voce or Oral examination

FREQUENCY OF OSCE

We can take a supreme of three OSCE attempts as part of our NMC application. We will need to wait at least 10 days between to each sitting.

If we're not able to pass our OSCE on the third attempt but the application will close and the contestant will need to start a new application. But the contestant needs to wait at least six months before you can sit the OSCE again.[3]

STUDENT GROUNDWORK FOR OSCE

Preparation is vital and increases students' self-confidence in performing skills during the OSCE and in clinical areas (Street and Hamilton, 2010). Determinative or mock OSCEs also increase poise and competence (Alinier, 2003). Students concocting for an OSCE should:

- Be emotionally prepared,
- Be conversant with how equipment works,
- Develop skills on clinical placement,
- Revise the underpinning theory of skills,
- Be accustomed with checklist/design criteria,
- Rehearse skills,
- Know the timing of the OSCE,
- Use response from mock or formative OSCEs,
- Know which procedures or guidelines are to be used in the OSCE,
- Use obtainable resources such as guided study, quizzes and videos,
- Check whether the candidates should wear uniforms,
- Confirm the date, time, venue and allow enough time to get there,
- Practise responding questions verbally.

STUDENT THROUGHOUT OSCE

❖ Pay attention to verbal and written directions and clarify any queries with the assessor before the student starts

❖ Should check all the equipment we will need is present at the station

❖ Should stay tranquil and attentive

❖ Inform the assessor if we forget to do something, as we may still have time to do it

❖ Should keep an eye on the time

❖ Communicate with the patient

❖ On accomplishment, take a moment to run through in the mind what the examinee were asked to do and check that the examinee have completed the task or not.[2]

SAMPLE OF OSCE EVALUATION IN NURSING

Marking Criteria	Score
Pain Assessment	( )/4
Vital signs Assessment	( )/4
Abdominal Assessment	( )/4
Cardiac Assessment	( )/4
Respiratory Assessment	( )/4
History inquires	( )/4
Data recording with marking the abnormal signs	( )/4
Explanation for the potential causes for abnormal signs	( )/4
Reasonable and correct information used and clear explanation	( )/4

ORGANIZATION OF THE OSCE

- ❖ The OSCE examination entails of about 10-15 stations, each of which requires about 4-5 minutes. The number of stations and time consumed on each station may vary based on needs of evaluation.
- ❖ All stations should be proficient of being completed in the same time.
- ❖ The students are rotated through all stations and have to move to the next station at the signal.
- ❖ As the stations are generally sovereign, students can start at any procedure stations and complete the cycle.
- ❖ Thus, using 15 stations of 4 minutes individually, 15 students can complete the examination within 1 hour.
- ❖ At some stations called procedure stations, students are given tasks to accomplish on patients or simulators. At all such stations there are onlookers with agreed upon checklists or rating scales to score the student's performance.
- ❖ At other stations called response stations, students answer to questions of the objective type or interpret data or record their findings of the preceding procedure stations.[4]

POSITIVE ASPECTS OF OSCE IN NURSING

- ➢ SIMULATED OSCE STATIONS
  - ✓ They are meticulous and safe
  - ✓ Feedback from modern sophisticated simulators can be attained
  - ✓ Simulators are readily available when mandatory
  - ✓ Scenarios that are worrying to real patients can be simulated.
  - ✓ In simulated stations, the patient adjustable in examination is uniform across trainees.
  - ✓ Simulated stations can be custom-made to the level of skill to be assessed
- ➢ REAL LIFE OBSE STATIONS
  - ✓ It provides actual competence of a person on performance because flawless 'textbook' scenarios may not mimic real-life situations
  - ✓ OSCEs allow valuation of complex skills which may not be possible at simulated stations.
  - ✓ Real-life circumstances may be more cost-effective.[5]

CHALLANGES CORRELATED TO OSCE IN NURSING

- Lack of feasibility due to time obliges
- Lack of training for use of OSCE
- Shortage of observers or examiners
- Lack of attention in examiners
- Lack of obligatory guidelines for practical examination by universities[6]

ADVANTAGES OF OSCE

- ❍ Uniform scenarios for all runners
- ❍ Obtainability
- ❍ Safety, no peril of injury to patients
- ❍ Stations can be tailored to level of skills to be evaluated
- ❍ Allows for teaching audit
- ❍ No risk of litigations
- ❍ Feedback from actors(simulators)
- ❍ Allows for reminiscence
- ❍ Allows for demonstrations of emergency skills

DISADVANTAGES OF OSCE

- ❖ Expensive
- ❖ Takes long time to paradigm a case and a scoring checklist
- ❖ Technical limitations
- ❖ Shortage of examiners
- ❖ Might be quite distressing to the students6

CONCLUSION

The OSCE style of clinical evaluation, given its obvious advantages, specifically in

terms of objectivity, standardization and resourcefulness of clinical scenarios that can be measured, shows superiority over so called clinical assessment methods. It permits evaluation of clinical students at variable levels of training within a relatively short period, over an extensive range of skills and issues. OSCE eliminates prejudice in examining students and allows all to go through the same scope and criteria for assessment. This has ended it a worthwhile method in medical practice.

LIST OF ABBREVIATIONS

- OSCE : Objective Structured Clinical Examination
- BPGs : Best Practice Guidelines
- NMC : National Medical Commission
- BLS : Basic Life Support

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CONFLICT OF INTEREST: Have no conflict of interest relevant to this article

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

ETHICAL CLEARANCE: Not required

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ORIGINAL RESEARCH PAPER

Nursing

KEY WORDS: Hypnosis, EEG, Etymology, Mesmerism, Self-hypnosis, Coping skills, Exploration

HYPNOTISM-ELUCIDATED REVIEW

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ABSTRACT

Hypnotism, once classified as an occult science, has grew, though only within recent years, a definite scientific status, and no mean place in genuine medicine. It typically involves an overview to the procedure during which the subject is told that propositions for imaginative involvements will be presented. Mesmer was a Scottish ophthalmologist, James Braid, who make up the word 'hypnosis'. The term neuro-hypnotism (nervous sleep), all of which were first coined by Étienne Félix d'Henin de Cuvillers in the 1820s. Hypnotism having a broad area of application including alleviation of symptoms associated with irritable bowel syndrome (IBS), control of pain during dental procedures, management of certain symptoms of ADHD etc. A number of myths are related with hypnotism like hypnosis is similar to sleep, it is possible to be hypnotized against the client's will, hypnotherapy doesn't cause to lose control etc. During a hypnotherapy sitting, people are guided through a process to induce a trance-like state that helps them focus their minds, respond more readily to suggestions, and become deeply relaxed. Hypnotherapy utilizes the heightened awareness of the hypnotic state to help us to focus on a problem more deeply.

Introduction

Hypnosis is a special psychological state with certain physiological attributes, similar to sleep only superficially and marked by a operative of the individual at a level of awareness other than the ordinary conscious state. This state is characterized by a degree of increased receptiveness and responsiveness in which inner experiential perceptions are given as much significance as is generally given only to external reality.[1]

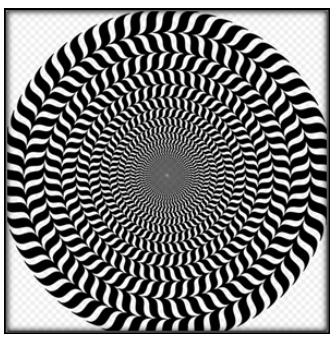
Hypnosis, also denoted to as hypnotherapy or hypnotic proposition, is a trance-like state in which the client has heightened focus and concentration. Hypnosis is generally done with the help of a therapist using verbal repetition and mental images.[2]

A peculiar transformed state of perception distinguished by certain marked indicators, the most projecting and inflexible of which are the presence of incessant alpha waves on the EEG, hyper suggestibility in the subject, an attentiveness of attention on a single stimulus, and a feeling of "at oneness" with the stimulus. Hypnotic situations may be induced by various techniques applied to oneself or by another.

The hypnotic state may be persuaded in a large percentage of normal individuals, or may occur instinctively. It is recognized as having an affinity with normal sleep, and likewise with a assortment of trance-like conditions, among which may be revealed somnambulism, ecstasy, and the trances of Hindu yogis and fakirs, and various tribal shamans. In fact, in one form or another, hypnosis has been identified in practically all countries and periods of history.

Hypnotism, once classified as an occult science, has grew, though only within recent years, a definite scientific status, and no mean place in genuine medicine. However, its history is inextricably interwoven with occult practice, and even today much hypnotic phenomena is allied with the psychic and occult, so that a consideration of hypnotism remains a necessary component in any mature sympathetic of the occult world science of both our own time and the past.[3]

Hypnosis typically involves an overview to the procedure during which the subject is told that propositions for imaginative involvements will be presented. The hypnotic induction is an extended initial suggestion for using one's thoughts and may contain further elaborations of the overview. A hypnotic process is used to hearten and evaluate responses to suggestions. When using hypnosis, one person (the subject) is directed by another (the hypnotist) to respond to suggestions for changes in subjective experience, alterations in perception,[4] sensation, emotion, thought or behaviour. Persons can also learn self-hypnosis, which is the act of running hypnotic procedures on one's own. If the subject responds to hypnotic suggestions, it is generally contingent that hypnosis has been induced. Many believe that hypnotic retorts and experiences are characteristic of a hypnotic state. While some think that it is not essential to use the word "hypnosis" as portion of the hypnotic initiation, others view it as essential.[5]



Methodology

This detailed review includes revealed data about Hypnosis overviewed information with possible areas of application in this present article. This information collected through electronic search from plentiful review & research articles along with a number of well-known websites.

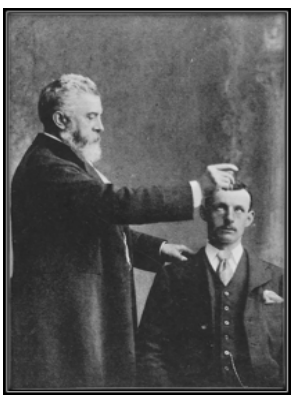
Etymology

The words hypnosis and hypnotism equally derive from the term neuro-hypnotism (nervous sleep), all of which were first coined by Étienne Félix d'Henin de Cuvillers in the 1820s. The term hypnosis is derivative from the ancient Greek πνος hypnos, "sleep", and the suffix -ωσις -osis, or from πνόω hypnoō, "put to sleep" (stem of aorist hypnōs-) and the suffix -

is. These words were popularised in English by the Scottish surgeon James Braid (to whom they are occasionally wrongly attributed) around 1841. Braid based his practice on that established by Franz Mesmer and his cohorts (which was called "Mesmerism" or "animal magnetism"), but differed in his theory as to how the procedure worked.[8]

A history of hypnosis: from ancient times to modern psychology

The history of hypnosis dates back to the late 18th century when Franz Mesmer, a German physician, developed hypnotism, his beliefs about the balance of magnetic power in our body, using animal charisma. The concept of animal magnetism was rejected a span later as it had no scientific basis. Though, many clinicians were fascinated by the fact that Mesmer did cure many symptoms of patients. One of the most notable clinicians that followed Mesmer was a Scottish ophthalmologist, James Braid, who make up the word 'hypnosis'. It sourced from the Greek word for 'sleep'. Modern science later evidenced hypnosis was not related to sleep but one thing hypnosis and sleep have in common is the augmentation of our external focus.[6]



Hypnosis is surrounded by many myths and misconceptions. Tactlessly, despite detailed scientific research and extensive clinical use, some people are scared off needlessly by the stigma that hypnosis is a mystical or esoteric technique. One of the hypnotherapists have found that some people assume hypnosis is a recent innovation of the New Age movement, which spread through metaphysical communities in the 1970s and 1980s. Actually, hypnosis has been used in the USA since the mid-1800s, and was forward-thinking by pioneers of modern psychology like Sigmund Freud, Pierre Janet, and Alfred Binet among others. This overview deliberates the history of hypnosis from ancient times to its subsequent investigation by modern psychologists, physicians, and researchers.

Hypnosis in Primeval Times

The ancestries of hypnosis are inseparable from those of western medicine and psychology. Practically all ancient cultures, including the Indian, Egyptian, Greek, Sumerian, Persian, Chinese and Roman castoff hypnosis in some form. In Egypt and Greece, the sick often went to remedial places known as sleep temples or dream shrines to be cured by hypnosis. In ancient India, the Sanskrit book known as The Law of Manu defined different levels of hypnosis: "Sleep-Waking," "Dream-Sleep," and "Ecstasy-Sleep."

Some of the most primitive possible evidence of hypnosis for healing comes from the Egyptian Ebers Papyrus, dating to 1550 B.C. Additionally Egyptian papyrus from around the 3rd century C.E. describes the placing of hands on the patient, hand passes, and eye-fixation.

Magnetism, Fluidism, and Mesmerism

For many centuries, especially during the Middle Ages, kings and princes were supposed to have the power of healing through the "Royal Touch." Their miraculous healings were accredited to divine powers. Before hypnosis was well tacit, the terms "magnetism" and "mesmerism" were used to describe these healing phenomena. The Swiss physician Paracelsus (1493-1541) was the foremost to use magnets for healing, as an alternative of the divine touch or a holy relic. This technique of healing was still around into the 18th century, when Maximillian Hell, a Jesuit priest and the Royal Astronomer in Vienna, became well-known for healing by using magnetized steel plates on the body. One of Hell's students was Franz Mesmer, the Austrian physician from whom we originate the word "mesmerize." Mesmer exposed that he could induce trance without magnets, and clinched (incorrectly) that the healing force must come from himself or from an invisible fluid that engaged space.

The Supremacy of Suggestion – Faria, Liebeault, Bernheim, and the Nancy School

In 1813, an Indo-Portuguese priest recognized as Abbe Faria steered research on hypnosis in India, and returned to Paris to study hypnosis with Puysegur. Faria wished-for it was not magnetism or the power of the hypnotist that was accountable for trance and healing, but a power engendered from within the mind of the subject. Faria's approach was the basis for the clinical and theoretical work of the French school of hypnosis-centred psychotherapy known as the Nancy School, or the School of Suggestion. The Nancy school detained that hypnosis was a normal phenomenon induced by suggestion, not the result of magnetism. The Nancy school was founded by Ambroise-Auguste Liebeault, a French country clinician who is considered to be the father of modern hypnotherapy. Liebeault believed that the phenomena of hypnosis were psychological and unheeded theories of magnetism. He premeditated the similarities between sleep and trance, and saw hypnosis as a state that could be produced by proposition.

Forerunners of Psychology

Some of the innovators of psychology studied hypnosis in both the Nancy and Paris Schools. Pierre Janet (1859-1947), who advanced theories of unconscious processes, severance, and hurtful memory, studied hypnosis with both Bernheim in Nancy and the rival school of Charcot in Paris. Sigmund Freud also deliberated hypnosis with Charcot and later observed Bernheim, and Liebeault. Freud began enthusiastic hypnosis in 1887, and hypnosis was crucial to his invention of psychoanalysis.

Mesmerizing Anesthesia

During the period of intense psychological investigation of hypnosis, a number of physicians advanced the use of hypnosis for anaesthesia. In the year 1821, Récamier accomplished a major operation using hypnosis for anaesthesia. In 1834, the British surgeon John Elliotson, who acquaint with the stethoscope to England, reported abundant painless surgical operations using hypnosis. James Esdaile, Scottish surgeon, has did over 2,000 minor and 345 major operations using hypnosis in the 1840s and 1850s.

Contemporary Hypnotism

The Scottish ophthalmologist named James Braid recognized as the father of modern mesmerism. It was Braid who first coined the term neuro-hypnotism (nervous sleep), which later turn out to be "hypnotism" and "hypnosis" (1841). Braid had remained a demonstration of a French magnetist, La Fontaine in 1841. He sneered at the ideas of the Mesmerists, and was the first to recommend that hypnosis was psychological. Braid is conceivably the first practitioner of psychological medicine. In th year 1847 he tried to explain hypnosis by "monoideism" (focus on one idea), but the term "hypnosis" had progressive turning in the work of the Nancy School, and is still the term used today.

Hypnosis in America

Just as hypnosis was investigated intensely by psychologists,

hypnosis was used in medicine as anaesthesia, with thousands of surgical operations performed using hypnosis. Hypnosis was ordinary in the mid-1800s when chemical anaesthetics were discovered. Street-corner "tent-shows" were popular entertainments where hypnosis was established, along with new gulp drugs and other wonders of chemistry. It was at one of these shows that Horace Wells first grew the idea of use nitrous oxide for dental extractions. As chemical anaesthetics became popular, the widespread use of hypnosis for anaesthesia declined.

In 1800s in America there was also a deep curiosity in metaphysical, psychic, and spirit phenomena, and this deposited different types of spiritual healing and mental healing movements. Since hypnosis was already widely known, it was ordinary for some spiritual healers to induce daze as part of their method. Their schedules usually presented their cures as coming from a spiritual source, but the cures perhaps resulted more often from the amalgamation of trance with the suggestions of the healer and the belief of the subject.[7]

APPLICATIONS

People might seek out hypnosis to aid deal with chronic pain or to ease pain and anxiety caused by medical procedures such as surgery or childbirth.

The following are just a few of the applications for hypnosis that have been demonstrated through research:[9]

- Alleviation of symptoms associated with irritable bowel syndrome (IBS)
- Control of pain during dental procedures
- Management of certain symptoms of ADHD
- Treatment of chronic pain situations such as rheumatoid arthritis
- Elimination or reduction of skin conditions including warts and psoriasis
- Treatment and reduction of pain during childbirth[10]
- Reduction of dementia symptoms
- Reduction of nausea and vomiting in cancer patients undergoing chemotherapy

Hypnosis has also used to help people with behaviour variations such as quitting smoking, losing weight, or preventing bed-wetting.

TYPES

- **Guided hypnosis**: This form of hypnosis involves the use of tools such as recorded instructions and music to induce a hypnotic state. Online sites and mobile apps often utilize this form of hypnosis.

- **Hypnotherapy**: Hypnotherapy is the use of hypnosis in psychotherapy and is practiced by licensed physicians and psychologists to treat conditions including depression, anxiety, post-traumatic stress disorder (PTSD), and eating disorders.[11]

- **Self-hypnosis**: Self-hypnosis is a process that occurs when a person self-induces a hypnotic state. It is often used as a self-help tool for controlling pain or managing stress.[12]

SURPRISING BENEFITS

1. Trouble Sleeping, Insomnia, and Sleepwalking

Helps to solve the problem of somnambulism, insomnia. Learning self-hypnosis techniques can increase the amount of sleep and the amount of time spent in deep sleep — a sound sleep makes refreshment of the mind.

Mechanism: Verbal cues put us in a trance-like state, alike how it feels when we're so involved in a book or movie that we don't notice what's going on around us. During or after Hypnosis makes us to sleep mostly.

2. Anxiety

Hypnosis helps to resolve the problem of phobia — a type of anxiety disorder where we are intensely fearful of something that does not pose a significant threat

Mechanism: Hypnosis works to help anxiety by encouraging our body to activate its natural relaxation response through the use of a phrase or nonverbal cue, slowing breathing, lowering blood pressure, and instilling an overall sense of well-being.

3. Irritable Bowel Syndrome (IBS) Symptoms

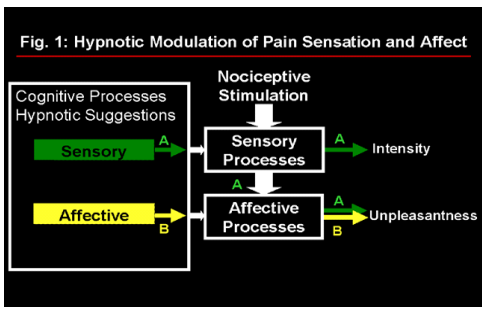
The effectiveness of hypnosis on IBS has been consistently supported by a number of clinical studies. IBS is abdominal pain created due to bowels, and hypnosis can help to improve symptoms such as constipation, diarrhoea, and bloating.

Mechanism: Hypnosis leads us through progressive relaxation, providing soothing imagery and sensations to combat your symptoms.

4. Chronic Pain

Hypnosis can help with pain — like what's experienced after surgery or from migraines or tension headaches as well chronic pain too. People with pain related to conditions like arthritis, cancer, sickle cell disease, and fibromyalgia, lower-back pain — may experience relief from hypnosis.

Mechanism: Hypnosis can help us to cope with pain and gain more self-control over our pain. Furthermore, studies indicate that hypnosis can do this efficiently for long periods of time.



5. Quitting Smoking

Hypnosis for smoking cessation works best if we work one-on-one with a hypnotherapist who can customize the hypnosis sessions to match our lifestyle.

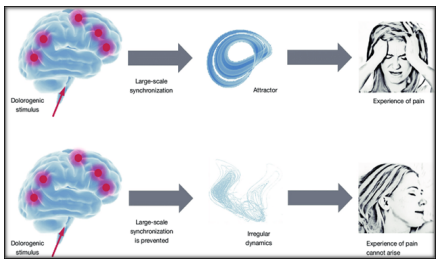
Mechanism: Hypnosis can work in two ways in case of quitting smoking. The first is to help you find a healthy, effective replacement action, and then guide our subconscious toward that habit, rather than smoking. This possibly will be something like chewing a piece of gum or taking a walk. The second is to train our mind to associate smoking with undesirable feelings like a bad taste in our mouth or a foul odour from smoke.

6. Weight Loss

It is habitually most helpful when hypnotherapy is used in combination with diet and exercise changes.

Mechanism: Once we are hypnotized, your attention is highly focused. This makes us more likely to listen and respond to suggestions for behaviour changes, such as eating a healthy diet or getting more exercise, which could help us to lose weight.

TECHNIQUES



During a hypnotherapy sitting, people are guided through a process to induce a trance-like state that helps them focus their minds, respond more readily to suggestions, and become deeply relaxed. Hypnotherapy utilizes the heightened awareness of the hypnotic state to help us to focus on a problem more deeply. Hypnotherapy utilizes techniques including:

Relaxation: The client will be guided by the hypnotherapist to visualize ourself in a state of peacefulness and relaxation, even when confronting a problematic behaviour or the object of your fears.

Suggestion: The hypnotherapist may make gentle suggestions for behaviour changes that can help the client conquer your issue. For example, he or she may be taught to see him or her as a supportive advisor during a phobic reaction, thus learning to trust and ability to get through the situation.

Coping skills: The client may be taught certain cognitive-behavioural coping skills, such as guided imagery and the STOP! technique, that can be used when confronting fears or anxieties.
Exploration of past experiences: The client may even be encouraged to talk about the first time we experienced the behaviour or problem that you are trying to overcome and how the client can feel at that moment.

MYTHS AND FACTS ABOUT HYPNOSIS

MYTH: *Hypnosis is similar to sleep.*
Fact: The mesmerized person is an active participant who relics responsive and aware of his or her environments.

MYTH: *It is possible to be hypnotized against the client's will.*
Fact: Any client who enthusiastically resists attempts to induce hypnosis cannot be fascinated.

MYTH: *One of the perils of hypnosis is getting stuck in a daze.*
Fact: If the hypnotist left the room, the client would instinctively come out of the trance.

MYTH: *Hypnosis is a form of therapy.*
Fact: Hypnosis is not a form of therapy. It is an different state of consciousness in which therapy can be steered.
MYTH: The hypnotist can make the client do things against his or her will.

Fact: *The hypnotist gives recommendations that will not be followed if they are intolerable to the subject.*

MYTH: The hypnotist is a powerful rigid figure who has total control over the passive subject.

Fact: *Hypnotic subjects are active problem solvers who maintain their values, beliefs, and opinions while in a trance state.*[14]

THINGS TO BE CONSIDERED

While hypnotherapy is generally safe and well-tolerated, that does not mean that it doesn't pose some likely risks, such as:

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Original Article

Effectiveness of Nurse-Led Educational Intervention on Knowledge Regarding Management of Chronic Kidney Disease among Patients

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Abstract

Background: Chronic kidney disease (CKD) is defined as kidney damage or glomerular filtration rate (GFR) <60 mL/min/1.73 m^2 for 3 months or more, irrespective of the cause. CKD can progress to end-stage renal disease (ESRD), which requires renal replacement therapy (RRT) and is associated with morbidity and mortality at all stages. Nurse-led educational interventions play an essential role in improving the awareness of patients, thereby enhancing their quality of life. **Purpose:** The study assessed the effectiveness of nurse-led educational intervention (NLEI) on knowledge of patients with CKD. **Methods:** The patients' level of knowledge was assessed using an 18-item Chronic Kidney Disease Patient Awareness Questionnaire. An NLEI was administered to 50 patients with CKD. The data were analyzed using Statistical Package for the Social Sciences (SPSS) version 21. **Discussion:** The pretest mean knowledge score was 40.42 and SD was ±4.09. The posttest mean knowledge score was 62.52 and SD was ±4.29. The paired *t*-test showed $t = 26.35$, df = 49. Significant association was found between the knowledge of patients and their dietary habits @ $P \leq 0.05$. **Conclusions:** NLEI was effective in enhancing the knowledge of CKD patients. This implies that when appropriately implemented, the CKD patients will reap the benefits of NLEI, which has the potential to improve their health status.

Keywords: chronic kidney disease, health education, health status, knowledge

Introduction

Chronic kidney disease (CKD) is defined as kidney damage or glomerular filtration rate (GFR) <60 mL/min/1.73 m^2 for 3 months or more, irrespective of the cause.[1] The six grades of CKD are classified based on GFR. It includes G1: GFR 90 mL/min/1.73 m^2 and above, G2: GFR 60 to 89 mL/min/1.73 m^2, G3a: GFR 45 to 59 mL/min/1.73 m^2, G3b: GFR 30 to 44 mL/min/1.73 m^2, G4: GFR 15 to 29 mL/min/1.73 m^2, and G5: GFR less than 15 mL/min/1.73 m^2 or treatment by dialysis.[2] CKD can progress to end-stage renal disease (ESRD), which requires renal replacement therapy (RRT) and is associated with morbidity and mortality at all stages. With the increasing prevalence and incidence of CKD and ESRD, CKD is becoming a major health concern worldwide and is associated with high costs and poor outcomes.[3]

CKD accounted for 2,968,600 of disability-adjusted life years and 2,546,700 of life years lost in 2012.[4] In 2019, the low-income countries (LICs) had the highest age-standardized disability-adjusted life years (DALY) rate at 692.25 per 100,000 people, followed by lower middle-income countries (LMICs) and upper middle-income countries (UMICs). The age-standardized years of life lost (YLL)

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rate was much higher than the years lived with disability (YLD) rate in various income regions. From 1990 to 2019, the age-standardized DALY rate showed a 13.70% reduction in LICs and 3.72% increment in LMICs. Age-standardized YLD rate was higher in female patients than in male patients, whereas age-standardized rates of YLL and DALY of CKD were all higher in male patients than in female patients in LMICs globally.[5]

In 2015, according to United States Renal Data system, there were 124,411 new ESRD cases reflecting an increasing risk of kidney failure. Moreover, the prevalence of CKD has been rising consistently by about 20,000 cases every year.[6] The reported prevalence in USA is 6% at the age of 18–44 years and 38.1% at the age more than 65 years.[7] Furthermore, CKD is the ninth leading cause of death in the United States.[8] The estimated global prevalence of CKD is 13.4% (11.7–15.1%). The patients with ESRD requiring RRT are estimated to be 4.902 to 7.083 million.[9] The global all-age prevalence and mortality from CKD between 1990 and 2017 increased by 29.3% and 41.5%, respectively.[10] The prevalence of CKD increases with age and mostly people aged 60 years or more are getting affected. The old age people, male gender, non-Caucasian ethnicity especially African–Americans, Hispanics, Afro–Caribbean, and Asians are badly affected by the progression of CKD.[11] In addition, the cause for increase in the global incidence and prevalence of CKD is the rise in type II diabetes mellitus, hypertension, and obesity.[12]

In India, a 38% increase in the proportion of deaths occurred due to kidney failure between 2003–2004 and 2010–2013.[13] In a recent Indian CKD study, it was observed that mostly male patients were affected; the mean ± SD of age was 50.3 ± 11.8 years and the median EGFR was 40 mL/min/1.73 m^2. Majority of the participants were hypertensive, diabetic, and CVD-affected having a history of acute kidney injury.[14] Moreover, the age-adjusted incidence rate of ESRD in India is 229 per million population and >100,000 new patients require RRT annually.[15] The prevalence of CKD in different regions of India ranges from <1% to 13%.[16] However, certain parts of India, namely, Andhra Pradesh, Goa, and Odisha have higher rates of CKD due to unknown etiology.[17] The outcomes of CKD are influenced by disease-related risk factors, sociodemographic variables, genetic differences, and access to healthcare resources.[14] Therefore, screening for CKD should be a priority in low-, middle-, and high-income countries, as early intervention would minimize the high risk of morbidity and mortality. Moreover, this will help the healthcare sector to achieve cost-effective prevention.[18]

As CKD is a growing health problem and is becoming increasingly common, adequate knowledge of the disease is essential to reduce its progression. Literature states that most of the patients with CKD are unaware of their disease management.[19-21] Knowledge and awareness regarding CKD among the patients is an important factor for the successful implementation of CKD prevention and screening programs.[22] Moreover, well-structured, interactive, and multidimensional individual or group educational interventions would improve the knowledge, self-management, and patient outcomes.[23]

The self-management intervention offers strategies to delay CKD progression and to encourage motivation to better self-manage at home. Self-management education and psychosocial support with culturally relevant scenarios are found to enhance the knowledge and management of CKD at home.[24] In addition, nurse-led disease management program seems effective to improve some parameters of quality of life for patients with chronic kidney disease.[25] Likewise, nurse-led educational intervention (NLEI) has a positive effect on the kidney disease, physical and mental health among the adults with T2D and end-stage renal disease.[26] Having adequate knowledge on CKD management would prevent or delay the progression of the kidney disease. Therefore, the authors of this study determined the effectiveness of NLEI on the knowledge of patients with CKD.

Methods

Research approach

The study involved a quantitative research approach.

Research design

The study utilized one group of pretest, posttest, and preexperimental research design to evaluate the effectiveness of NLEI on the knowledge of patients with CKD.

Setting

The study was conducted in a selected setting in Hassan, Karnataka, India. The selection of the setting was done on the basis of geographic proximity, feasibility to conduct the study, and availability of the samples. It was a government hospital with 750 bed strength. All the facilities including ICUs, medical, surgical, gynecological, nephrology, and pediatric units were available. Every year, approximately 750 CKD patients got treatment in this hospital. The hospital had a dialysis unit with 10 machines.

Population

Both male and female patients with CKD were selected as study population.

Samples

Fifty patients with CKD who are getting treatment in a selected hospital in Hasan, Karnataka, India, meeting the inclusion criteria were selected as samples for the study. The sample was selected using the following formula:

$$N = (z_\alpha + z_\beta)^2 \,/\, (\delta/)^{\,2} = 48.08$$

where N = estimated sample size

For $\alpha = 0.05$, $z_\alpha = 1.96$; for $\beta = 0.20$, $z_\beta = 0.84$.

δ = clinically significant difference = 3.

σ = standard deviation of the differences = 7.43.

Sample selection criteria

Patients who were attending nephrology OPD and in-patients with CKD and the patients who were willing to participate in the study were included in the study. The patients who were not available during the data collection period were excluded from the study.

Sampling technique

The samples were selected through convenient sampling technique.

Description and interpretation of the tool

Section A comprised of demographic data of the participants. It comprised of nine items including age, sex, religion, marital status, educational status, occupation, any previous information acquired regarding CKD, dietary habits, and family history of CKD. Section B consisted of Chronic Kidney Disease Patient Awareness Questionnaire developed by Peng *et al*.[27] This Likert scale was designed to assess the awareness of knowledge of CKD patients. This was a self-administered scale for patient-reported outcome assessment. This Likert Scale scored from *know nothing about it* to *know clearly* with the score ranging from 0, 1, 2, 3, and 4 points. Total score could be calculated by summing up all the 18 items. Higher score represented better perceived disease awareness with full credit of 72 points.

Translation of the tool

The tool was translated to Kannada language and retranslated to English language. Then, again, the tool was translated to Kannada language to check the clarity of the items, ambiguity of the language, and feasibility of the tool. The average time taken to complete the tool was approximately 20 minutes. The language of the tool was found simple and easy to understand.

Reliability and validity of the tool

The prepared instrument was submitted to seven experts including nephrologists, nutritionists, and medical surgical nursing experts to establish the content validity. The tool got its final shape after the modifications based on the opinions of the experts. The CVV index was 0.80. The reliability of the translated tool was 0.98.

Description of intervention

The NLEI comprised of information related to CKD and its management. It included the contents, namely, controlling the blood pressure, meeting the blood glucose goal if having diabetes, working with the healthcare team to monitor the kidney health, taking medicines as prescribed, working with a dietitian to develop a meal plan, making physical activity part of routine, aiming for a healthy weight, getting enough sleep, stop smoking, and finding healthy ways to cope with stress and depression. The NLEI was reviewed and validated by the experts. The NLEI was delivered using PowerPoint slides and pamphlets. The intervention lasted for 45 minutes. The doubts of the participants were clarified.

Ethical considerations

Ethical approval was obtained from the Research and Ethics Committee of Sri Jaya Chama Rajendra hospital, Hasan, Karnataka, India. Formal permission was obtained to collect the data from the CKD patients. The principal investigator personally visited each participant, introduced herself to CKD patients, and explained the purpose of the study and ascertained the willingness of the participants. The participants signed in the written informed consent form. The respondents were assured of anonymity and confidentiality of the information provided by them. The participants were not compelled to participate in the study. They were given the freedom to withdraw from the study at any point of time.

Procedure for data collection

The data were collected by the principal investigator from September 26, 2019 to October 29, 2019 in the chosen hospital. Pretest was conducted by distributing the questionnaire to the CKD patients. It took approximately 20 minutes to complete the questionnaire. Soon after the pretest, the NLEI was given to the participants. On the 8th day, the posttest was conducted by using the same tool to determine the effectiveness of NLEI.

Plan for data analysis

The data were analyzed using descriptive and inferential statistics.

Results

Table 1 shows the demographic variables of study participants. In our study, 50% of the samples belong to the age group of 40 to 45 years, whereas 36% belong to age group of 50 to 65 years, 10% belong to the age group of 30 to 35 years, and 4% belong to the age group of 25 years. Of the participants, 76% were male patients and 24% were female patients. In addition, 50% were Hindus, 40% were Muslims, and 10% were Christians. With regard to marital status, 76% of them were married, 10% were divorced and widowed, and 4% of them were unmarried. Considering the educational status, 40% had completed their primary education, 30% had acquired adult literacy, 20% had achieved secondary education, and 10% of the samples had attained PUC and degree as educational qualification. Majority (40%) of them were coolie workers, 30% of them were doing agriculture, 20% were private workers, and 5% were professionals. Regarding previous information acquired regarding CKD, 60% of them mentioned that they received information from

physicians, 20% received it from health personnel, 14% received it from newspapers, and 6% received it from Television. Considering the dietary habits, majority (80%) of the patients were nonvegetarians and the remaining 20% of them were pure vegetarians. Most of the patients (60%) had a family history of CKD and only 20% did not have a family history of CKD [Table 1].

Figure 1 illustrates the frequency and percentage distribution and mean and SD of pretest knowledge scores among CKD

Table 1: Sociodemographic variables of patients with chronic kidney disease

Sl. No.	Sociodemographic variables	Categories	Frequency (No)	*N* = 50 Percentage [%]
1	Age in years	25	02	4
		30–35	05	10
		40–45	25	50
		50–65	18	36
2	Gender	Male	38	76
		Female	12	24
3	Religion	Hindu	25	50
		Muslim	20	40
		Christian	05	10
4	Marital status	Married	38	76
		Unmarried	02	4
		Divorced	05	10
		Widowed	05	10
5	Educational status	Non formal education	15	30
		Primary education	20	40
		Secondary education	10	20
		PUC and Degree	05	10
6	Occupation	Cooli	20	40
		Agriculture	15	30
		Private workers	10	20
		Professional	05	10
7	Any previous information acquired regarding CKD	Physician	30	60
		Any health personnel	10	20
		News paper	07	14
		Television	03	6
8	Dietary habits	Vegetarian	10	20
		Nonvegetarian	40	80
9	Family history ofCKD	Yes	30	60
		No	20	40

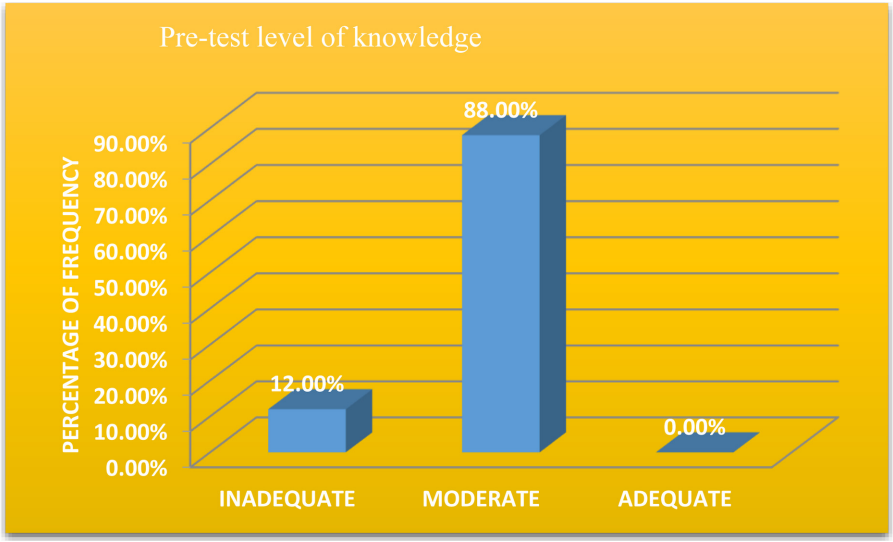

Figure 1: Bar diagram showing the pretest level of knowledge of patients on chronic kidney disease.

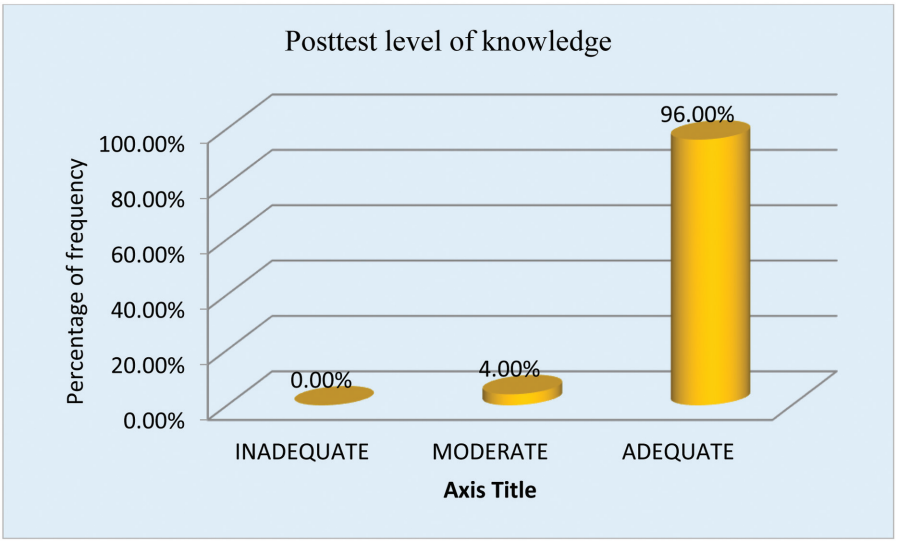

Figure 2: Cylinder diagram showing the posttest level of knowledge on chronic kidney disease.

Table 2: Pretest level of knowledge of patients with chronic kidney disease

Level of knowledge		Level of knowledge Scores		Frequency	*N* = 50 Percentage
Inadequate		<50%		6	12.0%
Moderate		50–75%		44	88.0%
Adequate		>75%		0	0.0%
Total				50	100.0
Aspects	**Maximum possible score**	**Minimum**	**Maximum**	**Range**	**MeanandSD**
Pretest knowledge scores	72	29	45	16	40.42±4.09

patients. Of the participants, 12% had inadequate knowledge, whereas 88% had moderately adequate knowledge. None of them had adequate knowledge. The overall mean and SD of pretest knowledge was 40.42 ± 4.09 [Table 2]. Figure 2 demonstrates the frequency and percentage distribution of posttest knowledge scores among CKD patients. Table 3 shows the mean and SD of posttest knowledge scores among CKD patients. None of them had inadequate knowledge in the posttest. A small portion (4%) had moderately adequate knowledge. However, a large portion (96%) had gained adequate knowledge in the posttest. The posttest mean knowledge score was 62.52 and the SD was ±4.29 [Figure 2]. The pretest and posttest level of knowledge among patients with chronic kidney disease is shown in Figure 3.

Table 4 shows the mean enhancement knowledge scores of CKD patients. The NLEI had shown to be effective in enhancing the knowledge of CKD patients with the enhancement score of 22.1. The paired *t*-test showed the value of 26.35 at 0.05 level. Lastly, Table 5 outlines the association between the pretest knowledge scores of CKD patients and their demographic variables. Significant association was found between the pretest knowledge scores and dietary habits @ $P \leq 0.05$ level.

Discussion

We determined the effectiveness of NLEI on the knowledge of patients with CKD. In our study, in the pretest, majority of CKD patients had moderately adequate knowledge and few of them had inadequate knowledge. In consistent to our study findings, most of the studies reported that the patients with CKD had inadequate knowledge regarding CKD and its management. For instance, a study conducted in Malaysia showed that the general medical patients had inadequate knowledge of CKD, especially, the people who are at risk of developing CKD are not aware of their risk of developing CKD and its complications. Therefore, the authors recommended that increasing the awareness on CKD is of paramount importance for its successful primary and secondary prevention.[28]

Likewise, another study conducted among Iranian population who attended kidney disease awareness campaign revealed that their knowledge on CKD is low. Of the participants, only

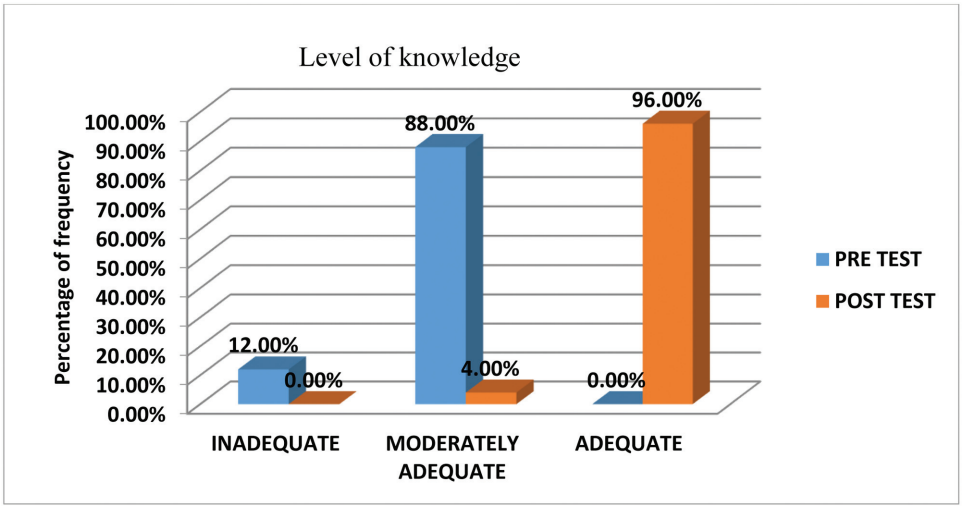

Figure 3: Bar diagram comparing the pretest and posttest level of knowledge among patients with chronic kidney disease.

Table 3: Posttest level of knowledge of patients with chronic kidney disease

Level of knowledge	Level of knowledge scores	Frequency	*N* = 50 Percentage
Inadequate	<50%	0	0.0%
Moderate	50–75%	2	4.0%
Adequate	>75%	48	96.0%
Total		50	100.0

Aspects	Maximum possible score	Minimum	Maximum	Range	Mean	SD
Posttest knowledge scores	72	53	72	19	62.52	±4.29

Table 4: Enhancement knowledge scores among patients with chronic kidney disease

Aspects	Mean			Mean%			*N* = 50 Calculated paired *t* test value
	Pretest	Posttest	Enhancement	Pretest	Posttest	Enhancement	
Overall knowledge scores	40.42	62.52	22.1	56.14	86.83	30.69	26.35**(S)df = 49**

(S) = Significant at $P \leq 0.05$ level.

10.4% knew that CKD could be asymptomatic in the initial stages, whereas only 14.4% knew that diabetes and hypertension are the risk factors for CKD. Thus, the recommendation was given to put efforts in educating the Iranian community about the importance of regular renal care counseling.[29] Additionally, Al Rahbi and Al Salmi[30] reported 64% of the patients having inadequate knowledge of CKD. It shows that a major portion of patients was unaware of CKD and its management. Hence, patients and family should receive adequate information regarding the nature of kidney disease and the available treatment options. This will allow them to make informed decisions about the management of CKD.

Recently, Molnar *et al.*[31] mentioned that only 25% of the patients correctly answered that CKD can be associated with no symptoms. Moreover, more than 60% of participants perceived themselves having no knowledge about the medications that help or hurt their kidney. Additionally, old age was associated with lower perceived knowledge about CKD and its management. Again, in line with our study findings, Sahu *et al.*[32] found that majority (63.6%) of the relatives of the CKD patients had poor knowledge and poor attitude (51.6%) toward the risk of CKD. Thus, it is very clear that most of the patients across the world have inadequate knowledge regarding CKD.

Considering the literature that showed a vast majority of the patients were unaware of CKD and its management, the investigators of this study developed an NLEI to enhance the knowledge of patients on CKD. Our study found that the NLEI was effective in improving the knowledge of patients

Table 5: Association between pretest level of knowledge of study participants and their sociodemographic variables.

Sl.No.	Demographic variables	Categories	$N = 50$			
			Pretest knowledge level		Calculated χ^2 value	df
			Inadequate	Moderate		
1	Age in years	25	1	1	3.43(NS)	3
		30–35	0	5		
		40–45	3	22		
		50–65	2	16		
2	Gender	Male	4	34	0.32(NS)	1
		Female	2	10		
3	Religion	Hindu	3	22	0.85(NS)	2
		Muslim	3	17		
		Christian	0	5		
4	Marital status	Married	4	34	3.79(NS)	3
		Unmarried	1	1		
		Divorced	1	4		
		Widowed	0	5		
5	Educational status	Non formal education	2	13	1.38(NS)	3
		Primary education	2	18		
		Secondary education	2	8		
		PUC and Degree	0	5		
6	Occupation	Cooli	2	18	4.22(NS)	3
		Agriculture	1	14		
		Private workers	3	7		
		Professional	0	5		
7	Any previous information acquired regarding CKD	Physician	3	27	1.16(NS)	3
		Any health personnel	2	8		
		News paper	1	6		
		Television	0	3		
8	Dietary habits	Vegetarian	1	9	0.04(S)	1
		Nonvegetarian	5	35		
9	Family history of CKD	Yes	6	24	4.54(NS)	1
		No	0	20		

NS = not significant, S = significant at $P \leq 0.05$ level.

on CKD. In congruent to our study findings, it was found in a study that the structured teaching program enhanced the knowledge of patients with CKD.[33] Likewise, another study had shown the effectiveness of e-health interventions on improving the knowledge of CKD patients.[34] Another study conducted among chronic renal failure patients undergoing hemodialysis has shown that the planned teaching program improved the quality of life and level of fatigue among the patients.[35]

Lopez-Vargas *et al*.,[36] conducted a systematic review of 26 studies to determine the efficacy of educational interventions on the knowledge, self-management, and patient outcomes. The review concluded that well-designed, multifaceted, and frequent educational interventions that include both individual and group participation may improve the knowledge, self-management, and patient outcomes. We, therefore, conclude that the NLEI designed by us is very effective in enhancing the knowledge of patients with CKD as shown in the above-cited literature. Furthermore, we recommend all the nurses working in the hospitals and community settings to educate the patients and caregivers on the early identification and management of patients with CKD.

Limitation

The study limits its generalizability as the NLEI was tested only in a small group of participants in a single setting.

Implications

Nursing professionals shall provide NLEI as part of their routine care, which will be effective in enhancing the patients' knowledge on CKD. Nurse educators shall emphasize the nursing students to teach the CKD patients regarding the renal disorders and its management. In-service education can be planned and provided to the nursing professionals on CKD updates. Study materials can be prepared and distributed to the nursing professionals and patients to have updates on CKD. Nurse educators can work with the hospital authorities to draw up a special policy based on current clinical practice guidelines. Nurse administrators should plan and organize a staff development programme on effects of renal disorders and its management. Nurse researchers can develop appropriate health education tools for educating the CKD patients regarding renal disorders and its management according to their demographic, socioeconomic, cultural, and political characteristics. Nurses should come forward to take up

unsolved questions in the field of renal disorders and its management among CKD patients and publish them for the benefit of patients, public, and nursing fraternity. The public and private agencies should also encourage research in this field through materials and funds.

Recommendations

The authors recommend organizing frequent educational interventions to motivate the CKD patients to keep them updated with necessary knowledge regarding renal disorders and its management. Because this study was carried out on a small sample, the results can be used only as a guide for further studies. A similar study on a large sample may help to draw more results that are definite. A similar study can be conducted using descriptive exploratory approach to identify the determinants of lack of awareness on CKD, which might generate hypothesis for future research. A study can be conducted using different methods of teaching to determine the most effective method of teaching.

Conclusion

We conclude that every hospital should initiate NLEI to enhance the knowledge of patients with CKD, thereby improving the quality of their life.

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Conflicts of interest

The authors declare that they do not have any conflict of interest.

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A REVIEW ARTICLE ON NEWBORN CARE

Paediatrics

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ABSTRACT

Around 2.4 million infant fatalities occur in the first few months of life worldwide as a result of inadequate newborn care. The results of the several programs launched by WHO to promote neonatal health are encouraging. However, there is still room for improvement in terms of standards and a reduction in obstacles such low socioeconomic position and illiteracy.1 By offering effective and high-quality treatment during the prenatal, intra natal, and postnatal periods, it is feasible to raise the ratio of stillbirth avoidance while also improving the survival and health of babies. observation of early disease warning signals and avoidance of having a sick newborn. In addition to discussing early and necessary newborn care, this article also covered a newborn's demands.

KEYWORDS

INTRODUCTION:

The term newborn refers to a baby 28-30 days from birth. A normal newborn means a newborn who has been clinically determined to have no complications or to be at low risk of developing complications.

Infant care from birth to around one month or 28 days is referred to as newborn care. Many health problems, such as infections, can arise during this time, and the newborn's health can be impacted by various etiologic factors if sufficient care is not provided.[2]

The primary cause of infant deaths, newborn mortality, was high on several continents, particularly in Asia and Africa. Though various projects have been started by WHO to promote the health of mothers and children, the findings point to a hopeful ratio of 17 fatalities in 2020.

Essential and routine Newborn care

- The care of newborns needs to be prioritized in society and globally. The health of infants throughout their early days depends on providing them with the proper care, including exclusive feeding (colostrum), temperature control, and vaccinations.
- In order to improve the health of the baby, the WHO has advised a specific plan, which includes educating primi mothers and primary health care providers about newborn care practices like eye, cord, skin, and immunization checks as well as exclusive breastfeeding.4
- Later care of a newborn includes the care that the baby needs such as rooming-in, initiating feeding, observations of early signs of diseases, care of diaper, and maintenance of personal hygiene for the prevention of infection.5

Coverage of Essential Newborn Care Practices

- Three composite Newborn care practices (safe cord care, optimal thermal care, and good neonatal breastfeeding) were investigated and the coverage was generally low.
- It was unable to maintain ideal thermal care because a major portion of newborns were bathed within six hours of delivery (defined as a baby wrapped within 10 minutes of birth plus first bath after six or more hours plus using warm water to bath the baby).
- The majority of mothers wrapped their newborns within 10 minutes after birth, however early bathing makes that practise insufficient for providing babies with good thermal care.
- Early meconium evacuation appears to reduce bilirubin reabsorption (the yellow pigment responsible for jaundice).
- Colostrum, which is rich in nutrients and contains antibodies that defend the infant from illnesses, is present in the first breast milk.6

Needs of newborn

- The newborn's primary demands are physiological and physical.
- Health workers, Mothers, and primary caretakers should be fulfilling some aspects such as: -
- Provide a safe and warm environment.
- Provide exclusive breastfeeding.
- Maintain hygiene of baby and personal hygiene.
- Provide timely immunization
- Maintain the trust of the baby in the mother or primary caretaker.7

Prevalence: -

- Data from UNICEF show that the mortality rate has somewhat declined over the past few decades. Particularly from 2017 to 2020, there will be 17 deaths for every 1,000 live births. In the first month of life in 2020, there will be about 2.4 million deaths. It implies that 6500 newborns die each day.8
- Premature births total about 3.5 million in India. Some of them are born with congenital malformations, birth asphyxia, and birth defects.9
- In 2020, more over 56 babies die before their 28th day of life, with 1 death per 1000 live births to 44.

Top 10 countries with the highest number (thousands) of new-born deaths, 2019.10

Country	Number of newborn deaths (thousands)
India	522
Nigeria	270
Pakistan	248
Ethiopia	99
The Democratic Republic of the Congo	97
China	64
Indonesia	60
Bangladesh	56
Afghanistan	43
United Republic of Tanzania	43

Causes

- The main causes of neonatal deaths are severe infections, preterm, birth asphyxia, and birth abnormalities. Malnutrition, diarrhea, and pneumonia are the leading causes of death.11

One of the eight Millennium Development Goals is to reduce under-five mortality rates by two-thirds by the year 2015. (MDG). Neonatal era mortality account for almost two-thirds of baby deaths and 38% of

deaths among children under the age of five.

Additionally, cutting the chord with a fresh razor blade was a typical practise (90.8%), but when one looks more closely and holistically at safe cord care (using composite indications), just 0.2% actually did that. This means it may be inaccurate to judge the situation using a single set of indications.

For example, In Bangladesh, the majority of births take place in the home in rural regions, and it has been observed that a high proportion of deaths during the early neonatal period are caused by birth asphyxia due to a lack of expert delivery attendance and infant care.12

Mothers' Knowledge of Newborn Care Danger Signs.
The mothers' overall knowledge of crucial newborn risk signs—aside from high body temperatures, diarrhoea, and excessive crying—was deficient.

Predictors of Good Newborn Care Practices
Maternal age, the timing of the first ANC, and maternal awareness of newborn danger signs were the key indicators of successful neonatal feeding.13

Diaper care
Mother will either use disposable or cloth diapers. Whichever method you choose, your child will have dirty diapers roughly 10 times each day, or 70 times per week.
You'll need:
- A clean diaper
- Diaper ointment
- After each bowel movement or if the diaper is wet, lay your baby on his or her back and remove the dirty diaper.
- Use water, cotton balls, and a washcloth or wipes to gently wipe your baby's genital area clean.
- To prevent or heal a rash, apply ointment.
- Always remember to wash your hands thoroughly after changing a diaper.13

To prevent or heal diaper rash, try these tips:
- Frequently change your baby's diapers, especially right away after bowel motions.
- Allow the infant to spend some of the day unattended. This enables the skin to breathe.

Bathing Basics
Until the navel heals fully and the umbilical cord falls off, you should give your infant a sponge bath (1–4 weeks)

Before bathing your child, get the following ready:
- A gentle, unscented baby soap and shampoo;
- A soft, clean washcloth
- A soft brush to massage the infant's scalp, towels or blankets, a fresh diaper, and fresh clothing.

Sponge baths. Choose a safe, flat surface (such a changing table, floor, or counter) in a warm area for a sponge wash.
- Pour warm (not hot!) water into a bowl or sink, if one is available.
- Start with one eye and wipe it from the inner corner to the outer corner of your baby's eyes using a washcloth (or a clean cotton ball) wet with water only.
- To clean the opposite eye, use a fresh washcloth corner or an additional cotton ball.
- Gently wash the remainder of the infant with a moist cloth and soap, giving close attention to the wrinkles in the genital region, behind the ears, under the arms, and around the neck.
- After washing such areas, make sure they are dry, then clothe and diaper your infant.13

Feeding and Burping Your Baby
- You might be unsure about how frequently to breastfeed or bottle-feed your newborn.
- Your infant may cry, put his or her fingers in their mouths, or make sucking noises as a cue to you.
- A newborn infant need feedings every two to three hours.

Sleeping Basics
- Baby actually sleeps for at least 16 hours each day.
- Newborns often snooze for 2-4 hours at a time.
- Babies should always be put to sleep on their backs to lower the risk of SIDS (sudden infant death syndrome).14

Providing adequate care in the home
- Newborns require special care during the first few weeks after birth, both physically and mentally.
- Mothers who are nursing need additional meals, should drink enough pure water, and should only take recommended medications at this time.
- Encourages warmth, excellent ventilation, and hygiene.
- Mothers should be aware of the warning indications for infants and the significance of swiftly obtaining assistance.

What To Do If Baby Shows Danger Signs After Birth
Regardless of whether they have issues or not, every mother and child should see a health professional as soon as possible following delivery.

The first month of life is the most vulnerable period
- The majority of infant deaths (80%) are brought on by preterm delivery difficulties, intrapartum incidents such birth asphyxia, or infections like sepsis or pneumonia.
- Therefore, focusing on the period immediately following birth with tried-and-true high-impact therapies and providing appropriate care for small and unwell newborns may prevent up to 80% of newborn deaths.

ü The first 28 days
- Nearly half (48%) of under-five deaths occur in the first 28 days of life, and they are decreasing more slowly than overall child deaths.
- More than 40% of newborn deaths could be prevented with proper care at the moment of birth.
- Thirty percent of neonatal mortality could be prevented by providing care for small, ill neonates. Kangaroo mother care, infant sepsis prevention or management, neonatal jaundice treatment, and preventing brain damage from birth-related oxygen deprivation are important measures.15

Skilled delivery and postnatal care
- Both the mother and the newborn must get skilled care at the time of birth and during postnatal visits to be healthy.
- However, globally in 2020, only around 1 in 5 births were attended by trained medical professionals (17 percent).

According to data, just 49% of newborns worldwide are breastfed within an hour of birth, and over half (54%) of newborns in places like sub-Saharan Africa are not weighed at birth. 15

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Perception of women regarding informed consent before laparoscopic sterilization in selected PHCs

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***Abstract*---**A descriptive study to assess the perception of women regarding informed consent before laparoscopic sterilization in selected PHC's. Objectives: To assess the perception of women regarding informed consent before laparoscopic Sterilization. To test the association between selected demographic variables and perception of women regarding informed consent before laparoscopic sterilization. Methodology: In this study Descriptive approach was used. Purposive sampling technique was used to select 100 based on sample selection criteria. Data from the samples were collected through interview method. Data was analyzed using SPSS-16 version. Both descriptive and inferential statistics were used. Result: -The obtained perception score mean percentage was M=65.73 (SD=.1.91), related to 'informed consent' was M=69.13% (SD= 1.90), related to 'Information' was M=60.34% (SD=.1.97), related to 'consent taking process ' was M= 67.71% (SD= .1.68), and related to ethical value of informed consent was M= 65.75%(SD=.1.93).Obtained F value regarding education shows highly significant association (F=9.877) (sig.734) and (sig.000) between education and perception of women regarding informed consent. It was inferred that all the selected demographic variables had not influenced the perception of women regarding informed consent before laparoscopic sterilization. Conclusion: Women's perception on informed consent was average. Women's perception on concept of consent, Consent taking process and ethical value of informed consent was average and perception on

information to provide to the client before taking consent was low among women.

***Keywords*---**perception, women, consent, laparoscopic.

Introduction

The Population Policy 2000 and the reproductive health programme phase II emphasise the importance of achieving population stabilization and attaining the goal of replacement- level fertility by 2010. To achieve this objective, it is vital to provide quality services in family planning programme. Sterilization through laparoscopic services are largely distributed through network of public and private health care settings.[1] Out of world's 1 billion married couples, some 650 million plan their families. Female sterilization is the world most popular method of birth prevention.[2.] Written consent and legal consideration in family planning is needed to make decisions without fear of coercion constitutes the crucial elements of reproductive rights. Written consent is more formal legal process in which the individual is first fully informed and then gives consent in writing, to receive a method or services.[3]

There has been growing concern about the quality of sterilization services being offered particularly increase in complication of failure and deaths due to sterilization as also resulted in increased litigation being faced by the providers Sterilization of women, by surgical occlusion of the Fallopian tubes, is the most widely accepted of all modern family planning measures, being currently used by an estimated 140 million eligible couples worldwide and is the most commonly used modern contraceptive method in many developing countries[4].

Sterilization is still the most widely used method of fertility regulation in the world. The method currently provides contraception for some 223 million couples as in the rest of India, the most prominent method of birth control in Karnataka is female sterilization, with relatively low levels of use of temporary methods. Data from the NFHS-3 (2005-06) show that about nearly half of married women of reproductive age in Karnataka are sterilized (57.4%). Almost half of all urban women (49.9%) are sterilized. Women in Karnataka tend to get sterilized at fairly young ages, with a median age at sterilization of 24 years. [5]

There is a need to sensitize the women to the fact that as clients they have the right to seek information from health care providers, right to decide their free will whether or not to accept sterilization and the right to exercise informed dissent. There is also a need to equip women with comprehensive information before they enter the health care institution so they can make an informed choice on the method to be adopted.

Statement of the problem

A descriptive study to assess the perception of women regarding informed consent before laparoscopic sterilization in selected PHC's.

Objectives

1. To assess the perception of women regarding informed consent before laparoscopic Sterilization.
2. To test the association between selected demographic variables and perception of women regarding informed consent before laparoscopic sterilization.

Methods and Materials

Hypothesis

H1 There will be a significant association between women's perceptions on informed consent with selected demographic variables.

Research approach: A descriptive approach was adopted by the investigator for the present study.
Research design: - The research design selected for the study was descriptive survey design.
Population: - The accessible population of the present study comprised of female population posted for laparoscopic sterilization
Sample and Sample size: - The sample for the present study consisted of 100 females who planned to undergo laparoscopic sterilization at selected PHC's.
Sampling technique: - Purposive sampling also termed as judgmental sampling, is a type of non-probability sampling in which subjects are selected because they are identified as knowledgeable regarding the subject under investigation.
Method of data collection: -The investigator interviewed each individual to collect the necessary data and Confidentiality of the subjects were met individually

Tool used for the study

Part I Data on demographic variables

Part I consists of personal and demographic data such as age, literacy, health condition, religion, Occupation, type of family the family planning method adopted previously.

Part II Data on perception on informed consent

Part II consists of 25 items and divided in to Perception on informed consent information needed to provide before obtaining consent, Process of consent taking and ethical value of informed consent. The subjects were asked to give their perception on informed consent before laparoscopic sterilization by using four point Likert scale. The responses given by clients were "Strongly disagree", "Disagree", "agree", and strongly agree". These responses were given scoring of '1' for "Strongly disagree", 2 for "Disagree", 3 for "agree" and 4 for: strongly agree", The high score indicates high and good perception with the informed consent before laparoscopic sterilization.

Plan for data analysis

1. Demographic variables of mothers were analysed using frequency and percentage distribution.
2. Perception of women are analysed by using mean, range and standard deviation
3. Association between perception of women regarding informed consent before laparoscopic sterilization were analysed using ANOVA.

Results

Analysis of the study finding are categorized and presented under the following headings:

Section 1: Data on demographic variables of women
Section II: Data on women's perception on informed consent before laparoscopic sterilization
Section 111: Data on Association between selected demographic variables and the women's perception on informed consent before laparoscopic sterilization.

Section 1: Data on demographic variables of women

Table – 1 Frequency and percentage distribution of women according to demographic variables

demographic variables	Frequency	Percentage
Age		
<20	0	0
21-25	90	90%
26-30	6	6%
31-35	4	4%
>36	0	0
Religion		
Hindu	85	85%
Christian	10	10%
Muslim	5	5%
Others	0	0
Education		
No formal education	28	28%
Primary education	54	54%
Secondary education	15	15%
PUC and above	3	3%
Occupation		
Unemployed (House wife)	65	65%
Other Agriculture	35	35%
Economic status		
Below poverty line	53	53%
Above poverty line	47	47%
Type of family		
Joint family	22	22%

Nuclear family	78	78%
Number of children		
One	0	0
Two	96	96%
Three and above	4	4%
Adaptation of temporary family planning		
Yes	87	87%
No	13	13%
Acceptance of this surgery		
Fully voluntary	77	77%
By advice of others	23	23%

Section II: Data on women's perception on informed consent before laparoscopic sterilization

The obtained perception score mean percentage was M=65.73 (SD=.1.91), related to 'informed consent' was M=69.13% (SD= 1.90), related to 'Information' was M=60.34% (SD=.1.97), related to 'consent taking process' was M= 67.71% (SD= .1.68), and related to ethical value of informed consent was M= 65.75%(SD=.1.93). Perception was high 69.13% regarding informed consent. Also women's perception was high in process of consent taking (67.71%) and ethical values (65.75%) but the perception of women was low (60.34%) related to the information to be provided by the health care provider before taking consent 1t was inferred that the women had average perception regarding informed consent before laparoscopic sterilization

Section 111: Data on Association between selected demographic variables and the women's perception on informed consent before laparoscopic sterilization.

The obtained 't' values regarding occupation 't'=.202(sig .840), economic status 't'=.353(sig.725), type of family 't'=.355(sig.723), number of children 't'=-551(sig .583), Adaptation of family planning method 't'=1.827(sig.073), Acceptance of surgery 't'=-.973(sig .333) showed no significant association. It was inferred that all the selected demographic variables had not influenced the perception of women regarding informed consent before laparoscopic sterilization

Conclusion

MHFW guidelines of consent taking process is published to maintain standard in reproductive health care services. And thereby to avoid conflicts. Supreme Court judgment is unwelcome and regressive for the women's movement, especially for reproductive rights

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"Efectiveness Of Structured Teaching Program On Knowledge Regarding Psychotherapeutic Approach (Problem Solving Skills) On Academic Performance Among 1ST YEAR B. Sc Nursing Students At Adichunchanagiri College Of Nursing".

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Abstract *– Aim of the study was to identify the effectiveness of structured teaching program (STP) effectiveness of structured teaching program on knowledge regarding problem solving skills. Pre experimental one group pre & post test design with non probability sampling technique was used with 60 sample. Among1st year B.Sc. Nursing students 15 (46.87%) had moderate knowledge and 17 (53.12) had inadequate knowledge, none of them had adequate knowledge regarding problem solving skills before administration of STP. In pre-test, the overall mean 13.36 (124.2%) with standard deviation 5.169 before the administration of STP. Overall mean post test knowledge score was 16.21 (149.11%) with standard deviation 5.242 after the administration of STP. Overall enhancement between pre-test and post-test mean score percentage was 24.91. Paired 't' test knowledge scores revealed that 't' value is 3.35 with standard deviation 5.19. Chi- square test for knowledge on demographic variables revealed that there is no association with any demographic variables. Based on the findings of study it was concluded that majority of 1st year B.Sc. Nursing students had moderate knowledge regarding problem solving skills.*

Keywords: *Knowledge; Problem Solving Skills; Structured teaching Program.*

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I. Introduction:

Problem solving is a methodic way of discovering a solution to a given problem. We must remember that there is not always only one method or path to the solution from the problem that is at hand. Problem solving is considered to be one of the most complex intellectual processes and one that children today struggle with. The reason for this struggle has a lot to do with the technological age that we live in; children can have almost any problem solved within seconds by simply "Googleing it" therefore, they see no reason to know how to methodically learn to solve problems. It has been suggested that ineffective problem-solving results in stressful outcomes and psychological maladjustment. As it occurs in the natural environment, problem solving may be defined as the self-directed cognitive-behavioral process by which a person attempts to identify for discovering effective or adaptor solutions for specific problems encountered in everyday living. More specially, the cognitive-behavioral process (a) makes available a variety of potentially effective solution for a particular problem, and (b) increases the probability of selecting the most effective solution from among the various alternatives (D'Zurilla & Nezu, 1999). As this definition implies, problem solving is conceived here as a conscious, rational, effortful, and purposeful activity (D'Zurilla & Nezu, 2007). Findings in educational psychology show that expert problem solvers master a large body of easily accessible domain-specific knowledge (Brown, 1992; De Corte).

II. Related Work:

Problem-solving and decision-making skills are both important in the workplace because they can help you to navigate a variety of situations that come up at work. Problem-solving is a process of creating a solution to address a challenge, and it often and it often involves making decisions. Decision-making, similarly, is the action of choosing the best option in a situation, including choosing the best solution to a problem. Problem-solving and decision-making can complement one another and be used to resolve many of the same issues. Problem-solving is important both to individuals and organizations because it enables us to exert control over our environment. Fixing things that are broken some things wear out and break over time, others are flawed from day-1. Personal and business environments are full of things, activities, interactions and processes that are broken or not operating in the way they are desired to work. Problem-solving gives us a mechanism for identifying these things, figuring out why they are broken and determining a course of action to fix them. Addressing risk humans have learned to identify trends and developed an awareness of cause-and-effect relationships in their environment. These skills not only enable us to fix things when they break but also anticipate what may happen in the future (based on past-experience and current events). Problem-solving can be applied to the anticipated future events and used to enable action in the present to influence the likelihood of the event occurring and/or alter the impact if the event does occur.

Statement of research study & Objectives

Effectiveness of structured teaching program on knowledge regarding psychotherapeutic approach (problem solving skills) on academic performance among 1st year B. Sc nursing students at Adichunchanagiri college of nursing

Objectives of the study:

1. To assess the pre-test and post-test knowledge regarding problem solving skills among1st year B.Sc. nursingstudents.
2. To compare the pre-test and post-test knowledge regarding problem solving skills among 1st year B.sc nursing students.
3. To associate the pre-test knowledge scores regarding problem solving skills among 1st year B.sc nursing students.

Operational Definition

1. **Effectiveness**: It refers to the improvement in knowledge of 1st year B.sc nursing students regarding problem solving skills.
2. **Structured teaching program**: It refers to systematically organized teaching strategy for duration of 45 min to 1 hr. for 1st year B.sc nursing students on problem solving skills by verbal interaction with the use of LCD projector. It includes recruiting, selecting, promoting, super annulation etc.
3. **Knowledge**: It refers to level of understanding regarding problem solving skills among1st year B.sc nursing students.
4. **1st year B.sc nursing students**: The students who are perceiving in the 1st year B.sc nursing at Adichunchanagiri college of nursing, B.G Nagara.

Research Hypothesis:

H1: There will be significant difference between mean pre-test and post-test knowledge regarding Problem solving skills.

H2: There will be significant association between pre-test knowledge scores of 1st year B.sc nursingstudents regarding Problem solving skills with their selected demographic variables.

Assumptions:

1. 1st year B. Sc nursing students may not have adequate understanding regarding problemsolving skills.
2. Structured teaching program along with verbatim may improve the knowledge of 1st year B.sc nursing students regarding "Problem solving skills".
3. 1st year B.sc nursing student's knowledge regarding "Problem solving skills" may vary with their selected demographic variables.

III. Research Methodology

Research Approach: Quantitative evaluative research approach**.**

Research Design: Pre experimental one group pre-test post-test design**.**

Variables:

Dependent Variable: Knowledge regarding problem solving skills

Independent Variable: Structured teaching program

Setting of study: 1st year B Sc. Nursing classroom in Adichunchanagiri College of Nursing

Population: All 1st year B.Sc. nursing students at Adichunchanagiri College of Nursing.
Sampling and Sample Size: Sample size used for study was 60 using non probability purposive sampling technique.
Criteria for Selection of Sample
Inclusion criteria:
1. Only 1st year B.Sc. Nursing students.
2. 1st year B.Sc. Nursing students who were available at the time of data collectionin the class room.
Exclusion criteria: 1styear B.Sc. nursing students who are not willing to participate in the study.
Description of The tool: Structured interview schedule consisted of 2 sections covering the following areas.
Section A: Educational status of mother, Educational status of father, Occupation of mother, Occupation of father, Sources of information.
Section B: Structured questionnaire schedule was used to assess the knowledge regarding problemsolving skills among1st yearB.Sc. Nursing students.
Scoring Key: Knowledge regarding problem solving skills was measured in terms of knowledge scores. Each correct answer was given a score of one and wrong answers score of zero. Maximum score was 20 and the minimum score was 0. To interpret the level of knowledge the scores were distributed as follow.
Inadequate knowledge: <50 %
Moderate knowledge: 50-75 %
Adequate knowledge: >75 %

Reliability of Tool: In order to establish reliability of the tool, the split half technique with the spearman Brown's prophecy formula was used & the r value was 0.88 which indicated that the developed tool was found to best artistically reliable.
Development of structured teaching program:
Following steps were adopted to develop the structured teaching program
- Preparation of 1st draft of structured teaching programmed.
- Content validity of the structured teaching programmed.
- Preparation of final draft of structured teaching programmed.
- Description of the structured teaching programmed.

Content validity of the structured teaching program
The initial draft of the STP were given to 3 experts comprising of three from nursing educators and Biostatistician and along with criteria check list. There was 100% agreement in the criteria of content. The suggestions given by the experts were accepted and ensured the clarity and validity of the tool.
Description of the structured teaching program
It consists of objectives like meaning of problem-solving skills, steps of problem-solving skills, importance of knowledge on problem solving skills in future.
Data collection procedure:
Prior permission was obtained from the principal; the data collection was carried out in the month of October 2021 in Adichunchanagiri college of nursing BG Nagara. 1styear B.Sc. Nursing students were selected based on inclusion criteria.
1. On the first day purpose of the study was explained to the sample and informed consent was taken before starting the study followed by conduction of pre-test using structured knowledge questionnaire schedule among 1styear B.Sc. Nursing students.
2. On the same day the structured teaching programmed was administered on problem solving skills for 45minutes, by using LCD projector.
3. Post test was conducted 8 days after pre test by using the same structured knowledge questionnaire to each sample.
Plan for data analysis: The data obtained was analyzed by using descriptiveand inferential statistics as follows:
-**Descriptive statistics:**
1. Demographic data was analyzed in terms of frequencies and percentage.
Inferential statistics:
1. The significant difference between pre-test and post–test score was determined by paired 't 'test.
2. Chi-square test was used to determine the association between pre-test knowledge scores with their selected demographic variables.

IV. Results and discussion

Table 1: **Frequency and percentage distribution of selected demographic variables of 1st year B. Sc Nursing students such as gender, types of family, religion, educational status of father, hobbies n=60**

Sl.No.	Demographic variables	Frequency(n)	Percentage(%)
1	**Gender**		
	a) Male	16	26.67
	b) Female	44	73.33
2	**Type of family**		
	a) Nuclear family	50	83.33
	b) Joint family	10	16.67
3	**Religion**		
	a) Hindu	40	66.67
	b) Muslim	4	6.67
	c)Christian	16	26.67
4	**Educational status of the Father**		
	a) Secondary	15	25
	b) Higher secondary	30	50
	c)Graduate	15	25
5	**Hobbies**		
	a) Reading	13	21.67
	b) Listening music	25	41.67
	c)Watching TV	20	33.33
	d)Gardening	2	3.33

Table 2: **Frequency and percentage distribution of level of knowledge regarding problemsolving skills among 1st year B Sc Nursing students before and after administration of STP.**

n =60

Level of knowledge	Pre-test		Posttest	
	Frequency	Percentage	Frequency	Percentage
Inadequate (<50%)	33	55	_	_
Moderate (50-75%)	27	45	6	10
Adequate (>75%)	_	_	54	90

Table3: Mean and Standard Deviation for overall improvement of knowledge regardingproblem solving skills among 1st year B. Sc Nursing students before and after STP.

n=60

Knowledgeaspects	Max. score	Pre-test			Posttest			Enhancement		
		Mean	SD	Mean %	Mean	SD	Mean %	Mean	SD	Mean %
General Information	16	5.46	1.77	45.5	6.34	1.95	52.83	0.88	1.95	7.33
Personal perception regarding problem solvingskills	20	4.81	1.98	40.08	6.5	2.02	54.16	1.69	2.02	14.08
Techniques ofproblem-solving skills	24	3.09	1.41	38.62	3.37	1.27	42.12	0.28	1.272	3.5
Overall	**60**	**13.36**	**5.16**	**124.2**	**16.21**	**5.24**	**149.11**	**2.85**	**5.242**	**24.91**

Table 3 reveals the mean, SD and improvement of knowledge score on problem solving skills among1st year BSc Nursing students, with regard to general knowledgeregarding problem solving skills the gain in mean score percentage was7.33, with regard to question regarding Personal perception regarding problem solving skills the

gain in mean score percentage was 14.08, with regard to questions regarding to Techniques of problem solving skills the gain in mean score percentage was 3.5. The overall enhancement betweenpre-test and post-test mean score percentage was 24.91.

The above table represented the mean pre-test and post-test knowledge regarding problem solving skills among 1st year BSc Nursing students. Paired 't' test was carried out it and was invariably significant at $p > 0.05$ level. Hence null hypothesis H_{01} is rejected and research hypothesis H_1 was accepted. It was evidenced that STP is significantly effectivein improving the knowledge regarding problem solving skills among 1st year B Sc Nursing students.

Table3: Association between pre test knowledge scores with selected socio demographic variables

n=60

Sl. No	ANALYSISOFCHI-SQUARE						
	Observed freq.(O)	**Expected. (E)**	**O-E**	**$(O-E)^2$**	**$(O-E)^2/E$**		
1	**Gender**					**Cal value**	**Tab value**
	7	10.4	3.4	11.56	1.11		
	9	5.6	3.4	11.56	2.064	**$\chi 2$ =4.328**	
	32	28.6	3.4	11.56	0.404		
	12	15.4	3.4	11.56	0.750	**d.f=4**	**9.49**
	2	2.81	-0.81	0.66	0.23		
	1	2.63	-1.63	2.64	1.01	**NS**	
	3	3.50	-0.50	0.25	0.07		
	5	3.94	1.06	1.13	0.29		
	2	1.75	0.25	0.06	0.04		
	3	2.19	0.81	0.66	0.30		
				∑=	4.328		
2	**Type of family**						
	35	34.16	0.84	0.705	0.020	**$\chi 2$ =0.383**	
	15	15.83	0.83	0.688	0.043		
	6	6.83	0.83	0.688	0.100	**d.f=4**	**9.49**
	4	3.16	0.84	0.7056	0.22		
	1	1.69	-0.69	0.47	0.28		
	1	2.63	-1.63	2.64	1.01		
	4	3.94	0.06	0.00	0.00		
	7	5.25	1.75	3.06	0.58		
	0	0.88	-0.88	0.77	0.88		
	2	1.31	0.69	0.47	0.36		
				∑=	0.383	**NS**	
3	**Religion**						
	18	12.66	5.34	28.51	2.0252		
	22	27.33	5.33	128.40	1.03	**$\chi 2$ =9.904**	
	0	1.26	1.26	1.587	1.26		
	4	2.73	1.27	1.61	0.59	**df=4**	**9.49**
	1	5.06	4.06	16.48	3.25		
	15	10.93	4.07	16.564	1.515	**NS**	
	3	5.25	-2.25	5.06	0.96		
	7	3.94	3.06	9.38	2.38		
	1	2.19	-1.19	1.41	0.64		

	2	1.75	0.25	0.06	0.04		
				∑=	9.904		
4	**Education of father**						
	2	4.75	2.75	7.56	1.592		
	13	10.25	2.75	7.56	0.737	**$\chi 2$ = 3.92**	
	10	9.5	0.5	0.25	0.026		
	20	20.5	0.5	0.25	0.01		
	7	4.75	2.25	5.06	1.065		
8	8	10.25	-2.25	5.06	0.49		
	3	3.38	-0.38	0.14	0.04		
	2	2.81	-0.81	0.66	0.23	**d.f=4**	**9.49**
	6	4.50	1.50	2.25	0.50		
	2	2.19	-0.19	0.04	0.02	**NS**	
	4	3.50	0.50	0.25	0.07		
	3	2.63	0.38	0.14	0.05		
	3	2.19	0.81	0.66	0.30		
	2	3.50	-1.50	2.25	0.64		
				∑=	**3.92**		
5	**Hobbies**						
	2	4.11	-2.11	4.452	1.08	**$\chi 2$ = 11.45**	
	11	8.88	2.12	4.49	0.50		
	5	7.91	-2.91	8.46	1.07		
	20	17.08	2.92	8.52	0.49		
	12	6.33	5.67	32.14	5.07		
	8	13.66	-5.66	32.03	2.34		
	0	0.6	-0.6	0.36	0.6	**Df =3**	**7.81**
	2	1.36	0.64	0.40	0.30	**NS**	
				∑=	**11.45**		
NS= Not significant, S=Significant, *P<0.05							

The results of chi square analysis presented in tables indicated that there was significant association between educational status of mother, educational status of father, father's occupation, mother's occupation, sources of information. It was evidenced that the knowledge regarding problem solving skills is associated with demographic characteristics of 1st year B ScNursing. Hence Research Hypothesis H_2 was accepted, that there is significant association between pre –test knowledge regarding problem solving skills among 1st year B. Sc nursing students with selected demographic variables.

V. Discussion

The first objective was to assess the pre-test and post-test knowledge regarding problemsolving skills among 1st year B Sc Nursing students.

The overall mean pre-test knowledge score obtained by the subjects was 13.36 with standard deviation of 5.169 in the pre-test. The overall mean post-test knowledge obtained by the subjects was 16.21with standard deviation of 5.242 in the post-test.

The second objective was to compare the pre-test and post-test knowledge regarding problem solving skills among 1st year B Sc Nursing students.

The level of knowledge distribution showed that 1st year BSc Nursing students 15(46.87%) had moderate knowledge and 17 (53.12%) had inadequate knowledge regardingproblem solving skills in pre-test. The level of knowledge distribution showed that 1st year BSc Nursing students 8(25%) had moderate knowledge and 24(75%) had adequate knowledge on problem solving skills on post-test.

The third objective waste associate the pre-test knowledge score regarding problem solving skills among 1st year B Sc Nursing students.

Association of pre-test knowledge scores of subjects with selected demographic variables such as educational status of mother, educational status of father, father's occupation, mother's occupation, sources of information evidenced that there was statistically significant association at $p<0.05$ level. Hence their search hypothesis H2 stated that there will be significant association between the pre-test knowledge of 1st year BSc Nursing students regarding problem solving skills score with their selected demographic variables was accepted.

The above study was supported by a study, which was done to identify association in of demographic variable between the 1st year B Sc Nursing students regarding problem solving skills. The study included 60, 1st year B Sc Nursing students from AdichunchanagiriCollege of Nursing, B.G. Nagara.

VI. Conclusion

Nursing implications: The investigator has drawn the following implications from the studies which are ofvital concern to the field of nursing practice, nursing education, nursing administration and nursing research.

Nursing practice:

- Nurses can conduct teaching session on problem solving skills among1st year B Sc Nursing students, which will be helping improvement of knowledge for students.
- Nursing personnel can offer opportunity to create awareness among 1st year B Sc Nursing students through structured teaching program.

Nursing education

- The student nurses should be encouraged to attend specialized courses and seminars regarding problem solving skills.
- Nursing faculty should come forward and encourage the student to provide theinformation on problem solving skills with the help of audio-visual aids.

Nursing administration

- Nursing leaders should enhance nursing services through reinforcement teaching.
- Teaching program can be given to 1st year BSc Nursing students through mass mediaregarding problem solving skills

Nursing research

- Nursing can be forced on selected aspects of problem-solving skills which could help to improve nurse's autonomous decisions and collaborate with the medical team to ensure continuing care towards more successful management.
- This study will serve as a valuable reference material for future investigators.

Recommendations

- Similar study can be undertaken on large scale.
- An explorative study may be conducted to identify the awareness, knowledge and practice of working parents regarding problem solving skills.
- A similar study can be undertaken by using different teaching methods.
- Similar study can be replicated with a control group.

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A study to assess the health problems faced by night duty staff nurses at AH & RC. B.G. Nagara

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Abstract : *Night shift work in nursing is really a risk factor for nurse's health and patient safety. But being a nurse, night shift is an essential factor. Such work schedule have been related to numerous health problems among which are sleep loss, fatigue, CVD, social problems and some psychological problems. One of the main problems faced by the night duty staff nurses is sleep loss which has lead to difficulty in concentration, headaches etc. Night work health problems are treated by regulation of shift work and enough rest and sleep. Aim of study to was to assess the common health problems faced by night duty staff nurses. Quantitative descriptive research design with survey approach using non probability sampling technique was used. 8% of sample had no adjustment problems, 54% of them had mild adjustment problems & 38% staff nurses had mild adjustment problems. Based on findings of the study it has been concluded that there are several disease which affect the night duty staff nurse. Insomnia, head ache, back ache, acidity, and stress over the body, depression, muscular strain are some of the diseases faced by night duty staff nurses.*

Keywords : *Health problems, night duty, Assess.*

1. INTRODUCTION:

Nursing is a lifesaving profession and nurse play a pivotal role in the health care industry If nurses who are the symbol of "service and humanity "are troubled by their own ill health or other stressful circumstance, then they will not be able to give their full attention to this demanding task .no hospital can function effectively if there is high incidence of ill health among Nurses.

About one third of the Nurses in our population showed symptoms indicatives of shift work disease with highest prevalence in schedule involving night shift. However out of the 768 who reported symptoms of shift work disorder, 146 were not working night shift .Hence some non-night work schedules also may in increased risk of shift work disorder.

Prevalence rate of symptoms of shift work disorder varied from depending on assessment method. The prevalence of symptoms indicative of shift work disorders was high. According to the adjusted analysis symptoms indicative of shift work disorders was associated with age.

2. LITERATURE REVIEW:

In 2020 the international agency of research cancer classified shift work that involves circadian disruption as probably carcinogenic to humans. Depression and anxiety disease are highly prevalent at shift work accompanied by sleeping, fatigue and cognitive disorder including memory and concentration impairment. Shift work can have an impact on sleep, wellbeing performance and organizational out comes.

Rotating shift work affects the amount of sleep, but not the rate of errors among workers on a three shift schedules found that professional mistakes such as drug administration errors, incorrect operation of medical equipment in hospital by nurses and needle stick injuries were associated with the complaints of excessive sleepiness. There is no

association between shift work and occupational accidents. But rather found an association between mental health and medical errors.

National institute of occupational safety and health working more than 40 hours per week, working extended shift and working both extended shift and over time can have adverse effect on worker health. Accident risk is also higher than day shift. Night work in nursing, it is really a risk factor for nurses health and patient safety. Such work schedule has been related to Nemours health problems among nurses such as sleep loss, depression, anxiety, irritable mood, working against a personals naturals sleep cycle causes such sleep disorders as well as fatigue. The study focusing night shift and health risk and this study would give an opportunity for the nursing staff to express their difficulty in professional life especially during the staff work.

From the above literature, Researcher has realized that staff those who are executing night shift duty are in much needed of care in their health aspects. So the researcher has chosen this study to assess the knowledge regarding common health problems among night duty staff nurses

3. MATERIALS:

Research approach: Survey approach
Research design: Quantitative descriptive design
Variables:

Dependent variables: Health problems.

Independent variables: Staff nurses

Setting of the study: The study was conducted in Adichunchanagiri hospital and research center, B.G Nagara.

Population : The target populations in this study were all the night duty staff nurses in AH & RC.

Sampling and sampling size: The sampling size for the present study was 60 night duty staff at AH & RC who full fill the sampling criteria.

Criteria for selection of samples

Inclusion criteria

The person who are working as a nurse
The staff nurse who all are working in night duty
The nurses who were available at the time of data collection
The staff nurses who were willing to participate in this study
Sampling technique: Non probability sampling technique

4. METHOD:

Description of the tool
Checklist consists of 3 sections covering the following areas.
Section A: It consists of eight items seeking information on demographic data which includes age of the staff nurses, family of the staff nurses, educational qualification of the parents, dietary pattern of the staff nurses, marital status of the staff nurses, previous history of medical illness, previous history of surgical illness and present placement.
Section B: Checklist was used to assess the health problems faced by the night duty staff nurses.
Section C: Magnitude of health problems faced by the night duty staff nurses on differential aspects
Data collection procedure:
A prior permission was obtained from the medical officer at AH & RC.

The data collection was carried out in the month of august 2021 in AH & RC. The night duty staffs were selected based on inclusion criteria.

On the first day purpose of the study was explained to the sample and informed consent was taken before starting the study.
Using checklist assessed the health problems among night duty staff nurses.

5. DISCUSSION:

The frequency and percentage distribution of health problems among night duty staff nurses by age, type of the family, educational qualification of the parents and diet patterns of the staff nurses. With regard the age of the staff

nurses 13 (21.6%) were between the age group of 20-25, 19 (31.6%) between 25-30, 22 (36.6%) between the age of 30-35 and 6 (10%) belongs to the age between 35-40 years. Regarding the type of family 36 (60%) from nuclear family, 23 (38%) from joint family, 1 (1.6%) from extended family. With regard the educational qualification of the parents 13 (21.6%) are uneducated or illiterate, 31 (51.6%) parents belongs to secondary level and 16 (26.6%) belongs to degree level. With regarding the diet 3 (5%) staff nurses are vegetarian, 6 (10%) are non-vegetarian and 51 (85%) following the mixed diet.

The frequency and percentage distribution of health problems among night duty staff nurses by the marital status, previous history of medical illness, previous history of surgical illness and present placement. With regard the marital status 49 (81%) of staff nurses were married and 11 (18.3%) were unmarried. With regard the previous history of medical illness 9 (15%) having previous medical history, 51 (85%) not having any previous medical history. With regarding the previous surgical history 5 (83%) having previous surgical illness, 55 (91%) not having previous surgical history. Regarding the present placement 12 (20%) were in ICU, 18 (31.6%) were in medical unit, 9 (15%) were in surgical unit, 6 (10%) were in OBG department, 2 (3.3%) were in pediatric unit and 13 (21.6%) were working in other unit

6. ANALYSIS:

Organization and presentation of data

Section 1: Assess the health problems faced by night duty staff nurses.

Frequency and Percentage based on different aspects of Health Problems.							
Sl. No	**Aspects of Problems**	**Never**		**Some times**		**Always**	
		f	**%**	**f**	**%**	**f**	**%**
1.	**Social problems**						
a)	Negative attitude towards nursing	24	40%	33	55%	3	5%
b)	Interpersonal conflict	19	31.6%	38	63.3%	3	5%
c)	Ever felt shouldn't take this profession	29	48.3%	20	33.3%	11	18.3%
d)	Difficulty for the communication	38	63.3%	22	36.6%	---	---
e)	Occupational accidents and incidence damage to equipment	33	55%	25	41.6%	2	3.3%
2.	**Health related problems**						
a)	Head ache	11	18.3%	31	51.6%	18	30%
b)	Muscular strain	12	20%	33	55%	15	25%
c)	Loos of sleep	11	18.3%	29	48.3%	20	33.3%
d)	Back ache	12	20%	29	48.3%	19	31.6
e)	Feet ailment	15	25%	31	51.6%	14	23.3%
f)	Other	---	---	4	6.6%	---	---
g)	Heart problems	40	66.6%	20	33 .3%	---	---

h)	Acidity	11	18.3%	35	58.3%	14	23.3%
i)	Acidity tablets	19	31.6%	41	68.3%	---	---
j)	Difficulty for spinal movements	32	53.3%	24	40%	4	6.6%
3.	**Psychological problems**						
a)	Development of stress on the body	4	6.6%	47	78.3%	9	15%
b)	Shift work affected your mood	20	33.3%	29	48.3%	11	18.3%
c)	Angry during night shift	20	33.3%	31	51.6%	9	15%
d)	Ever get depression	27	45%	24	40%	9	15%
e)	Alter level of concentration	23	38.3%	30	50%	7	11.6%
4.	**Sleep related problems**						
a)	Insomnia	15	25%	23	38.3%	22	36.6%
b)	Ever use sedatives	54	90%	5	8.3%	1	1.6%
c)	Ever experienced migraine	27	45%	26	43.3%	7	11.6%
d)	Weakness during night duty	10	16.6%	39	65%	11	18.3%
e)	Experienced fatigue	13	21.6%	36	60%	11	18.3%

Section 2: Magnitude of health problems faced by night duty staff nurses:

Sl. No	Aspects of problem	Never		Sometimes		Always	
		Mean	SD	Mean	SD	Mean	SD
1.	Social problems	2.38	7.8	2.3	7.6	0.31	1.49
2.	Health related problems	2.71	7.1	4.61	10.2	1.73	1.9
3.	Psychological problems	1.56	5.49	2.68	8.8	0.75	2.42
4.	Sleep related problem	1.98	7.8	2.15	7.7	0.8	3.42

7. FINDINGS:

Social problems Illustrate the distribution of check list among 60 staff nurse. Regarding the negative attitude towards nursing 24 (40%) of staff nurse never experienced,33 (55%) sometimes experienced and 3 (5%) always experienced. Regarding interpersonal conflict 19 (31.6%) never experienced, but 38 (63.3%) of staff nurses sometimes experienced interpersonal conflict in their family and 3 (5%) always experienced. Regarding the profession 29 (48.3%) never felt they shouldn't take this profession, but 20 (33.3%) of staff nurses sometimes felt and 11 (18.3%) always felt.

Regarding the communication with patients 38 (63.3%) staff nurses not having any difficulties to communicate patients during night duty, but 22 (36.6%) of staff nurses sometimes they experienced difficulties during communication.

Regarding the occupational accidents and incidence damage to equipment's 33 (55%) of staff nurse never have any problems, 25 (41.6%) are sometimes experienced, 2 (1.2%) always experienced occupational accidents and incidence damage to equipment's

Health related problems

Regarding the health problems of night duty staff nurses 11 (18.3%) never experienced frequent head ache, but 31(51.6%) sometimes experienced with head ache and 17 (28.3%) always experienced with frequents headaches. 12 (20%) never experienced muscular strain 33 (55%) of staff nurses sometimes experienced with muscular strain and 14 (23.3%) always experienced muscular strain. In case of los of sleep 11 (18.3%) never experienced 29 (48.3%) sometimes experienced and 15 (25%) always experienced with loos of sleep. 12 (20%) never experienced with back ache 29 (48.3%) sometimes experienced with back ache and 14 (23.3%) always experienced. 20 (33.3%) not having any feet ailment problems 31 (51.6%) sometimes having and 14 (23.3%) are always facing feet ailment problems. 4 (6.6%) are sometimes they are facing other health problems.

40 (66.6%) of staff nurses are never experience with heart problems but 21 (35%) are sometimes having heart problems. 11 (18.3%) are never having acidity 35 (58.3%) sometimes having acidity and 14 (23.3%) always having acidity during their night duty time. 19 (31.6%) of staff nurses never taking acidity tablets but 35 (58.3%) sometimes using acidity tablets. 32 (53.3%) of staff nurses never having any difficulty for their spinal movements 24 (40%) sometimes having difficult 4 (6.6%) of nurses are always experiencing difficulty for the spinal movements.

Psychological problems

Regarding the psychological problems of night duty staff nurses 4 (6.6%) never not experienced development of stress over their body 47 (78.3%) are sometimes experienced stress over their body during night duty time 9 (15%) always experienced stress over their body.20 (33.3%)of staff nurses that shift work never affect their mood 29 (48.3%) sometimes shift work affect their mood,11 (18.3%) always experienced that shift work affect their mood. 20 (33.3%) of staff nurses never get any angry during their night duty time,31 (51.6%) sometimes having angry during their night duty time and 9 (15%)always having angry during their night duty time.

27 (45%) of nurses never get depression after doing night duty 24 (40%) of nurses experienced depression after doing night duty 8 (13.3%) always having depression after night duty.23 (38.3%) of staff nurses never having alter level of concentration during their night duty time 30 (50%) of staff nurses sometimes only alter their level of concentration and 7 (11.6%) always change their level of concentration.

Sleep related problems

Regarding sleep related problems which includes 15 (25%) of staff nurses never experienced insomnia 23 (38.3%) sometimes experienced insomnia 22 (36.6%) always experienced insomnia after their night duty. 54 (90%) of staff nurses never using sedatives, 5 (8.3%) sometimes using and 1 (1.6%) are always using sedatives. 27 (45%) of staff nurses never experienced migraine 26 (43.3%).7 (11.6%) sometimes experienced migraine after their night duty 7 (11.6%) always experienced migraine after night duty.

10 (16.6%) of staff nurses never get any weakness after their night duty, 39 (65%) are having weakness after their night duty, 11 (18.3%) always having weakness.13 (21.6%) never experienced fatigue, 36 (60%) of nurses sometimes experienced fatigue 11 (18.3%) are always having fatigue after doing their night duty

8. RESULT:

Present study was conducted to assess the health problems faced by the night duty staff nurses at selected hospital. The findings of the study revealed that regarding the social problems 33 (55%) of people sometimes felt negative attitude towards their nursing profession 11 (18.3%) always felt shouldn't take this profession. Regarding the health problems faced by the night duty staff nurses 18 (30%) of staff nurse always having head ache, 20 (33.3%) always having sleep loss, 19 (31.6%) of staff nurse always suffer from back ache, 14 (23.3%) are having acidity in night duty and 41 (68.3%) sometimes using acidity tablets and 24 (40%) having difficulty for the spinal movement during their night duty time. Regarding the psychological problems faced by the night duty staff nurse 47 (78.3%) sometimes felt development of stress over their body during the night duty time, 11 (18.3%) of staff nurse shift work always affect their mood and 9 (15%) may fell angry .Regarding the sleep related problem 22 (36.6%) always having insomnia and 11 (18.3%) always experienced fatigue during their night duty. Insomnia, headache, back ache, acidity, stress over the body, occupational accidents these are the common health problem faced by the night duty staff nurse.

9. RECOMMENDATIONS:

The investigator has drown the following implications from the studies which are of vital concern to the field of nursing practice, nursing education, nursing administration and nursing research.

Nursing practice:

Nurses are the key persons of a health team, who play a major role in the health promotion and maintenance; it is a practicing that the researchers generally integrate findings in to practice.

- Medical officers can conduct a session on health problems among staff nurses, which will help in improvement of knowledge for the staff nurses.
- Nursing superintendent can create awareness among staff nurses through the health education.
- For the management of health problems during night duty, for this nurses need to adequate knowledge regarding common health problems of night duty nursing professionals working in the hospital should educate regarding common health problems of night duty. So that nurses can manage common health problems of night duty.

Nursing education

As a nurse educator, there are abundant opportunities for nursing professionals to educate common health problems faced by the night duty staff nurses.

The concept of prevention is better than cure need to be concentrated among staff nurses. The staff nurses itself needed special and care full concentration regarding the health.

Nursing superintendent should come forward and provide adequate facilities and create some awareness regarding the health. Peripheral health workers also can educate for nurses regarding common health problems of night duty.

Nursing administration:

The nursing administrator can mobilize the available resource personnel towards the health education of night duty nurses regarding common health problems of night shift.

The nurse administrators should plan and organize continuing education program for health workers to motivate them in conducting teaching program. The nurse administrator should explore their potentials and encourage innovative ideas in the preparation of appropriate teaching material.

Nursing research:

Nursing research can focused on selected aspects of health problems faced by the staff nurses. Tools are available to assess the health problems faced by the staff nurses who could help to improve the continuing care towards their health and more successful management.

Nurses should come forward to carry out studies on common health problems of night duty staff nurses and publish them for the benefit of public and nursing. This study will serve as a valuable reference material for future investigation.

10. CONCLUSION :

The present study was conducted to assess the health problems faced by the night duty staff nurses at selected hospital. The findings of the study revealed that regarding the social problems 33 (55%) of people sometimes felt negative attitude towards their nursing profession 11 (18.3%) always felt shouldn't take this profession. Regarding the health problems faced by the night duty staff nurses 18 (30%) of staff nurse always having head ache, 20 (33.3%) always having sleep loss, 19 (31.6%) of staff nurse always suffer from back ache, 14 (23.3%) are having acidity in night duty and 41 (68.3%) sometimes using acidity tablets and 24 (40%) having difficulty for the spinal movement during their night duty time. Regarding the psychological problems faced by the night duty staff nurse 47 (78.3%) sometimes felt development of stress over their body during the night duty time, 11 (18.3%) of staff nurse shift work always affect their mood and 9 (15%) may fell angry .Regarding the sleep related problem 22 (36.6%) always having insomnia and 11 (18.3%) always experienced fatigue during their night duty. Insomnia, head ache, back ache, acidity, stress over the body, occupational accidents these are the common health problem faced by the night duty staff nurse.

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A STUDY TO ASSOCIATE THE EFFECTIVENESS OF AWARENESS PROGRAMMES ON KNOWLEDGE AND ATTITUDE REGARDING ROAD SAFETY MEASURES AMONG ADOLESCENTS IN SELECTED SCHOOLS AND COLLEGES OF MANDYA, KARNATAKA

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ABSTRACT

Road traffic accidents are the only public health problem for which society and decision-makers still accept death and disability among young people on a large scale. The demographic, epidemiological, and economic transition in India has changed the health scenario in a significant way during the last two decades. This shift in health problems and priorities has brought the entire spectrum of non-communicable diseases to the forefront of the healthcare delivery system. The research approach adopted for this study is the evaluativeapproach as the researcher. The research design adopted for this study is a quasi-experimental study with randomization. The study was conducted at selected schools and colleges of Mandya dist., Karnataka state. In the study accessible population consists of adolescents in selected schools and colleges in Mandya, Karnataka. The sample of the study consists of adolescents in selected schools and colleges in Mandya, Karnataka. The sampling technique adopted in the present study was a simple random sampling technique using the lottery method. In association of knowledge with socio-demographic variables shows that monthly income, how often you travel on the highway, and how often you travel by public transport were found significant. In association of attitude with socio-demographic variables shows that gender, monthly income, mode of transport, duration of driving a vehicle, how often you travel on the highway, and how often you travel by public transport were found significant.

KEYWORDS: *Road traffic, epidemiological, non-communicative.*

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INTRODUCTION

A steep increase in vehicle and human population traversing the adverse road situations has made road traffic injuries a serious condition. The phenomenal increase in morbidity, mortality, disability and socio-economic impact from injuries in particular, during the past decade has been a matter of increasing concern among professionals and policymakers (Kolluri SVR 2005).

Adolescence is like a bridge between childhood and adulthood, during which the individual is gaining further physical maturity, further education, and training that will enable him/her to fulfill a useful role in adult society (Matous M 2006).

India, a rapidly developing country with expanding economy has one of the highest motorization growth rates which is accompanied by rapid expansion in road networks and urbanization. Consequently, the country is faced with various issues and impacts of RTA and road safety levels. In the year 2015, the total number of RTA was 5, 01,423 with an increase of2.5% in 2014. These accidents were responsible for a death toll of 1, 46,133 (Government of India, Ministry of road transport 2016).

More than 1.2 million people die in road traffic accidents and about 50 million are injured in road traffic accidents worldwide every year. On average 3242 persons die each day around theworld in road crashes. In developed countries, 57% of male deaths and 43% of female deaths are in the age group 10-24 years due to Road Traffic Accidents. The emergence of Road Traffic Injuries (RTIs) is a leading cause of Deaths & Disabilities in India. The magnitude of Road traffic accidents and fatalities in India is alarming in 2009, 4.22 lakh Road traffic accidents and 1.27 lakh Road traffic fatalities were reported. These numbers translate into one road accident every minute and one road accident death every four minutes [Road accidents in India, 2009].

The previous research found that 40% of motorcycle accidents in Jakarta involvedadolescents, of which 91.3% did not have a driver's license [Umniyatun et al 2021]. This dominance in traffic accidents by motorcycle riders is accompanied by an increase in motorcycle sales because this mode of transportation is considered cheap and practical [Chaudhuri et al 2019].

OBJECTIVE

1. **To associate the effectiveness of awareness programmes on knowledge and attitude regarding road safety measures among adolescents**

REVIEW OF LITERATURE

Lalitha. K & Kevin Ruther. G (Mar 2014) conducted a study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding prevention and control ofRoad Traffic Accident among male students in a select college at Guntur. Samples selected from second year civil students of NRI Institute of Technology in Guntur, A.P. A structured interview questionnaire used as a tool for evaluation. The result represented the highestpercentage 30(60%) is between the age of 17-18 years. 32(64%) of highest percentage have the upper income family. In the pre-test highest percentage 35(70%) had given incorrect answerknowledge regarding the prevention and control of road traffic accidents. In the post-test 48(96%) had given correct answer. 2(4%) had given incorrect answer. Findings related to the attitude of college students regarding the prevention and control of road traffic accidents in thepretest 35(70%) had given incorrect answer 15(30%) had given correct answer. In the post 46(92%) had given correct answer 4(8%) had given incorrect answer. The study ensures that the teaching programme for the students had impact on the knowledge of the students regardingroad traffic accident.

Intan Zainafree et al 2022 conducted a study on The Road Safety Education Program for Adolescents Using Social Media, Proving Increasing Knowledge, Beliefs, Attitudes, Intentions, and Behavior. The Mann–Whitney test in the intervention and control group demonstrated a significant difference in the average post-test score of two on all dependent variables (p = 0.000). The results of the GLM-RMA test demonstrated the effect of the Zainafree Program on knowledge (p = 0.000; ETA Square = 35.1), beliefs (p = 0.000; ETA Square = 32.0), attitudes (p = 0.000; ETA Square = 50.9), intentions (p = 0.000, ETA Square
= 20.7), and behavior (p = 0.000; ETA Square = 28.2), after adjusting for involvement between confounding variables (p = 0.000; ETA Square = 16.2), which demonstrated that the intervention was able to explain 16.2 changes that occur in the scores of five aspects together.

METHODOLOGY

The research approach adopted for this study is the evaluative approach as the researcher. Theresearch design adopted for this study is a quasi-experimental study with randomization. The study was conducted at selected schools and colleges of Mandya dist., Karnataka state. In the study accessible population consists of adolescents in selected schools and colleges in Mandya, Karnataka. The sample of the study consists of adolescents in selected schools and colleges in Mandya, Karnataka. The sampling technique adopted in the present study was a simple randomsampling technique using the lottery method.

RESULTS

TABLE .1 KNOWLEDGE					
HOW OFTEN DO YOU TRAVEL ON HIGHWAY	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
VERY FREQUENTLY	8	12	30	6	*19.54
FREQUENTLY	7	22	31		
OCCASIONALLY	12	10	18		
RARELY	32	12	6		

TABLE .2 KNOWLEDGE					
HOW OFTEN DO YOUTRAVEL BY PUBLIC TRANSPORT	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
VERY FREQUENTLY	8	12	6	8	*20.54
FREQUENTLY	17	12	9		
OCCASIONALLY	12	20	37		
RARELY	22	12	20		
NEVER	4	5	4		

TABLE .3 ATTITUDE					
GENDER	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
MALE	30	24	6	2	*20.78
FEMALE	18	25	22		
PREFER NOT TO SAY	15	20	20		

TABLE .4 ATTITUDE					
MONTHLY INCOME	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
LESS THAN RS 25,000	12	18	15	6	
RS 25,000-RS 50,000	25	8	22		*23.24
RS 50,000- RS 75,000	16	15	19		P<0.05
RS 75,000 OR ABOVE	22	17	11		

TABLE .5 ATTITUDE					
MODE OF TRANSPORTATION	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
CAR	14	12	8	8	
MOTORCYCLE/SCOOTER	10	14	6		*18.25
BICYCLE	21	9	26		P<0.05
PUBLIC TRANSPORTATION	12	11	17		
WALK	10	12	18		

TABLE .6 ATTITUDE					
DURATION OF DRIVING A VEHICLE	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
LESS THAN 1 YEAR	23	20	38	8	
1-3 YEAR	16	12	11		
4-6 YEAR	6	4	10		*19.52
7 YEARS OR ABOVE	2	4	4		P<0.05
I DONOT DRIVE	15	12	8		

TABLE .7 ATTITUDE					
HOW OFTEN DO YOU TRAVEL ON HIGHWAY	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
VERY FREQUENTLY	18	12	20	6	*10.54
FREQUENTLY	17	22	21		
OCCASIONALLY	17	12	11		
RARELY	18	16	16		

TABLE .8 KNOWLEDGE					
HOW OFTEN DO YOUTRAVEL PUBLIC TRANSPORT	**GOOD**	**AVERAGE**	**POOR**	**Df**	**χ2**
VERY FREQUENTLY	10	12	4	8	*22.36
FREQUENTLY	14	15	9		
OCCASIONALLY	23	20	26		
RARELY	17	14	23		
NEVER	4	4	5		

CONCLUSION

In association of knowledge with socio-demographic variables shows that monthly income, how often you travel on the highway, and how often you travel by public transport were found significant. In association of attitude with socio-demographic variables shows that gender, monthly income, mode of transport, duration of driving a vehicle, how often you travel on the highway, and how often you travel by public transport were found significant.

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Effectiveness of Self-Instruction Module on Knowledge Regarding the Quality of Life of End Stage Renal Disorder Patients among Staff Nurses at a Selected Hospital, Mandya

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ABSTRACT

Background: Health, as defined by World Health Organization, is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity. Thus, in chronic diseases, the quality of life (QOL), which describes the patient health, is an essential scale for assessing the success of a treatment. Health-related QOL (HRQOL) is the subjective perception of the illness and its treatment on the physical, psychological, and social well-being. Patients with end-stage renal disease (ESRD) on hemodialysis (HD) experience the heavy burden of dialysis treatment through its physical dependence, mental influence, and the myriad symptoms of ESRD.

Objective: The study aims to assess the effectiveness of Self Instruction Module (SIM) on knowledge of clinical nurses regarding quality of life of end stage renal disorder patients at Adhichunchanagiri Hospital and Research Centre, Mandya, Karnataka.

Materials and Methods: Quantitative research approach and a pre-experimental one group pre-test post-test research design were used to accomplish the stated objectives. The investigator selected a sample of 60 nurses who were working in Adhichunchanagiri Hospital. The data were collected by using a self administered structured knowledge questionnaire. Planned teaching was given with appropriate A-V aid followed by pretest.

Result: Inferential and descriptive statistical analysis was performed by using SPSS-IBM 20. Results were calculated by using p value < 0.05. The results revealed that, in pretest 70% of the nurses had inadequate knowledge where as in posttest 68.3% of the nurses had gained adequate knowledge and the improvement was statistically significant at P<0.05.

Conclusion: The study result shows that after intervention knowledge regarding quality of life of end stage renal disorder patients among nurses were improved significantly.

Key words: Effectiveness, self instruction module, quality of life, knowledge of staff nurses and end stage renal disorder.

I INTRODUCTION

"Train the mind to see the good in everything. Positivity is a choice. The happiness of one's life depends on the quality of the thoughts"

-Unknown

Chronic diseases have become a major public health problem and the leading cause of morbidity and mortality[1]. Global status report on non-communicable diseases (2010) stated that 80% of chronic disease deaths worldwide occur in low- and middle-income countries[2]. End- stage renal disease (ESRD) is one among the chronic diseases which possess great threat globally and increased burden in the healthcare system

and leads to increased morbidity and mortality and decreased the quality of life (QOL)[3]. According to the World Health Organization, Global Burden of Disease project, diseases of the kidney and urinary tract contribute to global burden with approximately 8,50,000 deaths every year and 11,50,10,107 disability-adjusted life years. Chronic kidney disease (CKD) is the 12th leading cause of death and 17th cause of disability. The global increase in CKD is being driven by the global increase in of diabetes mellitus, hypertension, obesity, and aging[4]. CKD is associated with increased incidences of cardiovascular mortality and loss of disability-adjusted QOL years[5]. CKD in India cannot be assessed accurately. The approximate prevalence of CKD is 800 pmp and incidence of ESRD is 150–200 pmp [1]. ESRD is the final stage of CKD in which the kidneys no longer function well enough to meet the needs of daily life. During this stage, renal replacement therapy is required to stay live, and hemodialysis (HD) is considered as the most widely used therapy and playing an essential role in increasing patients' lifetime. The QOL of HD patients was found to be considerably impaired when compared to that of healthy individuals of the general population as well as of renal transplant patients[6].

QOL is an overall assessment of a person's well-being, which may include physical, emotional, and social dimensions, as well as stress level, sexual function, and self-perceived health status. End-stage renal failure is a chronic disease that exerts a great negative impact on patients' health-related QOL mainly due to the accompanied impairment or to the imposed limitations in almost all domains of their daily lives. Despite remarkable advances in the treatment of HD, the patients encounter certain physical, psychological, economic, and social problems which affect their QOL[5,6].

HD consist a complex procedure for patients that require frequent hospital or dialysis centers visits, mainly 3 times a week, thus implying substantial changes in the normal way of patients' living. 92% of HD patients may endure a high symptom burden and may experience troubling symptoms such as fatigue, decreased appetite, trouble concentrating, swelling in their feet and hands, and muscle cramps, and, all of which cause daily distress and negatively affects their QOL[7]. HD is a time consuming, and costly treatment and it needs more restrictions for diet and fluid, and long run dialysis causes a loss of freedom, reliance on caregiver, disturbance of marriage, family, social live, and reduction or lack of income. All these factors impair QOL[6,8].

With this background, the researcher interested to assess the QOL among ESRD patients who have undergone HD with respect to their all domains including physical health (PH), mental health, kidney disease problem, and patient satisfaction among the clinical nurses.

Statement of the Problem

A study to assess the effectiveness of self instruction module on knowledge of clinical nurses regarding quality of life of end stage renal disorder patients at Adhichunchanagiri Hospital and Research Centre, Mandya, Karnataka.

Objectives

1. To assess the knowledge of clinical nurses regarding quality of life of end stage renal disorder patients.
2. To assess the effectiveness of self instruction module on knowledge of clinical nurses regarding quality of life of end stage renal disorder patients.
3. To find out the association between the pre-test knowledge scores of clinical nurses with selected demographic variables.

Hypotheses

H_1: There may be significant improvement in mean post-test knowledge score compared to mean pre-test knowledge score of clinical nurses regarding quality of life of end stage renal disorder patients.

H_2: There may be significant association between knowledge of clinical nurses with selected demographic variables.

II METHODOLOGY

A pre-experimental one group pretest-posttest was used to accomplish the stated objectives. The investigator selected a sample of 60 clinical nurses who met the inclusion criteria using a convenient sampling technique. The research tool was developed after doing extensive literature review. The primary and secondary sources of literature were reviewed to develop an appropriate tool. Experts from Nephrology, Urology, Psychiatric, Dialysis centre and nursing provided their opinion and valuable suggestions which were incorporated to develop the tool. The tool consisted of socio demographic characteristics and structured knowledge questionnaire. Structured knowledge questionnaire consisted of 40 items on knowledge regarding risk of unplanned extubation of patients with mechanical ventilation. Component-1: Consists of 19 items (50%) introduction to ESRD, dialysis. Component-2: Consists of 12 items (31.57%) factors affecting QOL of ESRD patients. Component-3: consists of 9 items (23.68%) nursing management of ESRD patients. The total knowledge score was interpreted as score of < 50% - inadequate, 51% - 75% - moderately adequate and > 76% - adequate. SIM was developed by referring the books and journals. It contains information regarding causes, risk factors, signs and symptoms, treatment of QOL of ESRD patients.

Inclusion criteria:

1. Clinical nurses who were willing and present at the time of data collection

Data collection procedure: Data collection procedure includes pretest, SIM and post test. The data were collected by self administered structured knowledge questionnaire during these phases of study. After obtaining the formal permission from Administrative Medical Officer and Nursing Director of Adhichunchanagiri Hospital and Research Center, the researcher approached Nursing Superintendent and the 60 clinical nurses were selected by using purposive sampling technique who met the inclusion criteria. The nurses were informed about the day and duration of pre-test. The day before pre-test, the researcher remained all the staff nurses through Nursing Director and ward in charges. The nurses were informed to gather at Seminar Hall in second floor in Adhichunchanagiri Hospital and Research Center, Mandya. The need for the study and the objectives were explained to the staff nurses. Anonymity and confidentiality was assured and written informed consent was obtained from the samples before conducting the pre-test. The investigator informed all the samples to answer all the questions given in the questionnaire and also assured that doubts in knowledge questionnaire will be clarified by providing SIM. The investigator collected data from 60 nurses that took 40-45 minutes for each nurse to complete the structured knowledge questionnaire.

Ethical consideration: Prior to the data collection, participants were informed about the study and written consent was obtained from each participant. Institutional human ethical committee clearance and permission was obtained to conduct the study.

Implementation of SIM: After pre-test, the SIM was distributed for 60 samples which was printed in English. The seating arrangements were made comfortably so that all the nurses can view the investigator while providing any instruction. Doubts raised from SIM were cleared then and there. All the staff nurses cooperated well and participated actively. They came forward with their queries about quality of life of end stage renal disorder patients. They also showed a positive attitude in group discussion. Post-test was administered on 8th day after PTP by using the same self-administered knowledge questionnaires on quality of life of end stage renal disorder patients. All the participants were cooperated well with the investigator in both pre-test and post-test sessions. The

data collection process was terminated by thanking the subjects for their cooperation.

III RESULTS

STATISTICAL ANALYSIS

Statistics were performed by using SPSS-IBM 20. Results were calculated by using P value <0.05. Chi-square was used to associate the knowledge and practice scores with selected demographic variables. Frequency and percentage distribution was used to analyze the demographic variables. Paired 't' test was used to find out the effectiveness of SIM.

Table 1: Frequency Distribution of Demographic Characteristics N = 60

Sl.No	Demographic Characteristics	Frequency (No.)	Percentage (%)
Age in Years	30 and above 30	8	13.33
	25 - 29	32	53.33
	Below 25	20	33.33
Gender	Male	14	23.33
	Female	46	76.67
Religion	Hindu	44	73.33
	Muslim	1	1.67
	Christian	15	25
Marital status	Married	26	43.33
	Single	34	56.67
Years of Experience	1 - 4	36	60
	5 - 9	16	27
	10 - 15	8	13
Educational qualification	GNM	47	78.3
	B.sc nursing	7	11.7
	Post B.sc nursing	6	10
Type of family	Nuclear family	31	51.6
	Joint family	29	48.4
Monthly family income	Rs. 10,000- 20,000	12	20
	Rs. 20,001 - 30,000	20	33.4
	Rs. 30,001 - 40,000	16	26.6
	Above Rs. 40,001	12	20
Place of residence	Urban	35	58.3
	Rural	25	41.6

Table 1 depicts majority of respondents 47(78.3%) were GNM graduates and most of them were from 35 (58.3%) residing in urban.

Table 2: Comparison of Knowledge of Participants in Pretest and Posttest N = 60

Sl. No	Level of Knowledge	Pretest		Posttest	
		Frequency(no.)	Percentage (%)	Frequency(no.)	Percentage (%)
1	Inadequate (<50%)	42	70	0	-
2	Moderately adequate (51%-75%)	18	30	19	31.67
3	Adequate >75%	0	-	41	68.33

Table 2 shows that 42 (70%) of the participants had inadequate knowledge in pretest with the mean of 12.03. In posttest, 41 (68.33%) of the participants had adequate knowledge and 19 (31.67%) of the participants had moderately adequate knowledge and the mean was 23.2. Paired't' value (24.9) showed that STP was very effective to improve the knowledge level of the participants and the improvement was found to be significant (p<0.005).

Table 3: Comparison of Mean, Standard deviation Score of Knowledge Level of Participants in Pretest and Posttest N = 50

Test	Mean	SD	Paired 't'value	P value
Pretest	12.03	2.604	24.9	<0.005*
posttest	23.20	2.57		

* Significant at P <0.005

Table 3 shows that posttest mean (21.7) is higher compared to pretest mean of 17.2. The paired't' value (24.9) showed that STP was very effective to improve the knowledge level of the participants and the improvement was statistically found to be significant (p<0.005).

Table 4: Aspect wise Knowledge scores of Respondents in Pre and Post tests

Aspect wise	Pre test		Post test		t value	DF	P value Inference
	Mean	SD	Mean	SD			
Introduction to ESRD and dialysis	6.07	1.793	11.27	1.793	16.3	59	P<0.005*
Factors affecting QOL of ESRD patients	2.67	1.036	5.43	1.170	13.6	59	P<0.005*
Nursing management of ESRD patients	3.30	1.280	6.50	1.066	16.2	59	P<0.005*

* Significant at P <0.005

Table 5: Association with the level of knowledge of patients and their selected demographic variables

Sl. No	Demographic Characteristics	Frequency (No.)	Level of Knowledge		Chi Square
			Moderately Adequate	Inadequate	
Age in Years	30 and above 30	8	5 (62.5%)	3 (37.5%)	0.354 (NS) P= 0.838
	25 - 29	32	24 (72.7%)	9(27.3%)	
	Below 25	20	13(68.4%)	6 (31.6%)	
Gender	Male	14	11(78.6%)	3(21.4%)	0.217 (NS) P= 0.641
	Female	46	31(67.4%)	15 (32.6%)	
Religion	Hindu	44	28(63.4%)	16 (36.4%)	3.261 (NS) P= 0.196
	Muslim	1	1 (100%)	-	
	Christian	15	13(86.7%)	2 (13.3%)	
Marital status	Married	26	16(61.4%)	10 (38.6%)	1.564 (NS) P= 0.211
	Single	34	26(61.5%)	8 (23.5%)	
Years of Experience	1 - 4	36	30(83.3%)	6 (16.6%)	1.32(NS) P= 0.838
	5 - 9	16	10(62.5%)	6 (37.5%)	
	10 - 15	8	2(25%)	6 (75%)	
Educational qualification	GNM	47	31(67.4%)	15 (32.6%)	3.261 (NS) P= 0.196
	B.sc nursing	7	4 (57.1%)	3(42.8%)	
	Post B.sc nursing	6	3(50%)	3(50%)	

Among the demographic variables analyzed in this study chi square value (x^2) and P value showed that except for the clinical experience there was no association found between mean pre-test score and the demographic characteristics such as age in years, gender, religion, marital status, years of experience and educational qualification.

The statistical value supported the research hypothesis that the mean posttest knowledge of clinical nurses regarding quality of life of end stage renal disorder patients will be significantly higher than the mean pretest knowledge score of nurses who had SIM.

Thus it shows that SIM was effective in improving the nurses' knowledge. This type of educational programs helps the nurses more knowledgeable and skilled in assessing patients' needs, providing quick and efficient care, evaluating the results of an intervention, supporting and teaching the patient and their family.

IV DISCUSSION

Description of demographic variables of patients undergoing cataract surgery

The demographic variables of the nurses included in this study were age, educational qualification, years of experience, marital status, monthly family income, type of family and place of residence.

The first objective was to assess the pre and post-test knowledge of clinical nurses regarding quality of life of end stage renal disorder patients.

From table 2 the study findings revealed that 42 (70%) of the participants had inadequate knowledge in pretest. It indicated that the nurses need to be educated and updated to take care of a patient with ESRD undergoing dialysis. After providing SIM, 41 (68.33%) of the nurses had adequate knowledge and 19 (31.67%) of them had moderately adequate knowledge and the improvement was statistically significant at P<0.005.

The second objective was to assess the effectiveness of self instruction module among clinical nurses regarding quality of life of end stage renal disorder patients.

In pretest the mean knowledge score obtained by the participants was 12.03 with SD of 2.6, whereas in post test the knowledge was improved to 23.2 with the SD of 2.57 which was statistically significant at P<0.005.

The third objective was to find out the association between the pre-test knowledge scores of clinical nurses with selected demographic variables.

In this study significant association was found between clinical experience and knowledge of clinical nurses.

The present study findings confirm that there was a considerable improvement of knowledge of staff nurses regarding quality of life of end stage renal disorder patients after providing SIM. In post-test 68% of staff nurses had scored up to 75% and 32% of them had scored above 50%. The present

study findings are supported by a similar study was conducted to evaluate the effectiveness of structured teaching programme on knowledge regarding quality of life among hemodialysis patients in Ahmed Gasim Kidney Association Centre, Khartom State, Sudan revealed that, the post test knowledge score was 86.3% compared to pre test score of 48.6%[28].

V LIMITATION OF THE STUDY

- The study is limited to staff nurses of Adhichunchanagiri Hospital and Research Center, Mandya.
- The study did not use control
- group.
- Only single domain i.e., knowledge was assessed in the present study.
- The sample size for the study was limited to 60 staff nurses. Hence the results of the study cannot be generalized.

VI RECOMMONDATIONS

Based on the present study findings it is recommended that;

- On the basis of findings of the present study the following recommendations havebeen made.
- A replication of present study can be conducted with a large sample.
- A similar study can be conducted in different settings with a control group and randomization.
- A comparative study can be conducted between nurses working in government and private hospital settings.
- The same study can be conducted on other domains such as attitude and practice.
- A follow-up study of planned teaching programme can be carried out to find the effectiveness in terms of retention of knowledge.
- A similar study can be conducted among nurses and other health care personnel.
- The same study can be conducted as comparative study between patients in different departments.

VII CONCLUSION

The interventional education program improved the quality of life after its implementation. Specifically, the results revealed that there was a significant improvement in all domain of quality of life namely; heath and functioning, social and economic, psychological/ spiritual and family domain. Therefore, the interventional education program should be adapted by hemodialysis units in the country in order to ensure that patients receiving hemodialysis are knowledgeable about their disease and its management, as well as to ensure high levels of quality of life among these patients.

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