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# Effectiveness of Learning Enrichment Programme on the Attittude Regarding Side Effects of Chemotherapy and Its Management among Caregivers of Patients Receiving Chemotherapy

**Ashly Zacharias[1], Anagha Jimmy[1], Riya Mathew[1], Shine Thomas[2]**

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## Abstract

The incidence of cancer has seen a remarkable increase in the recent times and chemotherapy occupies a pivotal role in the recovery process of the patient. Several types of cancer are now considered curable with chemotherapy even in advanced stages. The client who is at high risk for recurrence but shows no evidence of current disease may be a candidate for chemotherapy. The primary objective of the study is to assess the effectiveness of learning enrichment program on attitude regarding side effects of chemotherapy and its management among care givers of patients receiving chemotherapy. Hence the research approach selected for study was quantitative research approach. One group pretest posttest experimental research design was used. 30 care givers of patients receiving chemotherapy were selected from the oncology ward and day care center by using convenience sampling technique. Attitude was assessed by using attitude scale. The group was offered a learning enrichment program regarding side effect and its management of chemotherapy. The data collected were analyzed using descriptive and inferential statistics. The result shows that there is significant improvement in the level of attitude of care givers of clients receiving chemotherapy regarding side effects of chemotherapy and its management after learning enrichment programme with a mean difference 6.11at p>O.O5 level of significance.

***Key words:*** *Effectiveness, Learning enrichment program, Attitude.*

## Introduction

Cancer is a group of more than 200 diseases characterized by uncontrolled and unregulated growth of cells. It is a major health problem that occurs in people of all ethnicities. Most cancers occur in people over age 55. Cancer is the leading cause of death in people 55to 75 years of age. Globally cancers accounts for 5.1%of total disease burden and 12.5% of all deaths. In India they account for 3.3% of disease burden and9.9% of all deaths. This is especially important since life span is lengthening and elderly population (>55 years) is expected to double from 35 to 70 million by 2050. Most common cancer in males is lung and bronchus followed by hypo pharynx, oral cavity, pharynx, larynx and rectum. In the females commonest is the breast cancer followed by cervix, mouth, esophagus, ovary and stomach. Cancer incidence overall is higher in women than in men in India. These are considerable geographic variations in incidence of certain type of cancers, due to life style in a particular regions.[1]

Treatment options offered to patients with cancer are based on treatment goals for each specific type, stage, grade of cancer .Chemotherapy is used primarily to treat systemic disease rather than localized lesions that are amenable to surgery or radiation. Chemotherapy involves the use of antineoplastic drugs in an attempt to destroy cancer cells by interfering with cellular functions, including, replication, and DNA repair. Each time a tumor is exposed to chemotherapy, a percentage of tumor cells are destroyed. Repeated doses of chemotherapy are necessary over a prolonged period to achieve regression of tumor .It has evolved to become a therapeutic option

that can offer cure from certain cancers, control other cancers for long periods of time and in some instances offer palliative relief of symptoms and improve quality of life when cure or control no longer is possible.[2]

There are early and late side effects for chemotherapy. Cells with rapid growth rates are very susceptible to damage and effects may manifest in virtually any body system. Nausea, vomiting, leukopenia, anemia, neutropenia, dryness, kidney dysfunction etc.

Typically family members or friends provide care to individuals with variety of conditions including cancer. This experience is commonly perceived as a chronic stressor of caregivers often experience negative psychological, behavioral and physiological effects on their daily lives and health caregivers are often faced with multiple concurrent stressful events and extended, unrelenting stress ,they may experience negative health effects ,mediated in part by immune and autonomic deregulation.(3)

A descriptive survey was conducted on hundred patients diagnosed with breast, gastro intestine, lung and ovarian cancers to assess major side effects of chemotherapy. In hundred patients 80 were received different chemotherapy regimens with known side effects like nausea and vomiting. It was found that the patients who received chemotherapy regimens had hair loss, fatigue, effect on work or home responsibilities, effect on social activities and who had a negative effect on family or partner.

Proper management of side effects of chemotherapy may be improve the psychological strength of caregivers. Learning enrichment program may improve the knowledge and attitude regarding side effects of chemotherapy and its management. Apart from this various educational methods will help to reduce caregiver burden and improve their quality of life.

**Objectives**:The study is aimed to:

1) To assess the attitude of caregivers of patients receiving chemotherapy regarding side effects of chemotherapy and its management before administration of learning enrichment program.

2) To evaluate effective ness of learning enrichment program on attitude regarding side effects of chemotherapy and its management among caregivers of patients receiving chemotherapy.

## Materials and Methods

### Research Design

The research design is the overall plan for answer to the question being studied and for handling some of the difficulties encountered during research process. The research design used for study as pre experimental one group pretest posttest design.

O1XO2

O1 = Attitude assessment on caregivers of patients receiving chemotherapy regarding side effects of chemotherapy and its management before learning enrichment programs.

X= Learning enrichment program.

O2= Attitude assessment on caregivers of patient receiving chemotherapy regarding side effects of chemotherapy and its management after learning enrichment program.

### Settingof the study

The study is conducted in MIMS hospital Kozhikode district. The hospital is selected for easy availability and accessibility of subjects. There are oncology ward and day care in the hospital. In oncology ward there are 30 beds and in day care there are 10 beds. So that total the bed strength is 40 beds.

### Population

The population refer to the total category of persons or subject that meet the criteria for study established by the researcher. The selected population for present study is caregivers of patient receiving chemotherapy.

### Sample

A sample is a subset of population hen dealing with people, it can be defined as set of respondents selected from a large population for the purpose of

study. The samples are caregivers of patient receiving chemotherapy, who admitted in a selected hospital.

Sample size=30

**Sampling Technique**

Sampling is a process of selecting a set of population in order to obtain information regarding phenomena in a way that represent the entire population. Non probability sampling selects subjects based on the judgment of researcher to achieve particular objective of the research at hand within the prescribed time limits. In convenient sampling, the researcher selects or hand picks the elements of the study that are thought to best represent the phenomenon being studied.Convenient non probability sampling technique was found to be appropriate to select 30 caregivers of patient receiving chemotherapy.

**Sampling Criteria**

**Inclusion criteria:**

- Caregivers of patient receiving chemotherapy.
- Blood relatives.
- Contact with minimum 6 months.
- Language.

Exclusion criteria:

- Caregivers who are not willing to participate in this study.

Data collection instruments

1) Socio demographic data of caregivers of patient receiving chemotherapy its management.

2) Structured questionnaire to assess the attitude

3) Attitude Rating Scale

**Data collection process**

To conduct research study in the Aster MIMS Hospital Kozhikode, formal written permissionwas obtained from the institutional ethics committee and medical superintendent after explaining the nature and objectives of the study. Confidentiality of the responses was assured to all the subjects to get their cooperation. The researcher approached each subject individually. An informed consent was taken from all the subjects individually after explaining the objectives, the purpose of the study and the method of filling the rating scale items, followed by a self-introduction of the investigators. Data was collected from the patients of chemotherapy wards.

The collected data was analyzed by using manual method. The baseline data were analyzed by frequency and percentage. Inferential statistics such as t test was applied to identify theEffect of learning enrichment program on attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy at the p value <0.05 level of significance.

## Results

**SECTION 1: Sample characteristics**

- The findings shows that about 36.6% of subjects were in the age group of >60 years.
- The findings shows that 50% of subjects ere males and 50% of females.
- The findings shows that about 40% of subjects were educated up to higher secondary level.
- About 40% of subjects having income in-between 10000-20000 per month.
- About 50% of Subjects were unemployed.
- About 63.3% of subjects were married.
- About 96.65%of subjects ere Hindu.
- About 70% of subjects belongs to nuclear family.
- About 6O% of subjects got information through newspaper.

**SECTION 2**: **Effect of learning enrichment program on attitude on side effects and its management of chemotherapy among caregivers of**

**patients receiving chemotherapy.**

**Mean , Mean difference, standard deviation and t value of pre test and posttest score of knowledge on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy.**

| | Mean | SD | Mean difference | Table t value | Df | Calculated t value | P value |
|---|---|---|---|---|---|---|---|
| Pretest | 51.07 | 8.72 | 6.11 | 2.46 | 29 | 3.09 | 0.05 |
| Posttest | 57.18 | 8.28 | | | | | |

Significant at level of 0.05

It is inferred from the table 13 that the mean pretest score on attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy is 51.07 whereas of posttest is 57.18.The calculated paired t value 3.09 as greater than the table value 2.46 at df 29. Hence the null hypothesis stating that there is no significant difference in the level of attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy before and after learning enrichment program is rejected and the research hypothesis ere accepted. Thus it can be interpreted that there is significant difference in the level of attitude on side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy after learning enrichment program.

## Discussion

The present study was aimed to evaluate the effectiveness of learning enrichment program on the attitude regarding side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy in a selected hospital. The findings of the study are discussed below.

The present study on effectiveness of learning enrichment program on the attitude regarding side effects and its management of chemotherapy among caregivers of patients receiving chemotherapy shows that about 20% of subjects were got good attitude level, about 13.3% ere got excellent and 6.6% ere got very good attitude level in pretest. Then we provide learning enrichment program. After one eek of pretest we conducted the posttest, the posttest score is significantly greater than pretest score. And we concluded that there is significant improvement in the level of attitude of care givers of clients receiving chemotherapy regarding side effects of chemotherapy and its management after learning enrichment programme with a mean difference 6.11at p>O.O5 level of significance.

## Conclusion

Cancer is a group of more than 200 diseases characterized by uncontrolled and unregulated growth of cells. It is a major health problem that occurs in people of all ethnicities.Most cancers occur in people over age 55. Cancer is the leading cause of death in people 55to 75 years of age. Globally cancers accounts for 5.1%of total disease burden and 12.5% of all deaths. In India they account for 3.3% of disease burden and9.9% of all deaths. Hereby we are presenting a Learning enrichment programwhich can improve the attitude of care givers of patient receiving chemotherapy regarding side effects and its management.

**Ethical Clearance**- Taken from MIMS College of nursing ethics committee

**Source of Funding**- Self

**Conflict of Interest** - Nil

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# Effectiveness of Team Teaching Method on Knowledge Towards COVID19 Prevention and Outbreak among B.Sc. Nursing Students

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## Abstract

In December 2019, COVID-19 emerged and rapidly spread worldwide. Transmission of SARS-CoV-2, the virus that causes COVID-19, is mainly transmitted through droplets generated when infected person coughs, sneezes, or exhales, countries worldwide have imposed rigorous public health measures, such as quarantine. This study aims to assess the effectiveness of training program on knowledge towards Covid19 prevention and outbreak among B.Sc. nursing students. The study is quantitative in nature i.e. pre-experimental research design, and the data were collected from 193 B.Sc. Nursing students through structured questionnaire who were studying in Bombay Hospital College of Nursing Indore. The result showed that the post test mean score was 16.14 with SD of 2.06 and the respondents post test knowledge score were significantly higher than the mean pre test knowledge score 8.95 with SD of 2.50 and computed paired 't' value 27.94 is higher than table value 1.96, which shows that training program was effective at 0.05 level of significance ($P \leq 0.05$).

***Keywords:*** *Covid19 prevention and outbreak, Knowledge, Team teaching method, B.Sc. Nursing students.*

## Introduction

Corona virus is a group of viruses that is the main root of diseases like cough, cold, sneezing, fever, and some respiratory symptoms (WHO, 2019). Corona virus is a contagious disease, which is spreading very fast amongst the human beings. COVID-19 is a new strain which was originated in Wuhan, China, in December 2019. Corona virus circulates in animals, but some of these viruses can transmit between animals and humans (Perlman & Mclntosh, 2020). On March 24, India declared a country-wide lockdown of schools and colleges (NDTV, 2020) for preventing the transmission of the corona virus amongst the students. The first SARS-CoV-2 positive case in India was reported in the state of Kerala on January 30th, 2020. Subsequently, the number of cases drastically rose. According to the press release by the Indian Council of Medical Research (ICMR) on May 8th, 2020, a total of 14, 37,788 suspected samples had been sent to the National Institute of Virology (NIV), Pune, and a related testing laboratory. The recent outbreak of COVID-19 in several countries is similar to the previous outbreaks of SARS and Middle East respiratory syndrome (MERS) that emerged in 2003 and 2012 in China and Saudi Arabia, respectively. Corona virus is responsible for both SARS and COVID-19 diseases; they affect the respiratory tract and cause major disease outbreaks worldwide. SARS is caused by SARS-CoV, whereas SARS-CoV-2 causes COVID-19. So far, there is no particular treatment available to treat SARS or COVID-19. In the current search for a COVID-19 cure, there is some evidence that points to SARS-CoV-2 being similar to human corona virus HKU1 and 229E strains even though they are new corona virus family members. These reports suggest that humans do not have immunity to this virus, allowing its easy and rapid spread among human populations through contact with an infected person. A brief qualitative review based on

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the application and effectiveness of virtual teaching during the COVID-19 pandemic was conducted by referencing keywords, including medical student virtual teaching COVID-19, virtual undergraduate medical education, and virtual medical education COVID-19, in the electronic databases of PubMed and Google Scholar. A total of 201 articles were found, of which 34 were included in the study.- Iskra Mircheva et. al (2020).

**Objectives**

1. To assess the baseline knowledge towards covid19 prevention and outbreak among B.Sc. nursing students.

2. To develop and implement the team teaching method towards covid19 prevention and outbreak.

3. To assess the post test knowledge towards covid19 prevention and outbreak among B.Sc. nursing students.

4. To find out the effectiveness of team teaching method on knowledge towards covid19 prevention and outbreak among B.Sc. nursing students.

## Materials and Methods

This study was conducted pre-experimental research design and quantitative research in nature. The population included B.Sc. nursing programme students who are studying in Bombay Hospital College of Nursing Indore. The sample was consisted 193 nursing students and the purposive sampling (non probability) method was utilized to gather information from chosen population. The structured questionnaire was used to collect the knowledge towards COVID 19 prevention and outbreak. It covered the demographic variables, knowledge questionnaire regarding COVID 19 prevention and outbreak. Reliability of the instrument was calculated by using Karl Pearson Correlation Coefficient formula and significance of correlation was tested using Spearman Brown prophecy formula and the tool was found reliable. Formal permission was obtained from concerned authority for the data collection, at the end for describing the data, descriptive statistics (frequency, mean and standard deviation and paired t test) were used.

## Results

Analysis and interpretation is based on the objectives of the study. The analysis was done with the help of descriptive statistics.

**Table 1.1- FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC INFORMATION**

| Sr. No. | Demographic variables | Frequency (n) | Percentage (%) |
|---|---|---|---|
| 1. | **Age in years** | | |
| | · 18- 19 years | 80 | 41.5 |
| | · 20-21 years | 85 | 44.04 |
| | · 22-23 years | 24 | 12.4 |
| | · >24years | 04 | 2.07 |
| 2. | **Last year passing percentage (%)** | | |
| | · 51 – 60 | 15 | 7.7 |
| | · 61 – 70 | 40 | 20.7 |
| | · 71 - 80 | 97 | 50.2 |
| | · 81- 90 | 41 | 21.2 |

***Cont...*** **Table 1.1- FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC INFORMATION**

| | | | |
|---|---|---|---|
| 3. | Religion | | |
| | · Hindu | 134 | 69.4 |
| | · Muslim | 04 | 2.07 |
| | · Christian | 55 | 28.4 |
| | · Others | 00 | 0 |
| | Source of knowledge on Covid 19 | | |
| | · Multimedia | 75 | 38.8 |
| | · Classroom | 118 | 61.2 |
| 5. | Year of study in B.Sc. Nursing programme | | |
| | · 1st year | 50 | 25.9 |
| | · 2nd year | 46 | 23.8 |
| | · 3rd year | 47 | 24.3 |
| | · 4th year | 50 | 25.9 |

KNOWLEDGE SCORES OF B.Sc. NURSING STUDENTS TOWARD COVID19 PREVENTION AND OUTBREAKS

**Table 1.2- The criteria measures of the knowledge score of the students.**

| | **Pre test** | **Post test** | **"t" value** |
|---|---|---|---|
| Mean | 8.95 | 16.14 | 27.94 |
| SD (standard deviation) | 2.50 | 2.06 | |

The analysis of findings concluded that the team teaching method is an effective method to increase the knowledge towards Covid19 prevention and outbreak as the computed 't' test was significant at 0.05 level of significance. The post test mean score was 16.14 with SD of 2.06 and the respondents post test knowledge score were significantly higher than the mean pre test knowledge score 8.95 with SD of 2.50.

## Discussions

Our study focused on assessing the nursing students' knowledge toward COVID-19. Students should be responsible and pay attention to truthful details on social media. This finding suggests that nursing education should establish programs such as educational and awareness campaigns aimed at directing students to trustworthy student-centered sources of COVID-19 information. Nurse educators should help students choose the best sources of knowledge and include study materials. This research lays the groundwork for creating an educational campaign aimed at enhancing nursing students' understanding of COVID-19. Nursing students would be better prepared to react to similar public health crises in the future if they have sufficient awareness and the proper preventive behavior against COVID-19. The findings revealed several areas where nursing education could concentrate. The findings revealed some areas that should be focused on by nursing education, as well as

MOH and other health agencies,

## Conclusion

Corona virus disease 2019 (COVID-19) is an ongoing pandemic, It is essential to understand the level of knowledge of the students towards COVID 19 and infection control measures towards COVID 19. Health education programs aimed at improving COVID-19 knowledge toward prevention and outbreak among the nursing students. The results of the study recommended strongly the need of effective structured educational interventions target undergraduate nursing students. The program should provide the basic knowledge among students towards covid19.

**Ethical Clearance:** Taken from College Ethical Committee of Bombay Hospital college of Nursing, Indore

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**Conflict of Interest:** There was no conflict of interest exists

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# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Coronary Artery Disease among the Patients with Diabetes Mellitus in S.C.B MCH Cuttack, Odisha

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## Introduction

Coronary artery disease is a condition in which the blood supply to the heart muscle is partially or completely blocked.Diabetes mellitus has been well described as a cardiovascular risk factor in developed countries. In the Framingham study, the incidence of cardiovascular disease among diabetic men was twice that among nondiabetic men, and similarly was three times more elevated in diabetic women compared to nondiabetic women. Diabetic subjects are known to have a two to four times increased CAD risk, and CAD has been reported to occur two to three decades earlier in diabetic subjects as opposed to their nondiabetic counterparts.

**Aim of the Study:** Thepresent study was conducted to assess theeffectiveness of structured teaching programme on knowledge regarding prevention of coronary artery disease among the patients with diabetes mellitus in selected hospitals.

**Methods:** Evaluative approach. A one group pre test and post test (pre experimental) design was used for study.Non Probability convenience sampling technique was used for selection of sample.60 diabetes patients were selected as per availability and fulfillment of the preset criteria from selected hospital.

**Results:** The majority of pretest knowledge score of patients that is75% (45) has poor knowledge but majority posttest knowledge score have 53.33% (32) have good knowledge. posttest mean value 23.98was higher than the pretest mean value 11.56. The mean difference between pre and posttest was 12.42and the z test value was 14.27at 5% level of significance which was highly significant.Chi square was calculated to find out the association between post test knowledge scores of patients with diabetes mellitus with their selected demographic variables. It was find that there was no significant association between post test scores among patients with diabetes mellitus regarding prevention of CAD, when compared with age, sex, educational qualification, religion, marital status, dietary habits, habits, history of high BP, history of high cholesterol, previous knowledge of CAD. This indicates that the demographic variables have no effect on posttest knowledge score of patients.

**Conclusion:** From the findings of the present study it is concluded that structure teaching programme on knowledge regarding prevention of CAD among the patients with diabetes mellitus was effective for improving the level of knowledge.

***Key words:*** *Coronary artery disease (CAD), Prevention, Diabetes mellitus, Knowledge*

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## Introduction

"As the arteries grow hard,

The heart grows soft".

WilliumBenkinson

The heart is the engine of human life. Beating almost 100,000 times a day, more than 36 million times each year, Endlessly Beating examines the heart as a muscle, pushing approximately five quarts of blood in an endless course to deliver oxygen to every cell of the human body.[1]

Coronary artery disease is a condition in which the blood supply to the heart muscle is partially or completely blocked.The heart muscle needs a constant supply of oxygen-rich blood. The coronary arteries, which branch of the aorta just after it leaves the heart, deliver this blood. Coronary artery disease can block blood flow, causing chest pain (angina) or a heart attack (also called myocardial infarction).[2]

Since 1990, CAD has been the leading cause of death worldwide, and this trend is expected to continue until 2020.[3]Cardiovascular diseases accounted for 30.9% of all deaths in 1998 and 10.3% of disability adjusted life year loss. Most of the developing countries have witnessed a dramatic increase in the prevalence of CAD, while the developed countries have followed a reverse trend.[4]India is predicted to bear the greatest CAD burden, according to the estimates from the Global Burden of Disease Study, more than 9 million deaths due to CAD in 1990 in developing countries, 2.4 million (25%) occurred in India. By 2020, 85% of the global cardiovascular disease burden is expected to be borne by developing nations, and the increase in CAD mortality in developing countries between 1990 to 2020 is projected to be 120% in women and 137% in men. As these projections are based on conservative figures and changes in demography of the population, the actual numbers of CAD-related deaths would be more alarming if increases in all cardiovascular risk factors are taken into account.[5]CAD includes a spectrum of disease manifestation ranging from asymptomatic atherosclerotic disease to acute coronary syndrome, which includes ST elevation myocardial infarction (STEMI), Non-ST elevation myocardial infarction (NSTEMI) and unstable angina.[6]

Diabetes mellitus has been well described as a cardiovascular risk factor in developed countries. In the Framingham study, the incidence of cardiovascular disease among diabetic men was twice that among nondiabetic men, and similarly was three times more elevated in diabetic women compared to nondiabetic women. Diabetes shares several risk factors in common with coronary artery disease (CAD), such as age, hypertension, dyslipidemia, obesity, physical inactivity, and stress, an increase in the prevalence of diabetes indirectly implicates an escalating risk of CAD as well. Diabetic subjects are known to have a two to four times increased CAD risk, and CAD has been reported to occur two to three decades earlier in diabetic subjects as opposed to their nondiabetic counterparts. The life expectancy of people with diabetes is reduced by nearly eight years due to increased mortality. Coronary artery disease accounts for more than 80% of all deaths and 75% of all hospitalizations in diabetic subjects. It is also reported that plaques are more vulnerable to rupture among patients with diabetes.[7]

## Need of the Study

**Dr. V. K. Bahl (AIIMS, New Delhi)**says,'' It is estimated by the year 2020, India will have the largest cardiovascular burden in the world''. He adds that among Indians, coronary heart diseases tend to occur earlier in life than in any other ethnic group.[8]

The extent of the disease in coronary arteries is also greater among diabetic patients. Autopsy studies have reported that diabetic patients have a higher incidence of two- and three-vessel disease and a lower incidence of one-vessel disease compared to non- diabetics. Similar data have been reported from one large retrospective analysis of patients undergoing elective percutaneous transluminal coronary angioplasty (PTCA). Multivessel disease was more common in diabetic patients.[9]

**The Chennai Urban Population Study**, a population-based study in Chennai, in South India, showed a prevalence of CAD of 11%, which is 10 times more than what it was in 1970. Clustering of risk factors for CAD such as hyperglycemia, central body obesity, dyslipidemia, and hypertension tends to occur, and interplay of these risk factors could explain the enhanced CAD risk in Indians. Preventive measures

such as lifestyle modification with healthy diet, adequate physical activity, and decrease in stress could help prevent the twin epidemics of diabetes and CAD.[10]

**Statement of Problem**

"A study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of coronary artery disease among the patients with diabetes mellitus in S.C.B MCH Cuttack, Odisha."

Objective

· To identify the existing knowledge regarding prevention of coronary artery disease among the patients with diabetes mellitus.

· To administer a structured teaching programme regarding prevention of coronary artery disease among the patients with diabetes mellitus.

· To evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of coronary artery disease among the patients with diabetes mellitus.

· To find out the association between posttest level of knowledge scores with their selected demographic variable.

## Material and Methods

RESEARCH APPROACH

Evaluative research approach is used for the study.

**Rsearch Design**

A pre experimental research design was adopted in the present study. In this design one group pre-testpost-test was selected.

**Setting of the Study**

Selected hospitals in odisha.

**Population:-**

The population of the study includes the patients with diabetes mellitus of selected hospital of Cuttack Odisha.

**SAMPLE:-**

Patients who met the inclusion criteria and were available during data collection were sample for the study.

**SAMPLE SIZE:-**

The sample size of the study was 60.

SAMPLING TECHNIQUE

Non Probability convenience sampling technique was used in this study.

## Findings

**1. Overall comparison (Frequency and percentage wise distribution) of level of knowledge of pretest and post test knowledge scores among the patients with diabetes mellitus regarding prevention of coronary artery disease.**

| Level of knowledge | Pre test | | post test | |
|---|---|---|---|---|
| | Frequency | Percentage | Frequency | Percentage |
| Poor | 45 | 75% | 0 | 0% |
| Average | 15 | 25% | 28 | 46.66% |
| Good | O | 0% | 32 | 53.33% |
| Total | 60 | 100% | 60 | 100% |

2. Area wise distribution of mean, SD and mean (%) percentage of pre and posttest level of knowledge score among the patients with diabetes mellitus regarding prevention of CAD.

| AREA | PRE TEST | | | POST TEST | | | Difference in mean % (Y-X) |
|---|---|---|---|---|---|---|---|
| | MEAN | MEAN% (X) | SD | MEAN | MEAN% (Y) | SD | |
| Introduction of coronary artery disease | 1.06 | 26.50% | 0.88 | 2.83 | 70.75% | 0.79 | 44.25% |
| Risk factors, symptoms and diagnostic evaluation of coronary artery disease | 3.61 | 27.76% | 1.68 | 7.88 | 60.61% | 2.05 | 32.85% |
| Management of coronary artery disease | 0.85 | 28.33% | 0.67 | 1.95 | 65% | 0.8 | 36.67% |
| Prevention of coronary artery disease among patients with diabetes mellitus. | 6.03 | 31.73% | 2.15 | 11.31 | 59.52 | 3.01 | 27.79 |
| Over all | 11.56 | 29.64% | 3.84 | 23.98 | 61.48% | 5.68 | 31.64 |

3. Comparison between difference of pre-test and post test level of knowledge score among the patients by using closed ended knowledge questionnaire on selected sections related to prevention of CAD among patients with diabetes mellitus.

| SL NO | AREA | 'Z' VALUE | LEVEL OF SIGNIFICANCE |
|---|---|---|---|
| 1. | Introduction of CAD | 12.64 | Highly Significant |
| 2. | Risk factor, symptoms and diagnostic evaluation of CAD. | 12.93 | Highly Significant |
| 3. | Management of CAD. | 11 | Highly Significant |
| 4. | Prevention of CAD among diabetes mellitus patients. | 11.47 | Highly Significant |

(df =59)**(Table Value= 2.576), (P< 0.05)**

Thus, it can be interpreted that structured teaching programme was effective for all the areas and there was a difference between pre and post-test knowledge scores of patients regarding prevention of CAD.

4. Comparison between the overall scores of mean, SD, mean difference and 'z' value of pre and post test level of knowledge score among patients with diabetes mellitus on prevention of CAD.

| Groups | Mean | Sd | Mean Difference | 'Z'value | Table Value (P≤ 0.05) |
|---|---|---|---|---|---|
| Pre test | 11.56 | 3.84 | 12.42 | 14.27 | 2.00 |
| Post test | 23.98 | 5.68 | | | |

It was inferred that patients with diabetes mellitus had significantly higher level of knowledge score in post-test after implementation of structured teaching programme.

5. Association between post test knowledge scores of patients with diabetes mellitus regarding prevention of CAD with their selected demographic variables.

| SL NO | DEMOGRAPHIC VARIABLES | CHI SQUARE VALUE (X2) | df | TABLE VALUE | LEVEL OF SIGNIFICANCE |
|---|---|---|---|---|---|
| 1. | Age | 0.29 | 6 | 12.59 | Not significant |
| 2. | Sex | 0.61 | 2 | 5.99 | Not significant |
| 3. | Educational qualification | 2.68 | 10 | 18.31 | Not significant |
| 4. | Religion | 0.81 | 6 | 12.59 | Not significant |
| 5. | Marital status | 0.008 | 6 | 12.59 | Not significant |
| 6. | Dietary habits | 0.10 | 2 | 5.99 | Not significant |
| 7. | Habits | 7.91 | 8 | 15.51 | Not significant |
| 8. | History of high BP | 0.003 | 2 | 5.99 | Not significant |
| 9. | History of high cholesterol | 0.3 | 2 | 5.99 | Not significant |
| 10. | Previous knowledge of CAD | 0.02 | 2 | 5.99 | Not significant |

This indicates that the demographic variables have no effect on posttest knowledge score of patients. Hence researcher rejected the research hypothesis and accepts the null hypothesis

## Discussion

The majority 53.33 %( 32) of patients were in the age group of 35-50 years.The majority 70% (42) of patients with diabetes mellitus were male.The majority 35% (21) of patients belongs to Intermediate.The majority of patients with diabetes mellitus 80% (48) were Hindu. The majority of patients that is 96.66%(58) were married . The majority of patients that is 76.66% (46) were non vegetarian. The majority of patients 51.66% (31) have no any habits like alcoholic, smoking, tobacco chewing and drug addiction.The majority of patients that is 56.66% (34) were not having history of high blood pressure.The

Majority of patients that is 78.33% (47) were not having history of high cholesterol.The majority of patients that is 58.33 %( 35) had previous knowledge of prevention of coronary artery disease.The majority ofpretest knowledge score of patients that is75% (45) has poor knowledge but majority posttest knowledge score have 53.33% (32) have good knowledge.Area wise highest pre test mean score was 6.03 which show 31.73% for the area of "prevention of coronary artery disease", and the highest post-test mean score was 11.31which shows 59.52% for the area of "prevention of coronary artery disease".Item wise comparison showed that there is effectiveness of STP in increasing knowledge of the patients with diabetes mellitus regarding prevention of CAD.No significant association was found between post test knowledge scores and demographic variables.

## Conclusion

From the findings of the present study it is concluded that structure teaching programme on knowledge regarding prevention of CAD among the patients with diabetes mellitus was effective for improving the level of knowledge. Prior to implementation of structure teaching programme , patients had poor knowledge 75% and after structure teaching programme patients had good knowledge 53.33% regarding prevention of CAD among the patients with diabetes mellitus with over all mean in pre test was 11.56and post test was 23.98. Hence it can be easily interpreted that STP was effective to improve knowledge regarding prevention of CAD among patients with diabetes mellitus.

**Ethical Clearance**– Taken fromethics committee of college.

**Source of Funding**- Self

**Conflict of Interest**- Nil

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# A Cross Sectional Study to Assess the Knowledge, Attitude and Practice Toward Covid-19 among the Arts and Science Students in Farasan, Kingdom of Saudi Arabia

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## Abstract

Coronavirus disease (COVID-19) is an infectious disease caused by a new variable of the Coro-naviridae family. COVID-19 spreads primarily by contacting the virus either from a COVID-19-infected individual through coughing or sneezing or from COVID-19-contaminated surfaces. A Descriptive cross-sectional survey of 200 participants, was conducted to explore the awareness, attitude and practice of COVID-19 among the arts and science students studying in University college of Farasan. Results: Of all the participants, 58% showed a moderate level of awareness, 70% presented a high attitude and 56% presented an adequate practice regarding COVID-19. Significant positive correlation between awareness-attitude ($r = 0.156$, p-value $< 0.001$) and attitude-practice ($r = 0.192$, p-value $< 0.001$) were found. Majority of students with non-medical background agreed that the patient with COVID-19 could remain asymptomatic ($p < 0.01$) while considering the transmission route, the students from non-nursing background students were found more conscious ($p < 0.01$) that infection could spread through personal contact, respiratory droplets and possibly by faeces. Despite the moderate public awareness, their attitude and practice were better. Therefore, public awareness must be improved to be prepared for epidemic and pandemic situations.

***Keywords:*** *Knowledge, Attitude, & Practice of COVID 19, Arts and science students,*

## Introduction

During epidemics and pandemics, a gap in knowledge about the emerging disease can cause chaos and panic among the public. Dis-tributing the proper information can not only guide society through such events but can also increase epidemic preparedness that might occur in the future. In addition, negative attitudes and practices towards new infectious diseases can aggravate epidemics which may eventually result in pandemics. Awareness, Attitude and prac-tice have been studied in many previous epidemics such as swine influenza[1], Middle East Respiratory Syndrome (MERS)[2] and Dengue fever[3]. The World Health Organization (WHO) declared this outbreak as a global pandemic on the 12th of March, with the continuous increase in reported cases[4]. COVID-19 disease is caused by Severe Acute Respiratory Coronavirus 2 (SARS-CoV-2)[5].

The virus spreads between humans by coughing discharge that contaminates the surfaces. It can also be highly transmitted by asymptomatic individuals during the virus incubation period[6,7,8]. The virus can last on surfaces up to 5 days depending on the type of surfaces[9,10,11]. Although infected people may be asymptomatic, others may develop flu-like symptoms including fever and coughing, which may deteriorate in some cases[12]. The severity of symptoms has shown to be more in elderlies, along with those with underlying

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chronic health conditions as a result of pneumonia, cytokine storm and multi-organ failure[13].

As the risk of COVID-19 becomes more widespread, people should take steps to safeguard themselves from infection and limit its spread to others. Though the students from allied health sciences are not directly involved in managing COVID-19 patients, they can serve as an information provider. They can sensitize community people about maintaining personal hygiene, symptoms of COVID-19 and how to prevent its spread. Students must possess the basic knowledge about novel Coronavirus and be able to clear the myths pertaining to COVID- 19. With this background, our study is aimed to assess the knowledge, perceptions and practice about COVID-19 among allied health science students.

**Objectives**

1. To assess the knowledge about COVID 19 among arts and science students.

2. To assess the attitude of COVID 19 among arts and science students.

3. To assess the practice of COVID 19 among arts and science students.

4. To correlate the knowledge, attitude and practice of COVID 19 among arts and science students.

5. To associate the knowledge, attitude and practice scores of students with their demographic variables

## Methodology

**Research Approach**: Quantitative Research Approach

**Research Design**: Descriptive Cross Sectional survey design

**Population**: Arts and Science students studying in University College of Farasan.

**Samples:** students from level 1-8

**Sampling Technique**: Non-Probability Purposive sampling technique

**Sample Size:** 200

**Setting of the Study:** University College of Farasan, Farasan Campus, Jazan University.

**Tool for data collection:**

A survey with 35 Questions (in English language) was formulated. The survey questionnaire comprises four sections to collect data regarding demographic variables, knowledge, perception, and practices towards COVID-19 pandemic. The knowledge section has 15 questions. These question had three choices (True/ False/Don't know) to answer. The attitude or perception section had 10 questions. These question had three choices (True/False/Don't know) to answer. The practice section had 10 questions. These question had three choices (Yes/No/Don't know) to answer..

**Ethical considerations:**

The official ethical approval will be obtained from the **Scientific Research Ethics Committee - Jazan University and also** obtain permission from the Dean, University College of Farasan.

**Data Collection Procedure:**

A web-based cross sectional survey study was conducted using a "Google Form" the students from 1st level to 8th level of Allied health students studying in University College of Farasan. After data collection the education was given about general awareness, information sources, knowledge and perceptions related to COVID-19 through web based lecture.

**Data Analysis:**

Descriptive statistics was applied to calculate proportions and frequencies. The chi- square test was used to investigate the level of association among study variables.

## Results

**Demographic Variables:**

Out of 200 participants that filled out the web based survey, 190 participants have given their consent

with a response rate of 95%. The majority of the study participants was 21years (71.8%). Nearly half of the percentage students were from level 3 & 4 (37%). Majority (63.1%) of the students was not caring COVID 19 suspected or confirmed patients. Maximum of the students had primary source of knowledge about COVID 19 through Social media (81.6%). Highest percentage of the students were from Nursing program (73.8%) and maximum (41%) were residing in jazan.

**Table No.1: Knowledge about Corona virus among study participants**

**n = 190**

| S. No | Knowledge aspects of COVID 19 | True | False | Don't know |
|---|---|---|---|---|
| 1. | COVID-19 is an infectious disease caused by the most recently discovered novel coronavirus in Wuhan, China. | 95.1% | 1% | 3.9% |
| 2. | The time between catching the novel coronavirus and beginning to have symptoms will be 14 days. | 88.3% | 4.9% | 6.8% |
| 3. | Fever, dry cough, tiredness, and body pains are the most common symptoms in COVID 19 | 96.1% | 1.9% | 1.9% |
| 4. | The person infected with novel coronavirus definitely develops symptoms. | 71.8% | 10.7% | 17.5% |
| 5. | The majority of people (about 80%) who get COVID-19 becomes seriously ill and develops breathing problem | 67% | 10.7% | 22.3% |
| 6. | Old age people, and those with underlying medical problems like high BP, heart problems or diabetes, are more likely to develop serious illness. | 89.3% | 2.9% | 7.8% |
| 7. | People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets | 74.8% | 23.7% | 1.5% |
| 8. | Social distance means stay more than 1 m (3 feet) away from a person who is sick. | 78.6% | 15.5% | 5.8% |
| 9. | COVID-19 can be transmitted through the air. | 38.8% | 35.9% | 25.2% |
| 10. | Regular hand wash, social distancing, avoiding crowd, wearing a mask and stay at home can protect the person from getting COVID-19 | 97.1% | 2.9% | 0 |
| 11. | The virus can infect a person more than once | 63.1% | 10.7% | 26.2% |
| 12. | Children cannot be infected with the virus that causes COVID-19 | 12.6% | 76.7% | 10.7 |
| 13. | Pregnant women are more vulnerable to get the COVID-19 disease | 51.5% | 14.6% | 34% |
| 14. | Treatment with antibiotics can kill the virus caused COVID-19 disease | 36.9% | 30.1% | 33% |
| 15. | Healthy food and drinking water increases body's immunity and resistance to COVID 19. | 81.6% | 2.9% | 15.5% |

Assessment of knowledge about novel Coronavirus among the students shows that, Majority of the study participants (95.1%) correctly identified novel Coronavirus i.e. COVID-19. A high proportion of study participants (88.3%) provided the correct response while 6.8% did not have any idea about time between catching the novel coronavirus and beginning of symptoms. Maximum of them (96.1%) were answered the symptoms of COVID 19. Majority (89.3% & 97.1%) of the participants answered correctly about high risk of old age people and all protectives measure such as distancing, wearing mask, regular hand wash, avoiding crowd and stay at home respectively. Nearly 75% of the participants given correct answer about COVID 19 transmission and Social distancing. Only half of the percentage (51.5%) answered pregnant women are more vulnerable to get the COVID 19 disease. More than two-thirds of the participants know about the healthy food and drinking increases body immunity and resistance to COVID 19.

**Table No.2 : Attitude / Perception about Corona virus among study participants**

**n = 190**

| S. No | Attitude aspects of COVID 19 | True | False | Don't Know |
|---|---|---|---|---|
| 1. | COVID-19 virus CANNOT be transmitted in areas with hot and humid climates. | 27.2% | 44.7% | 28.2% |
| 2. | Taking a hot bath CANNOT prevent the novel Coronavirus disease. | 47.6% | 29.1% | 23.3% |
| 3. | The novel Coronavirus CAN be transmitted through mosquito bites. | 18.4% | 50.5% | 31.1% |
| 4. | Hand dryers are NOT effective in killing the novel Coronavirus. | 39.8% | 21.4% | 38.8% |
| 5. | Spraying alcohol or chlorine all over your body cannot harm skin and mucous membranes. | 22.3% | 53.4% | 24.3% |
| 6. | Vaccines against pneumonia can protect against the novel Coronavirus. | 32% | 31.1% | 36.9% |
| 7. | Eating garlic helps in the prevention of infection with novel Coronavirus | 50.5% | 17.5% | 32% |
| 8. | Vitamin D & Vitamin C Foods/Supplementation are effective in preventing and treating the novel Coronavirus | 63.1% | 9.7% | 27.2% |
| 9. | Holding breath for more than 10 s is a test for COVID-19. | 24.3% | 35% | 40.8% |
| 10. | Medicines are available in the global market to prevent or treat the novel Coronavirus. | 23.3% | 51.5% | 25.2% |

Over 70% of the respondents were in favor of attitudes towards limiting the spread of COVID-19. Majority of the participants (44.7%) believe that COVID-19 virus CANNOT be transmitted in areas with hot and humid climates while some (27.2%) of the participants do not agree with the statement. About half of the students (47.6%) were found to have a correct perception that Taking a hot bath CANNOT prevent the novel Coronavirus disease as well as 63.1% rightly agreed that Vitamin D & Vitamin C Foods/Supplementation are effective in preventing and treating the novel Coronavirus. A large number of the participants (50.5%) incorrectly believe that Eating garlic helps in the prevention of infection with novel Coronavirus. Notably, one third of participants believe that Hand dryers are NOT effective in killing the novel Coronavirus as well as Vaccines against pneumonia can protect you against the novel Coronavirus. 53% believed that Spraying alcohol or chlorine all over your body cannot harm skin and mucous membranes. Half of the percentage of the respondents are not believing that Medicines are available in the global market to prevent or treat the novel Coronavirus.

**Table No.3 : Practice about Corona virus among study participants**

**n = 190**

| S. No | Practice aspects of COVID 19 | Yes | No | Don't Know |
|---|---|---|---|---|
| 1. | Do you stay at home during this COVID-19 pandemic. | 84.5% | 11.7% | 3.8% |
| 2. | Do you cover your mouth and nose with a tissue or elbow when sneezing. | 92.2% | 2.9% | 4.9% |
| 3. | Do you follow social distancing (>1 m) when meet other people? | 78.6% | 16.5% | 4.9% |
| 4. | Do you perform regular hand wash in your daily routine activities? | 85.4% | 11.7% | 2.9% |
| 5. | Do you wear a mask when you visit a hospital or infected person. | 93.2% | 3.9% | 2.9% |
| 6. | Have you traveled to any area affected with COVID-19? | 23.3% | 71.5% | 4.9% |
| 7. | Do you sanitize the surfaces which are suspected of infection exposure? | 88.3% | 4.9% | 6.8% |
| 8. | Have you recently been to a crowded place | 53.4% | 41.7% | 4.9% |
| 9. | Do you give shake hand upon meeting of friends/family members/others? | 54.4% | 41.7% | 3.9% |
| 10. | Do you touch routinely your mouth, nose, and eyes?. | 65% | 28.2% | 6.8% |

Over 80% of respondents agreed on the importance staying at home during pandemic, whereas 92% of the respondents agreed on cover the mouth and nose with a tissue or elbow when sneezing. More than two third (79%) of respondents follow social distancing (>1 m) when you go and meet other people. Majority of them perform regular hand wash in your daily routine activities (85%) and wear a mask when visiting a hospital or infected person wearing mask (93%) respectively. Around 60 % of the respondents practiced wrongly

about visited crowded place, shake hand upon meeting of friend's/family members/others and touch routinely their mouth, nose, and eyes. In relation to participants' practice 89% recommended sanitizing all groceries prior usage, 77% recommended washing fruit and vegetables with soap and water.

**Association of Demographic Variables:**

On the basis of statistical analysis, significance with the participant background was observed in areas of identification of novel Coronavirus, its origin, asymptomatic behaviour and the modes of transmission. Majority of students with non medical background agreed that the patient with COVID-19 could remain asymptomatic ($p < 0.01$) while considering the transmission route, the students from non-nursing background students were found more conscious ($p < 0.01$) that infection could spread through personal contact, respiratory droplets and possibly by faeces.

Correlation between knowledge, attitude and practice:

Correlation between awareness-attitude was significant and positive ($r = 0.156$, p-value $< 0.001$). Also, there was a significant correlation between attitude-practice ($r = 0.192$, p-value $< 0.001$).

## Discussion

The purpose of this study was to estimate the general level of awareness, practice and attitude towards the emerging COVID-19 disease. The majority of the participants had a good general level of awareness, attitude and practice toward the virus. However, according to the participants' responses less knowledge was detected in various aspects related to the virus' way of transmission, the disease symptoms, vulnerable people, re-infections and incubation period and practice. Since the initial outbreak of COVID-19 disease in China, it has spread widely to various countries. According to the MOH update on the 20th of April 2020, the number of COVID-19 cases raised to10,484 in Saudi Arabia with the majority of cases 2210 in Riyadh. Many studies have reported the importance of awareness, attitude and practice of society to reduce the spreading rate during epidemics and pandemics[14,15]. Similarly, lack of awareness contributes to undesirable attitudes and practice, which leads to negative impacts on infection-control[16]. In this study, we found a significant positive correlation between awareness and attitude, indicating that the better the level of awareness was reflected in their attitude. The same was also true for the correlation between attitude and practice.

## Conclusion

We discovered that the students are having adequate awareness about COVID-19. Also, it has been observed that majority of participants acquired the information form social media which is an unauthentic resource of obtaining evidences about disease. Students should be informed about the authentic sources of information as provided by global health authorities and health ministry of respective countries. Our study finding also highlights the specific aspects of knowledge, perception and practice where the partial or incorrect responses were noted and these areas were addressed through webinars to improve the understanding and to correct the myths about COVID-19.

**Limitation of the Study:**

- Firstly, as this is an online cross-sectional survey, there are chances of recall bias in information as well as it is possible that the students may have looked up the answers to some of the questions before answering.
- Secondly, the survey was conducted among the students from health science background so the findings cannot be extrapolated to the health care professionals.
- Lastly, as this is an internet- based online survey, responses from the regions without internet access may not be captured which may lead to demographic selection bias.

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# A Preexperimental Study to Assess the Effectiveness of Self-Instructional Module on Knowledge Regarding Laqshya among Staff Nurses in Selected Hospitals

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## Abstract

**Introduction:** Although there has been considerable progress in maternal and new-born health over the past two decades, provision of high-quality care for women once they reach healthcare facilities has emerged as an important challenge.Poor quality of care at the time of birth hampers health outcomes for women, children and communities; and research efforts should identify ways to improve the current state of affairs.[1]

Maternal and new born health are important issues for sustainable development. With an estimated annual 210 million pregnancies and 140 million live births globally, ensuring that every woman and every new born across the globe have the right to high quality care is a formidable challenge.[2]

The era of the Millennium Development Goals (MDGs) lead to good progress and maternal deaths declined by nearly half (44%). However, this progress was inconsistent across many parts of the world, and many countries could not achieve the MDG 5a target of a 75% reduction in the maternal mortality ratio (MMR).[3]

The Sustainable Development Goals (SDG) are at the brink of global transformation. United Nation (UN) in December 2012 passed a landmark resolution endorsing Universal Health Coverage which was in September 2015 got enshrined in Sustainable Development Goals (SDG) as a key target to be achieved by 2030.[4]

**Methodology:** Pre experimental one group pretest – posttest design was adopted. Non-Probability Convenient sampling was used and 60 staff nurses were selected at hospitals. Intervention of the study, the investigator informed about the study topic, its need and the importance of knowledge regarding LaQshya. After explaining the purpose of the study, verbal and written informed consent was obtained. The staff nurses who met the required criteria and were willing to participate in the study were selected. After taking a written consent from the sample they were provided with the questionnaire. The investigator explained about the questionnaire and ask them to complete the pre-test in about 20-25 minutes. After completion of the pre-test, the investigator administered the self-instructional module. The post post-test was administered on the 7th day of the pre-test with the same questionnaire.The data was collected, organized and analysed in terms of both descriptive and inferential statistics.

**Result:** The analysis revealed that the overall Mean score in pre-test is 7.91 and was increased in post-test to 13.32.83 The overall Standard deviation score in pre-test is 2.56 and in post-test overall standard deviation score is 1.55. The overall median score in pre-test is 8.0 and overall median score in post-test is 13.0. As compared to pre-test and post-test values of Mean, standard deviation and Median was improved in post-test. This suggests that knowledge was improved after distribution of self-instructional module regarding LaQshya.

**Conclusion:**- This study proves that "Self-instructional modulewas effective in improving knowledge regarding LaQshya of staff nurses" selected hospitals.

***Key-words:*** *Preexperimental Study, LaQshya, Staff Nurses, Selected Hospitals.*

## Introduction

Universal Health Coverage which was recognized by Indian Government in its National Health Policy whose ambitious targets attempt to achieve Universal Health Coverage. One of the major impediments for providing UHC is out of hospital deliveries which cause high infant and maternal mortality.[5]

A LaQshya Scheme is step in the right direction so as to improve care in hospitals for pregnant ladies which will lead to higher and better institutional deliveries. LaQshya (labour room quality improvement initiative 2017) comes under the National Health Mission. The goal of achieving Universal Health Coverage (UHC) has become the major focus of health system reform around the world. Universal Health Coverage is about ensuring that everyone has access to the health care they need without suffering financial hardship. It has been called "the single most powerful concept that public health has to offer".[6]

For improving the quality of care at Public Health Facilities, Quality Assurance Standards for District Hospitals, Community Health Centres, Primary Health Centre and Urban-Primary Health Centres have been drafted, and their implementation has been operationalised through the National Quality Assurance Programme.[7]

### Need for the study

The UNICEF estimated that in 2015-16, roughly 30,300 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings and most could have been prevented. However, these indicators still remain unacceptably high as compare to developed countries, hence there is a huge scope to bring out the improvement in the key maternal and new-born health indicators.[8]

The WHO (2016) estimated that approximately 46% maternal deaths, over 40% stillbirths & 40% neonatal death take place on the day of delivery. Between 1990-2015, India has witnessed 77% decline in maternal mortality as compared to global declined 44%. The need of this study that to improves knowledge regarding 'LaQshya' to staff nurses.[9]

In 2013-2018, a maternal mortality ratio of India is 130/100,000 live births and of the Maharashtra state is 61/100,000 live births. For further reduction in MMR, every pregnant woman needs to have institutional delivery attended by skilled birth attendant. For women to have safe childbirth, the delivery points need to be women friendly offering respectful maternity care. It is the responsibility of the delivery point staff to provide humane & dignified treatment to women during their pregnancy, delivery and postpartum period, respect their rights and choices and maintain supportive communication during labour.[10]

## Review of Relevant Literature

A cross-sectional health facility based study on, "Prevalence of pregnancy-related complications and course of labour of surviving women who gave birth in selected health facilities in Rwanda". The data were collected in 2014–2015 through structured interviews and medical records (n=817) in Kigali and Northern Province, Rwanda. Frequencies and prevalence were used to describe participants' background factors, labour and delivery-related characteristics. Bivariable and multivariable logistic regression models were performed for different background factors and pregnancy/delivery outcomes. Pre-eclampsia/eclampsia, postpartum haemorrhage and CS due to prolonged labour/dystocia represented 1%, 2.7% and 5.4% of all participants, respectively. In total, 56.4% of the participants were transferred from facilities with low levels to those with higher levels of healthcare, and the majority were transferred from health centres to district hospitals, with CS as the main reason for transfer. Participants who arrived at thehealth facility with cervical dilation grade of ≤3 cm spent more hours in maternity ward than those who arrived with cervical dilatation grade of ≥4 cm. Risk factors for CS due to prolonged labour or dystocia were poor households, nulliparity and residence far from health facility. The study concluded that the estimated health facility-based prevalence of pregnancy-related complications was relatively low in this sample from Rwanda. CS was the main reason for the transfer of pregnant women from health centres to district

hospitals. Upgrading the capacity of health centres in the management of pregnant women in Rwanda may improve maternal and fetal health.[11]

A study was conducted on "The Effectiveness of self-instructional Module on Knowledge Regarding Maternal and Neonatal Outcome of Induction of Labour among Staff Nurses in Selected Hospital, Bangalore, India". Total staff nurses are 60 which are selected by randomly non-probability method. Majority of staff nurses attained were 31- 35 years age (37%) had GNM education (83%). About 39% of subjects had above 6 years experiences. Self-instructional module is effective in improving staff nurse's knowledge regarding maternal and neonatal outcome of induction of labour. ($P< 0.05$). A significant association was found between knowledge of staff nurses with demographic variables such as age, religion, marital status, educational qualification, total years experiences, monthly income, and previous sources of information. He concluded that the findings revealed that the improvement Mean score of all level of knowledge of staff nurses between pre-test and post-test was 13.75% with 't' test value was 12.88, which was highly significant at $p< 0.05$. Hence, it is inferred that there is significant increase in the knowledge level of the staff nurses regarding maternal and neonatal outcome of induction of labour after used of Self Instructional Module.[12]

**Statement of the Problem:**

A preexperimental study to assess the effectiveness of self-instructional module on knowledge regarding "LaQshya" among staff nurses in selected hospitals.

**Objectives of the study:**

**Primary Objectives:**

To assess the effectiveness of self-instructional module on knowledge regarding LaQshya among staff nurses in selected hospitals.

**Secondary Objectives:**

To assess the pre-test knowledge regarding LaQshya among staff nurses in selected hospitals.

To assess the post-test knowledge regarding LaQshya among staff nurses in selected hospitals.

To compare pre-test and post-test knowledge regarding LaQshya among staff nurses in selected hospitals.

To find out the association between the pre-test knowledge regarding LaQshya among staff nurses in selected hospitals with selected demographic variables.

**Hypothesis:**

**Primary Hypothesis:**

H01: There will be no statistically significant difference between the pre-test and post-test knowledge regarding LaQshya among staff nurses.

H1: There will be statistically significant difference between the pre-test and post-test knowledge regarding LaQshya among staff nurses.

**Other Hypothesis:**

H02: There will be no statistically significant association between the pre-test knowledge regarding LaQshya among staff nurses with selected demographic variables.

H2: There will be statistically significant association between the pre-test knowledge regarding LaQshya among staff nurses with selected demographic variables.

**Operational Definitions**

**Assess:** According to the oxford dictionary, assess is evaluate or estimate the nature, ability, or quality of. In this study assess means, evaluate the effectiveness of self-instructional module.

**Effectiveness:** According to Oxford Dictionary: Effectiveness is defined as a change, which is as result of an action or other cause. In this study: Effectiveness means increase in knowledge regarding LaQshya among staff nurses.

**LaQshya:** According to National Health Mission, LaQshya meaning is target which refers to labour room quality improvement initiative. In this study it means

same as above.

**Research Design:**The research design selected for the study was pre-experimental one group pre-test post-test design.

**Setting of the Study:**The study was conducted in the selected hospitals.

**Sample Size:**The sample size was 60 staff nurses who are working in selected hospital.

**Sampling Technique:**Sampling technique adopted for the selection of sample was Non-Probability Convenient sampling.

**Description of the tool:** The tool consists of two parts. The tool consists of three parts.

**Section A**

It deals with Demographic variable consists age, gender, educational qualification, area of experience, year of experience in labour room, exposure to in-service education.

**Section B**

It deals with semi-structured Questionnaire and which was categorises as under;

Knowledge regarding goals and strategies of LaQshya

Knowledge regarding scope and targets of LaQshya

Knowledge regarding institutional arrangement and intervention

Knowledge regarding phasing of activities, certification, incentives and branding of LaQshya

Knowledge regarding financial arrangement and roles and responsibilities of LaQshya

**Section C**

It deals with self-instructional module consist of following points introduction, goals, strategies, scope, institutional arrangement, targets, interventions, phasing of activities, certification, incentives and branding, financial arrangements and roles and responsibilities.

Intervention

The researcher approached the staff nurses in selected hospitals for the pilot study. The researcher discussed the study in detail with staff nurses one by one and obtained their consent for the participation in the study. After taking the consent and confirming the participant, the structured questionnaire was given. 20-25 minutes time was given to the sample to fill up the questionnaire. Then they were given the self-instructional module. The post-test was given using the structured questionnaire after 7 days.

## Findings

**Table 1: Knowledge regarding LaQshya**

| Knowledge | | Number of staff | | | |
|---|---|---|---|---|---|
| **Questions** | **Max. Scores** | **Pretest** | **percentage** | **Posttest** | **Percentage** |
| 1. | 60 | 34 | 56.7 | 60 | 100.0 |
| 2. | 60 | 16 | 26.7 | 55 | 91.7 |
| 3. | 60 | 14 | 23.3 | 18 | 30.0 |
| 4. | 60 | 31 | 51.7 | 55 | 91.7 |

***Cont...*** **Table 1: Knowledge regarding LaQshya**

| | | | | | |
|---|---|---|---|---|---|
| 5. | 60 | 37 | 61.7 | 60 | 100.0 |
| 6. | 60 | 15 | 25.0 | 15 | 25.0 |
| 7. | 60 | 05 | 8.3 | 14 | 23.3 |
| 8. | 60 | 32 | 53.3 | 56 | 93.3 |
| 9. | 60 | 06 | 10.0 | 12 | 20.0 |
| 10. | 60 | 32 | 53.3 | 57 | 95.0 |
| 11. | 60 | 10 | 16.7 | 07 | 11.7 |
| 12. | 60 | 19 | 31.7 | 13 | 21.7 |
| 13. | 60 | 33 | 55.0 | 59 | 98.3 |
| 14. | 60 | 13 | 21.7 | 19 | 31.7 |
| 15. | 60 | 26 | 43.3 | 22 | 36.7 |
| 16. | 60 | 37 | 61.7 | 59 | 98.3 |
| 17. | 60 | 31 | 51.7 | 54 | 90.0 |
| 18. | 60 | 26 | 43.3 | 54 | 90.0 |
| 19. | 60 | 29 | 48.3 | 53 | 88.3 |
| 20. | 60 | 29 | 48.3 | 57 | 95.0 |
| Total = (20 × 60 × 60) | 1200 | 475 | 39.6 % | 799 | 66.6 % |

**Table 2: Significance of knowledge regarding LaQshya:**

| Knowledge | | Number of staff | | |
|---|---|---|---|---|
| **Questions** | **Max. Scores** | **Wilcoxon Signed rank Test** | **P-Value** | **Significant at 5% level** |
| Knowledge regarding goals and Strategies (Q1-Q4) | 240 | 6.110** | <0.001 | Yes |
| Knowledgeregarding scope and target (Q5 – Q6) | 120 | 6.750** | <0.001 | Yes |
| Knowledge regarding institutional arrangement and interventions (Q7 – Q8) | 120 | 6.791** | <0.001 | Yes |
| Knowledge regarding phasing activities, certificates, certification, incentives and branding (Q9 –Q12) | 240 | 6.565** | <0.001 | Yes |
| Knowledge regarding financial arrangement and roles and responsibilities (Q13 – Q20) | 480 | 2.235* | 0.025 | Yes |
| Total = (20 x 7) | 1200 | 6.747 | <0.001 | Yes |

Statistically Significant at 5% level i.e., P< 0.05.

## Conclusion

The study findings conclude that post-test the figures show that there was higher than thepre-test score after the distribution of self-instructional module. Thus this study proves that "self-instructional module regarding LaQshya was effective in improving knowledge of staff nurses.

**Acknowledgement:** The study was conducted in selected hospitals after obtaining formal permission from the selected hospitals. Ethical clearance obtained from ethical committee, Dean/ Principal of various colleges.

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**2.Conflictofinterest-Noanyconflictofinterestwashappenedduringstudy.**

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# Content Validity of Knowledge Questionnaire on HPV Infections, HPV Vaccination and Cervical Cancer

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## Abstract

**Introduction**: The significant stage in research is the construction of the tool. Validity is the initial step in standardization of the tool. Content validity is the subjective agreement of professional experts that the content of the scale logically appears to accurately reflect what it is intended to measure. This article elaborates the significance and sequential steps of content validity.

**Materials and Methods**: The knowledge questionnaire on HPV infections, HPV vaccinations and cervical cancers is a newly developed tool by the authors. It is a part of larger study. Eight experts have been selected purposively after their consent. The experts were in the field of Nursing and OBG medicine. Based on the experts opinion content value index (CVI) and content validity ratio (CVR) was computed.

**Results**: The computed value of content validity index is found to be anexcellent in both item interval and scale interval. Content value ratio of the computed value is one. Hence, all the items has not been changed and kept as it is for further process. This findings show that this knowledge questionnaire shows acceptable validity.

**Conclusion**: This structured knowledge questionnaire isa significant tool in medical, nursing and health sciences. It is mandatory to compute reliability for the further use. In this article, content validity procedure was explained in detail which will be useful for the researchers in future.

***Key words****: content validity, content validity ratio, content validity index, HPV infections, HPV vaccination, Cervical Cancer*

## Introduction

Content validity is defined as "the degree to which elements of an assessment instrument are relevant to a representative of the targeted construct for a particular assessment purpose"[1].Content validity is known as "logical or rational validity is the estimate of how much a measure represents every single element of a construct"[2]. This tool is developed to assess the knowledge on HPV infections, HPV vaccination and cervical cancer among rural women of south India.Worldwide, the fifth most common cancer in humans is cervical cancer and it is the second most common cancer in women and the most common cancer cause of death in the developing countries.TheHuman Papilloma Virus (HPV) infection transmits through sexually is the most important risk factor for cervical intraepithelial neoplasia and invasive cervical cancer[3]. It is estimated that around 80% of the sexually active women get genital HPV in 50 years of age. Thus, the start of a vaccine against HPV has motivated as well as question[4].It is clear that HPV is a main cause of cervical cancer[5]. So, HPV vaccination is the only mode to prevent it[6]. Societal, religious and ethical issues linked with the vaccination of adolescent girls in India in concert with lack of awareness about HPV and HPV vaccines, no successful HPV immunization program has been employed in India[7]. Hence, authors developed a tool as a part of larger study to assess knowledge and tested before and after implementation of a module to create awareness.

## Materials and Methods

**Ethical concern:** This study obtained ethical approval from the Himalayan University, Itanagar, Arunachal Pradesh, India. Research Ethical committee

**Development of the knowledge questionnaire**: Extensive literature was initially done to develop a tool. A literature review is defined as "a descriptive, analytic summary of the existing material relating to a particular topic or area of study"[8]. Review literature helps in making decisions about the suitability of material to be considered[9]. PubMed, CINAHL, books, reports, articles, periodicals, published and unpublished research studies and mass education media were reviewed for literature. After search of existing tool, it is observed that no tool has been found based on the objectives of the study. Hence, authors developed the own tool and validated. To assess the knowledge, MCQ(Multiple Choice Questions) questionnaire isconsidered as anefficient tool[10], so it is developed. The knowledge questionnaire developed by authors was divided into three areas that are: i) knowledge on HPV ii) knowledge on HPV vaccination iii) knowledge on cervical cancer. The content covered in these areas is meaning, causes and risk factors, clinical features, diagnostic evaluation ofHPV infections and cervical cancer as well as HPV vaccination. The items constructed in the knowledge questionnaire are based on review literature. Finally, the draft knowledge questionnaire before content validity contains 38number of items. All items prepared are in multiple choice questions, with a stem and four distracters.

**Content validity procedure**

The following steps are followed in content validity:

- Ø Preparation of content validity evaluation form
- Ø Selection of content validity experts
- Ø Data sheet and scoring
- Ø Calculating content validity index
- Ø Calculating content validity ratio

**Preparation of content validity evaluation form:** The initial process in content validity is preparation of content evaluation form, which is to be submitted to the subject experts along with newly developed tool. It should be prepared in such a way that the experts will go through the content and find out the relevancy, clarity, simplicity andambiguity.The criteria for measuring content validity includes that the content in the item is not relevant, needs modification, needs minor modification and relevant. The authors adopted Yaghmaie F[11] criteria for measuring content validity and based on that evaluation form was developed. The scoring ranges from 1 to 4. Experts wereasked to rate the items in the content validity evaluation form.

| Item no | Relevancy | | | | Clarity | | | | Simplicity | | | | Ambiguity | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Not relevant | Needs modification | Needs Minor modification | Relevant | Not relevant | Needs modification | Needs Minor modification | Relevant | Not relevant | Needs modification | Needs Minor modification | Relevant | Not relevant | Needs modification | Needs Minor modification | Relevant |
| | | | | | | | | | | | | | | | | |

**Selection of Content validityexperts**: Experts were selected on the basis of their qualifications, job title, experience, knowledge and availability to complete the task within the specified time frame. Thus, authors had selected eight experts who areexpertise in the particular topic with minimum qualification of PhD in nursing and M.D in Ob. GObstetrics &Gynecologyspecialty. Four experts were from the field of Nursing and three were ObG specialist and one bio-statistician was selected. The authors contacted experts through mobile and after consent the tool has been submitted to the experts for content validity with study objectives, synopsis, a requesting letter for content validity and content validity certificate. The experts were requested to go through the

knowledge questionnaire and give their validity based on relevancy, clarity, simplicity and ambiguity in the content evaluation form of items. The tool has been collected and analyzed for validity after receiving from all experts. Five experts gave their suggestions face-to-face and three non face-to-face approaches.

**Data sheet and scoring:** The rating given by the experts has been noted in the data sheet. The item number and expert number are marked in the coding sheet. The evaluation form submitted to the experts is four points rating scale which has scoring of not relevant (1), needs modification (2), needs minor changes (3) and relevant (4). Further, the data was computed for content validity index.

**Calculating content validity index**: Content validity index is used to find out representativeness, comprehension, ambiguity and clarity. Two types of content validity index (CVI) are calculated i.e., I-CVI and S-CVI. I-CVI is item level content validity index. It is the proportion of content experts giving items a relevance rating 3 or 4[12]. The formula used to compute I-CVI is agreed item/number of experts. S-CVI is scale for content validity index. It is the average of I-CVI scores for all items on the scale.There are two methods for estimating S-CVI, inwhich the average of the I-CVI scores forall items on the scale (S-CVI/Ave) andthe proportion of items on the scale thatachieve relevance scale of 3 or 4 by allexperts (S-CVI/UA). The experts rate the items 1 to 4, as given in the following rating.

**Determination of content validity index.**

| Item no | E 1 | E 2 | E 3 | E 4 | E 5 | E 6 | E 7 | E 8 | E A | I-CVI | UA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 to 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 1 | 1 |
| 27 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 5 | 0.62 | 0 |
| 28 to 31 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 1 | 1 |
| 32 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 5 | 0.62 | 0 |
| 33 to 38 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 1 | 1 |
| Proportion relevance | 1 | 1 | 0.94 | 1 | 0.94 | 1 | 1 | 0.94 | 0.98 | 0.98 | 0.94 |

E= Expert

EA= Expert Agreement

UA= Universal Agreement.

i. **Experts in agreement**: Sum up the experts rating of each item. If an expert marked the item score either '3' (need minor changes) or '4' (relevant), then it is considered as agreed, if not disagreed. For an each agreed items the assigned score was '1'and for disagreed item '0'. For a example in item number 27 (1 + 1 + 0+1 + 0 + 1 + 1+ 0) = 5

ii. **Universal agreement (UA)**: If all experts agreed to the item then the score 'one', even one expert is not agreed then the score is zero.

iii. **I-CVI**: The total number of experts agreement divided by The total number of experts. For a example in item number 1, 8/8=1. In item number 27 and 32, five experts agreed and three experts rejected. So 5/8=0.62.

iv. **S-CVI/Ave** (based on I-CVI): The sum up of I-CVI score of all items divided by the total number of items, for example the S-CVI/Ave (38/38) is equal to 1.

v.**S-CVI/Ave** (based on proportion relevance): the average of proportion relevance scores across all experts, for example the S-CVI/Ave. for example expert one scale- content validity index is38 and total items is38. So, 38/38 is equal to 1. The average proportion scores of all scores are 1+1+1+1+1+1+1+1is equal to 8, the total experts are 8, hence, 8/8=1. Similarly, in item number 27 and 32 three experts rejected the items and the calculated value of S-CVI/Avebased on proportion relevance is 0.98.

vi. **S-CVI/UA**: The average of UA scores across all items, for example the S-CVI/ UA. S-CVI is 1 and UA is 0.94.

Based on the above calculation, we can conclude that I-CVI, S-CVI/Ave and S-CVI/UA meet satisfactory level, and thus the scale of questionnaire have achieved satisfactory level of content validity. Since three experts has been rejected the item number 27 and 32. It has been subjected for validity to the same experts after corrections as per their suggestions. It has been accepted by the experts.

**Calculating content validity ratio**: In addition to content validity index, content validity ratio was computed using Lawshe formula[13].

$$\mathrm{CVR}=\frac{n_e-N/2}{N/2}$$

$\mathbf{n_e}$is the total number of experts considered the item as essential

**N** is the total number of experts in the panel

In CVR, experts identify the items as necessary for in use a construct in a set of items or not. In other hand, experts are asked to rate each item from 1 to 3. The rating ranges of "not necessary (1), useful butnot essential (2), essential (3)". CVR varies between +1 to −1. The value one indicates that the item is essential given by all the experts. It is based on the Lawshe table. To accept that the tool is valid only after all the item is considered "essential"[13].

**Language validity**:After establishing the content validity of the CASHS, the tool was translated into Tamil, by alanguage expert. The translated version was retranslated to English language by another expert, for establishing language validity. There was no ambiguity in any of the items or instruction, and so no modification was made.

## Results and Discussion

The systematic approach of content validation should be done to consider that the tool is valid. The main purpose of validation is to identify the unrelated items which are to be removed and the items which need modification to be evaluated. The content validation is done to filter the not fit items. In this tool, computed CVI and CVR value is +1. Hence all items are considered as essential, and no modifications done.

**Conclusion**: Proper validation of tool is essential and it is crucial process in the newly constructed tool. There is no published tool till now related to HPV infections, HPV vaccination and cervical cancer. Moreover, this article described the sequential steps process of the content validity. This will be beneficial for health professionals in future investigations.

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**Conflict of Interest**: None

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# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Promotion of Child Mental Health among the Mothers at Selected Area of, Bhubaneswar, Odisha

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## Abstract

The aim of this study to assess the effectiveness of structured teaching programme on knowledge regarding promotion of child mental health among The mothers at selected area of, Bhubaneswar, Odisha. The main objective is to find out the maximum knowledge of mothers regarding promotion of child mental health. The data were collected from 60 mothers by purposive sampling technique by using close ended knowledge questionnaire. **'t'** test and Chi square test has been done for descriptive and inferential statistics. The study finding revels that the pre test scores is 12.43±2.98 which is 31% of the total mean score, where as in post-test the total mean score is 36.95±0.8 which is 92% of the total mean score. From the finding of the present study it is concluded that structured teaching programme on promotion of child mental health is effective for improving the level of knowledge among mothers.

***Keywords*** *– effectiveness, knowledge, structured teaching programme, mother, promotion, child mental health*

## Introduction

Children are considered as the building blocks of the strong nation. Children are very small but have capability to change the nation positively. They are the responsible citizens and leaders of tomorrow as development of the country lies in their hands, so they need special care & protection from their parents. Children are important asset of nation. Their nurture and solitude are our responsibility. Hence, programmes for children should find prominent part in our policies for the development of human resources in each sector, so that our children grow up to become responsible citizens.[1]

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Mental health includes our emotional psychological & social well-being. It affects how we think, feel & act. Mental health is important at every stage of life, from childhood and adolescences through adulthood. Mental health is a level of psychological well-being or an absence of mental illness. Child mental health the complete well being & optimal development of child in the emotional, behavioural, social & cognitive domains. Mental health is an essential part of children's overall health. It has a complex interactive relationship with their physical health and their ability to succeed in school, at work and in society. Both physical and mental health play a pivotal role, how child thinks, feels and behaves from inside & outside.[2]

Mental health problems are common in infancy and childhood. It may be because of maternal psychosocial health, which can have a significant effect on the mother-infant relationship, and that this in turn can

have consequences for both the short and long term psychological health of the child's. It is particularly important to take up the issue of parent child mental health as a part of the maternal and child healthcare, as it will also lead to the prevention of psychological problems in children. Two major problems exist in the mental health aspects of maternal and child health care. They are the anxieties of parents about child-rearing and the relationship between parental stress and the mental state of the child. Till date most of population in our society perceive mental illness is because of God, or evil spirit, curse, witch-craft and black-magic. It has been estimated that eighty percent of rural population uses magic-religious as treatment.[2,3]

Sigmund Freud (1856-1939) an Austrian neurologist categorized his personality theory according to structure, dynamics and development. Freud organized the structure of personality into three major components: the id, ego, and superego. A person, who is well-adjusted or mentally healthy, has all three components of personality. Freud would expect anyone in whom any of the components is absent or out of balance to display maladaptive behaviours. Defense mechanisms hate been associated strongly with Freud s theories. One of the Freud s main beliefs is that behaviours resulting from ineffective personality development are unconscious. He believed that ineffective personality development was in some way related to the relationship of the child with the parent and that it was related to what he called psychosexual development.[4,5]

So, for developing a child to a mentally healthy personality and to maintain a healthy mental status, the role of family is most important. Among the entire family member the mother is the most important person who can promote the child mental health in the early stage of life. She can resolve all the conflict and frustration that may arise with in her child during these stages.[6,7]

Child mental health is a shared responsibility, and for any intervention to be effective there should be a synergy between efforts being made by different stakeholders to address the issues. There is a need to create a mechanism that will make such a synergy possible. These may include child mental health prevention and promotion mechanisms at village, block, district and state levels which involve parents, elected representatives of urban and rural local bodies, teachers, *anganwadi* workers, medical practitioners, police and social workers and responsible members of public among others.[8,9]

Effective prevention programs have been identified which may help to reduce the risk of children developing a mental problem or disorder. Some prevention programs are even more effective than later treatments, particularly in the area of conduct disorders. Significant advancements can be made when both the early years of life and the early stages of disorders are targeted[4] Mental health prevention and early intervention are relatively new fields in mental health. Progression of these initiatives involves supporting health and related staff and the community in the acquisition of the knowledge and skills needed to meet the challenges of new service directions and programs, including the provision of resources to assist implementation.[10,11,]

Child's mental health may be affected by events such as death of a family member, marital discord or separation, environmental disasters and economic disadvantage. Children and adolescents may require interventions to ameliorate the effects of abuse or neglect, parental substance abuse or mental health problems or domestic violence. [12]

**Objectives-:**

1. To identify the existing knowledge of mothers regarding promotion of child mental health.

2. To administer structured teaching programme on knowledge regarding promotion of child mental health among mothers in a selected rural area.

3. To evaluate the effectiveness of structured teaching programme on knowledge regarding selected personality disorders among mothers in a selected rural area.

4. Find out the association between pre-test knowledge score among mothers with their demographic variable.

5. To find out the significance difference between pre test and post test knowledge score.

**Hypothesis:**

All hypotheses will be tested at 0.05 level of significance

$H_0$- there will be significant difference between pre-test and post test knowledge score.

$H_1$- There will be significant association between the pre-test knowledge score and selected demographic variables.

## Material and Methods

The research approach adopted for the study is quantitative research approach. The design used for the study is one group pre-test and post-test design which belongs to the pre-experimental study.

Study was conducted in chakeisihani, Bhubaneswar. the sample size of the study comprised of 60 mothers having children between 4-12 year, who met the inclusive criteria were selected through non-probability purposive sampling technique. Structured questionnaire was used as a research tool. Since, it is considered to be most appropriate instrument to elicit the response from subject. The reliability of the tool was established by using spit half method by using cronbach's alpha formula. The tool was found to be highly reliable (r=0.8) for data collection and for proceeding with the main study.

A letter of request was sent to the concerned authority of the area chakeisihani, Bhubanrswar, prior to the data collected during the month of November 2018 and permission was granted for the same. The data was collected in the month of January 2019 at Chakeisihani, Bhubanrswar. The data was collected from 60 mothers having children between 4-12 year, using non-probability purposive sampling technique. The purpose of questionnaire was explained to the sample with self introduction.

The questionnaire was distributed to the mothers and they took 20-30 minutes to fill up the answers for the questions and they were very co-operative. After conducting the pre-test, they were given structured teaching programme and post-test was conducted with in one week using the same tool used for the pre-test.

## Findings

Ø Most of the mothers were(56.66%) in the age group 20-30years, (31.66%) were in the age group 31-40years, (8.33%) were in the age group 41-50 years and (1.66%) were in the age group more than <50 years.

Ø 60% of mothers had primary school education, 38.33% mothers had secondary school of education, and 1.66% mother had graduation and above education.

Ø Highest percentage of mothers are from hindu religion 100%

Ø (51.66%) Maximum percentage of mothers monthly income 6327-18989, 43.33% mothers monthly income >6323, and 5% mothers monthly income is 31595-47262.

Ø 55.66% of mothers were house wife, 28.33% mothers are had their own business, 15% mothers were had government job and 5% mothers were had private job.

Ø Maximum (68.33%) mothers were belongs to joint family % and 31.66% mother belongs to nuclear family.

Ø 73.33% mother were having 2 children, 20% mothers were have 1 children, 6.66% mothers were having, <2 children.

Ø Previous knowledge shows that 20% mothers were got knowledge from media, 20% from family member and friends,15% were from other sources and 45% were having No knowledge.

## Discussion

Structured teaching programme was found to be an effective educative method for improving the knowledge of mothers regarding promotion of child mental health. The findings were similar to others studies, which shown that mothers having less knowledge on promotion of

child mental health. In the present study results revealed that obtained [t] value was 63.07, which were found with statistically significant at 0.05 levels.

## Conclusion

The study concluded that the structured teaching programme on knowledge regarding promotion of child mental health among mothers carried out was effective in improving the knowledge of mothers as evidenced by significant change between pre-test and post-test k knowledge score.

**Conflict of Interest :** None

**Source of Funding-** This study was self financed

**Ethical Clearance:-** Ethical permission was taken from the councillor of the area. The study was conducted keeping all the ethical issues in mind. The information provided by the sample was kept strictly confidential and were used for the purpose of research onl

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