A pre –experimental study to assess the effectiveness of structured teaching programe on knowledge regarding breast self examination among FMPHW Ist year students at Ramzan institute of paramedical sciences, Gulshan Nagar, Nowgam Srinagar, Kashmir, India

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Abstract
According to the world cancer report 2017 about 5.37 lakh Indian women got Breast cancer in 2012 and was a leading cause of death among women between age group of 20 and 59 years worldwide. Among Kashmiri women breast cancer is the second leading cancer after esophageal cancer, with an incidence rate of 12.6 per 100,000 women. The study was conducted with the aim to assess the effectiveness of structured teaching programme on knowledge regarding breast self examination among FMPHW Ist year students at Ramzan institute of paramedical sciences, Gulshan nagar, Nowgam Srinagar Kashmir. A quantitative pre-experimental one group pre-test post-test design was adopted to assess the effectiveness of structured teaching programme on knowledge regarding breast self examination among FMPHW Ist year students at Ramzan institute of paramedical sciences, Gulshan nagar, Nowgam Srinagar Kashmir. Convenient sampling technique was used to collect data from FMPHW Ist year students using self administered structured knowledge questionnaire. The data was analysed using descriptive and inferential statistics and the results of the study revealed that there was significant difference between pre -test and post-test knowledge scores regarding breast self- examination among FMPHW Ist year students; the mean post-test knowledge score (31.94 ± 2.86) was higher than pre-test knowledge score (16.8 ± 3.50), which shows the effectiveness of structured teaching programme.

Keywords: Structured teaching programme, FMPHW students, Knowledge, Breast Self Examination, Breast cancer.

Introduction
Every year Women’s International Day is celebrated to inspiring the women to stride ahead in life. While women had made progress in most of the field still she tends to inexplicably neglect her own health.1 The technological advancement, modernization, urbanization, economic liberation, and changing values of the society have been influencing the health care tremendously.2

Every year October month is considered as the Breast Cancer Awareness Month, which is worldwide annual campaign involving thousands of organizations to highlight the importance of breast awareness, education and research. Breast is the symbol of femininity, beauty, sexuality and motherhood, So any diseases most commonly cancer of breast is a life threatening disease as it affects the organ, intimately associated with self-image, reproductive and nurturing capacity.3 Breast cancer is a leading cancer among worldwide with more than 540000 new cases occurring each year. Incidence of breast cancer in India is estimated to be 20.1 per lakh population (2012).4 The natural history of breast cancer can be altered when early diagnosis and treatment will be undertaken. Therefore, the diagnosis of breast cancer in early stage has a significant impact on therapy, which in turn can improve the quality of life of a patient with breast cancer.5

Background of Study
Breast diseases are very common and can be found in most women. As the female breast has been regarded as a symbol of beauty, sexuality and motherhood, any actual (or) suspected diseases (or) injury affecting breast tends to reflect the prevailing societal view of the breast. The threat of mutilation (or) loss of a breast may be devastating for the women because of significant psychosocial, sexual and body image implication associated with it. Cancer of breast is disease which affects many dimensions of health as it gives physical, emotional, psychological as well as economical set back to the women affected. Breast cancer is ranked the number one cancer among Indian women with a rate as high as 25.8 per 100,000 women and motility of 12.7 per 100,000 women, according to health ministry report 2017. According to the world cancer report 2017 about 5.37 lakh Indian women got Breast cancer in 2012 and was a leading cause of death.
among women between age group of 20 and 59 worldwide. Among Kashmiri women breast cancer is the second leading cancer after esophageal cancer, with an incidence rate of 12.6 per 100,000 women. The incidence, mortality and survival rates for breast cancer vary across the globe because of underlying differences in known risk factors, availability of organized screening programs and access to effective and affordable treatment modalities.6

Breast cancer is distinguished from other type of cancer by the fact that it occurs in visible organ and can be detected and treated at an early stage. Although there are no specific cause for breast cancer, researchers have identified a cluster of risk factors; they are: genetic mutation, increasing age, family history, early menarche, null parity, late menopause, obesity, exposure to ionizing radiation, hormone replacement therapy and alcohol intake.7 Medical advances have shown that one third of all cancers are preventable and a further one third if diagnosed early, is potentially curable. This observation demands that cancer control component should be of increasing priority in the health care programmes of developing countries. One potentially important strategy in reducing breast cancer mortality is the use of screening to achieve early detection of cancer. This is very important because an excellent prognosis is directly linked with the stage at which the tumor is detected. Early diagnosis usually results in treatment before metastasis and signifies a better outcome of management.8

Screening for early detection and diagnosis of diseases and health condition is an important public health principle. Recommended preventive techniques to reduce breast cancer mortality and morbidity include Mammography, Clinical Breast Examination, and Breast Self-Examination. The first method Mammography is the X-ray of the breast. The second method is for a women to get herself examined by a breast specialist. It appears that if clinical examination is done properly it may be as effective as mammography. The third method is a self-examination whereby a women examines her own breast once a month after taking lessons from an expert. The first method Mammography is the method of choice but its use is limited due to high cost and unavailability. The second method Clinical Breast Examination is not possible for all the women. So Breast Self-Examination is an ideal method for the early identification of breast abnormalities and this method can be performed by every woman at her leisure time. Due to lack of access to diagnostic facilities, especially for women in low resource setting, it is essential to empower them with BSE as a primary modality for screening.9 It is a cost effective, simple noninvasive, private, comfortable, easy screening method, which can be used for diagnosis of 95 percent of malignant breast tumors by monthly self-examination. The method involve the women herself looking at and feeling each breast for possible lumps, distortion or swelling.10 The US cancer institute recommended that breast self-examination should be initiated from the age of 20 to improve the health condition and early diagnosis of breast cancer among women.11 The goal of breast self-examination is to notice changes in the breast that should be brought to the attention of physician for further evaluation; these include breast lumps, changes in the breast, size, shape or contour and color of breast and nipple. The method should be done on routine basis and takes less than 5 minutes to perform. It should be done a few days after the end of menstruation in case of regular menstrual periods, in case of menopausal women and female with irregular periods the examination should be performed on the same day each month. It can be done by an adolescents girls, pregnant women, lactating mother & woman with breast implants. The woman who correctly practice BSE monthly is more likely to detect lump at the early stages of its development which ultimately leads to better survival rate.12

Need for study
Every country in the world is focusing towards the destiny of “HEALTH FOR ALL”. We are confronted by various challenging health problems thus making a journey a moment task. Cancer is one of the frequently talked about and most feared diseases which is rapidly evolved in the past two decades. Among women around the globe, breast cancer is the both common and the leading cause of death among cancer patients. Breast cancer is the most feared cancer in women because it affects the perception of self-image to a degree greater than any other cancer. The incidence of breast cancer is rising in every country of the world especially in developing countries like India. India continues to have a low survival rate for breast cancer, with only 66.1% women diagnosed with cancer between 2010 and 2016 surviving. To eradicate breast cancer breast cancer programmes were organized in many countries both at national and international levels. They are NHS (National Health Service) Breast Screening Programme, National Breast and Cervical Cancer Early Detection Programme, International Agency For Research of Cancer Screening Group etc. The outcome of these programmes focusing on a way
to alleviate knowledge among women regarding breast cancer.\textsuperscript{13}

Different Studies were conducted regarding breast cancer awareness and the practice of BSE as:-

1. \textit{Kouser- sideeq} (2017), conducted a study to assess knowledge, attitude and practice of breast self-examination among ethnic Kashmiri females. The study concluded that to detect breast cancer in early stage promotion of BSE practice need to be tailored with health education and health promotion programmes.\textsuperscript{14}

2. Philomena-fernandes (2017), conducted a pre-experimental study to evaluate the effectiveness of PTP\textsuperscript{15}(planned teaching programme) on Breast self-examination among nursing students at Karnataka medical college. The study concluded that nursing students are the key group to deliver health information and training. Their attitude towards promotion of BSE practice will attain a high degree contribution towards giving awareness to the general population regarding BSE.\textsuperscript{15}

3. Shalini -Jose (2016), conducted a pre-experimental study to determine the effectiveness of PTP (planned teaching programme) on BSE among GNM nursing students at Nursing college Indore city. The study concluded that PTP helps to improve the knowledge of students on BSE as evidenced by significant difference between pre-test and post-test\textsuperscript{16}.

Keeping in view, the above results proved that there is a need for implementing programmes regarding BSE to detect breast cancer in early stage and FMPHW students are the persons who empower and disseminate the knowledge to general population at a large. So the researcher felt the need of teaching FMPHW students: BSE practice, as to put an effort in controlling and preventing the disease to some extent.

\textbf{Problem Statement}

A pre – experimental study to assess the effectiveness of structured teaching programme on knowledge regarding breast self examination among FMPHW 1st year students at Ramzan institute of paramedical sciences, Gulshan Nagar, Nowgam Srinagar, Kashmir, India.

\textbf{Objectives of the study}

1. To compare pre-test and post –test knowledge scores regarding breast self - examination among FMPHW 1st year students.

2. To assess the pre-test knowledge scores regarding breast self - examination among FMPHW 1st year students.

\textbf{Selected Variables}

Variables are the characteristics, qualities or properties of persons, things or situations that change or vary

The selected variables of the present study are knowledge and structured teaching programme.

\textbf{Dependent variable}

The dependent variable is the variable the researcher is interested in understanding, explaining or predicting.

In this study the dependent variable refers to level of knowledge regarding Breast Self- Examination among FMPHW students in selected institute of paramedical sciences.

\textbf{Independent variable}

Independent variable is the variable that stands alone and does not depend on any other.

In this study structured teaching programme on breast self- examination is independent variable.

\textbf{Demographic Variables}

These are those demographic characteristics of an individual which the researcher wants to compare with research variables. The demographic variables of the study are

1. Age
2. Residence
3. Class.
4. Previous information regarding breast self-examination.

\textbf{Assumption}

The study assumes that

1. The FMPHW students are exposed to different educational programme will be having knowledge of breast self- examination and breast cancer precautions.
2. FMPHW students do not apply knowledge into practice.
3. Knowledge gained from STP will assist the FMPHW students to prevent breast cancer.

\textbf{Hypothesis}

\textbf{H}\textsubscript{0}. There will be no significant difference between pre-test and post-test knowledge scores regarding breast self - examination among FMPHW 1st year students.
H1: There will be significant difference between pre-test and post-test knowledge scores regarding breast self-examination among FMPHW Ist year students.

Conceptual framework
Nursing science is deeply involved in the body of knowledge essential to nursing research and practice. Identification of this knowledge base requires that development and recognition of concepts and theories specific to nursing.

Conceptual framework is interrelated concepts or abstractions that are assembled in some rationale by virtue of their relevance to common theme. Each conceptual framework proposes a different view of the Mata-paradigm concepts which provides clear descriptions of variables, suggesting ways or method to conduct the study and guarding the interpretations and integration of the significant findings.17

The conceptual model for the present study is based on kegleles, Rosenstock and Becker M’s Health Belief Model. This model addresses the relationship between a person’s beliefs and behavior. It provides a way of understanding and predicting how clients will behave in relation to their health and how they will comply with health care therapies.18,19

Health belief model consists of three components:

Component 1: Individual’s Perception
Perceived susceptibility
It emphasis that the person’s beliefs about his or her own susceptibility to disease
In the present study, perceived susceptibility refers to the nurse investigator and girl’s perception of the susceptibility to the breast disease such as breast lump / cyst or carcinoma.
1. The nurse investigator perceives the presence of risk factor in the population under study that may lead to breast cancer.
2. The FMPHW student’s perception regarding susceptibility of breast diseases is limited due to lack of knowledge regarding BSE which is measured by structured knowledge questionnaire.

Perceived seriousness
It emphasizes the individual’s perception regarding the seriousness of the disease.
The nurse investigator perceives that since the incidence of breast cancer is increasing nowadays and the population under study are not aware of BSE, there is an urgent need to create awareness regarding the importance of the performing BSE.
FMPHW students lack adequate awareness about breast cancer and the importance of BSE. Hence they don’t perceive the seriousness of disease and its impact on their health and family.

Perceived threat
According to Becker, perceived susceptibility and perceived seriousness combined to determine the total perceived threat of an illness to a specific individual. The nurse investigator perceived the threat, which is due to the increased incidence of breast cancer and lack of knowledge regarding BSE.
The FMPHW students do not perceive breast cancer as a threat as their knowledge regarding the disease is limited. However they do perceive the “cancer” as a dangerous.

Component 2: Modifying Factors
The factors that modify the individual perception of disease include the following:-
1. Demographic variables: it include the age, sex, race and ethnicity.
   In the present study, demographic variables include age, place of residence, previous breast self-examination, previous knowledge regarding BSE.
2. Structure variables: Knowledge about the disease and prior contact with it are structured that are presumed to influence preventive behaviour.
   In the present study, FMPHW students do not have any knowledge regarding breast self-examination.

Component 3: Likely hood of action
The likelihood of a person’s taking preventive health action depends on the perceived benefits of the action minus the perceived barriers to action.

Perceived benefits of action
Refraining from a particular habit to prevent a disease.
   In the present study, perceived benefits of action include the gain in knowledge of own body parts, gain in knowledge regarding BSE, improved self-care, and early detection of breast diseases including breast cancer.

Perceived barriers to action
Perceived barriers to action include the cost, inconvenience, unpleasantness, and lifestyle changes.
   In the present study, the perceived barriers include lack of knowledge, laziness, shyness, fear of discovering of lump, lack of time, lack of confidence, and socio-cultural beliefs.24,25
Health action
When the risk for developing breast cancer is perceived to be serious and the barriers are low, the FMPHW students are more likely to take certain health actions like gaining additional knowledge on breast self-examination.
Health and illness are inevitable dimensions of life experience. As an individual moves along the health illness continuum, she will encounter problems to which she must adapt. Nurses have a unique role in health promotion. The result is an optimum wellbeing.

The schematic presentation of the application of the health belief model is shown as under:

Conceptual framework for assessing the knowledge regarding breast self-examination based on health belief model.

Methodology
This section deals with the methodology adopted for the study. The methodology of the investigation is of vital importance for research to analyze information in a systematic manner.
Research methodology is a way to solve problem. It is a systematic procedure in which the researcher starts from initial identification of the problems to final conclusion.

The methodology of research indicates the general pattern of organizing the procedure; it gathers valid and reliable data for the problem under the investigation.

This chapter includes:
1. Research approach.
2. Research design.
3. Diagrammatic presentation.
4. Setting of the study.
5. Population.
6. Sample & sampling technique.
7. Data collection tools & techniques.

Research Approach
A quantitative research approach was adopted to determine the effectiveness of structured teaching programme on knowledge regarding breast self-examination among FMPHW Ist year students.

Research Design
The research design spells out the basic strategies that the researchers adopt to develop information that is accurate and interpretable. It provides a path for the investigator to obtain answer to the research problem. Pre-experimental one group pre-test post-test design was used to determine effectiveness of structure teaching programme on knowledge regarding breast self-examination among FMPHW Ist year students of selected institute.

One group pre-test post-test design can be represented as follows:

<table>
<thead>
<tr>
<th>O₁</th>
<th>X</th>
<th>O₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre - test to assess existing knowledge</td>
<td>Intervention by conducting structured teaching programme regarding breast self-examination</td>
<td>Post - test to assess effectiveness of intervention.</td>
</tr>
</tbody>
</table>

Schematic representation of research design
O₁ – pre-test on knowledge regarding breast self-examination
X-Teaching on breast self-examination
O₂- post-test on knowledge regarding breast self-examination.

Schematic representation of research methodology can be presented as follows:
Variables Under Study

Variables are qualities, properties or characteristics of persons, things or situation that change or vary. The selected variables of the present study are:

**Dependent variable**
The dependent variable is the variable the researcher is interested in understanding, explaining or predicting. The dependent variables of the present study is knowledge regarding breast self-examination among FMPHW students.

**Independent variable**
Independent variable is the variable that stands alone and does not depend on any one. The independent variables of the present study is effectiveness of teaching programme on breast self-examination.

**Extraneous Variables**
All those variables which are present in the research environment that may interfere with research findings. In this study research extraneous variables are:

1. Age.
2. Residence.
3. Class.
4. Previous source of information regarding breast self-examination.

**Setting**
Setting is a physical location and condition in which data collection takes place.
The study was conducted at Ramzan Institute of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar, Kashmir India.

**Population**
Population is the entire, set of individuals or objects having some common characteristics. In this study the population comprises of FMPHW Ist year students at Ramzan Institute of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar.

**Sample**
A sample is a subset of population, selected to participate in a study.
In this study sample consists of 50 FMPHW Ist year students at Ramzan Institute Of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar.

**Sampling technique**
Simple Random sampling technique was used to select the sample.

**Inclusion criteria**
1. FMPHW Ist year students between age group of 18-26.
2. FMPHW Ist year students who are willing to participate in research study.
3. FMPHW Ist year students who are attending regular classes.

**Exclusion criteria**
1. FMPHW students who are studying other than Ist year
2. FMPHW Ist year students who are not willing to participate.
3. FMPHW Ist year students who are not available.

**Selection and development of tool**
Data collection tools are the instruments used by investigator to measure key variables in the research problem. Based on objectives, demographic data and structured knowledge questionnaire on breast self-examination was prepared.
The following steps were involved in the development of tool:
1. Literature review.
2. Preparation of blue print.
3. Personal consultation and discussion with the guide and nursing experts.
4. Content validation of the tool.
5. Modification of the tool based on suggestions from nursing experts.

**Testing of Tool**

Content validity: It refers to the degree to which an instrument measures what it is supposed to measure.

The prepared instrument/tool along with objectives, blueprint and answer key was submitted to a panel of experts to establish content validity. These includes: Seven nursing experts from Government College of Nursing And Paramedical Sciences, Shireen Bagh, Srinagar.

Consent for the tool validation was obtained by sending a requisition letter and an acceptance form. Experts were requested to give their opinions and suggestions regarding each item in the tool in terms of Strongly Agree (SA), Agree (A), and Disagree (DA). They were also requested to give their remarks for each question. The questions of the tool were modified according to the recommendations and suggestions of the experts.

**Description of the final tool**

The tool for data collection had three sections—Section A, B and C.

**Section A**: Demographic data consists of students’ age, place of residence, class, previous source of information.

**Section B**: Structured knowledge questionnaire on breast and breast cancer had 14 questions. The subjects were instructed to tick mark(✓) the correct response. The scoring was done by just counting the correct response and according the tool score obtained. The highest possible score was 14.

**Section C**: Structured knowledge questionnaire on breast self-examination had 26 questions. The subjects were instructed to tick mark(✓) the correct response. The scoring was done by just counting the correct response and according the tool score obtained. The highest possible score was 26.

**Criterion measurement**

Each correct answer carries one mark and each wrong answer carries zero marks.

**Pretest**

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Scores</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>28-40</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Average</td>
<td>14-27</td>
<td>41</td>
<td>82%</td>
</tr>
<tr>
<td>Poor</td>
<td>0-13</td>
<td>9</td>
<td>18%</td>
</tr>
</tbody>
</table>

**Posttest**

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Scores</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>28-40</td>
<td>48</td>
<td>96%</td>
</tr>
<tr>
<td>Average</td>
<td>14-27</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Poor</td>
<td>0-13</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Method of data collection**

Data collection for the study was done from FMPHW Ist year students of Ramzan Institute of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar after getting permission from the principal of Ramzan Institute of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar and coordinator of FMPHW Ist year students.

The student investors personally visited Ramzan Institute of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar. The purpose of the study was explained to the students. The respondents were assured for confidentiality. The study was conducted according to the convenience of students.

**Time of data collection**

Month: March
Date: 14-3-2019 (pretest), 18-3-2019 (post-test)
Day: Thursday (pretest), Monday (posttest)
Time: 11:00 am—2:30 pm

**Plan for data analysis**

The data obtained was planned to be analyzed by both descriptive and inferential statistics on the basis of the objectives of the study. To compute the data a master plan data sheet would be prepared by the investigator.

**Section I**

Data on demographic characteristics will be analyzed by frequency and percentage and will be presented in tables and figures.

**Section II**

Structured knowledge questionnaire regarding knowledge of breast self examination.

The knowledge of FMPHW Ist year students regarding knowledge of breast self examination before and after administering structured teaching programme would be analysed in terms of frequency, percentage, mean, median and standard deviation and would be presented in tables and figures.

The significant difference between pre-test and post-test knowledge scores would be calculated by paired t-test.
Analysis and interpretation

Analysis is the process of organizing and synthesizing the data so as to answer the research question and test hypothesis. Interpretation of data is an activity of critical thinking, which is done carefully through brainstorming to infer the condensed and statistically computed data so that the research question can be answered and hypothesis can be tested.

This chapter deals with analysis and interpretation of results of data collected from 50 FMPHW students regarding their knowledge on breast self-examination and determining the effectiveness of structured teaching programme on breast self-examination. A pre-experimental one group pre-test: post-test approach was adopted in this study.

Analysis and interpretation of the data were based on the objectives of the study and research hypothesis, using descriptive and inferential statistics.

Objectives of Study
1. To assess the pre-test knowledge scores regarding breast self-examination among FMPHW students.
2. To assess post-test knowledge scores regarding breast self-examination among FMPHW students.
3. To compare pre-test and post-test knowledge scores regarding breast self-examination among FMPHW students.

Hypothesis

H0: There is no significant difference between pretest and posttest knowledge scores regarding breast self-examination among FMPHW 1st year students

H1: There is significant difference between pre-test and post-test knowledge scores regarding breast self-examination among FMPHW 1st year students

The analysis and interpretation of data in this study was based on the data collected through structured knowledge schedule regarding breast self-examination. The sample consist of 50 FMPHW 1st year students at Ramzan Institute of Paramedical Sciences, Gulshan Nagar, Nowgam Srinagar.

The results were computed by using descriptive and inferential statistics based on objectives and hypothesis of the study.

Descriptives statistics
Frequency and percentage was used to describe sample characteristics.
Mean, standard deviation, median, minimum, maximum and range was used to assess the knowledge of study subjects.

Inferentail statistics
Paired “t” test was used to compare pretest and post-test level of knowledge

Organization of study findings
The analyses of the data from the study are presented under the following headings:

Section I: Description of demographic characteristics of FMPHW Ist year students.
Section II: Description of pre-test knowledge scores regarding breast self-examination among FMPHW Ist year students.
Section III: Description of post-test knowledge scores regarding breast self-examination among FMPHW Ist year students.
Section IV: Description of findings related to association of pre-test and post-test knowledge scores regarding breast self-examination of FMPHW Ist year students.

Section I: Description of demographic characteristics of FMPHW students
This section describes the characteristics of the sample which provides the back ground information of the subjects and has been presented in the form of frequency and percentage in tables and figures.

Table 1: Showing distribution of respondents as per their age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>36</td>
<td>72%</td>
</tr>
<tr>
<td>20-22</td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td>22-24</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>24-26</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 2: Showing distribution of respondents as per their residence.

<table>
<thead>
<tr>
<th>Residence</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>34</td>
<td>68%</td>
</tr>
<tr>
<td>Urban</td>
<td>16</td>
<td>32%</td>
</tr>
</tbody>
</table>
Table 2 Frequency and percentage distribution of respondents as per their residence

Table 3: Showing distribution of respondents as per their class. N=50

<table>
<thead>
<tr>
<th>Class</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fmphpw 1st year</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3 Frequency and percentage distribution of respondents as per class

Table 4: Showing distribution of respondents as per their previous source of information

<table>
<thead>
<tr>
<th>Previous source of information</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass media</td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td>Health professional</td>
<td>23</td>
<td>46%</td>
</tr>
<tr>
<td>Relatives/ friends</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>Any other</td>
<td>02</td>
<td>4%</td>
</tr>
</tbody>
</table>

Table 4 Frequency and percentage distribution of respondents as per information

Section II: Description of pre-test knowledge scores regarding breast self examination among FMPHW 1st year students.

The knowledge scores are assessed by using a structured knowledge questionnaire and are presented in the form of tables and figures

Table 5: Frequency and percentage distribution of respondents as per their level of knowledge regarding breast self – examination N=50

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Scores</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>28-40</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Average</td>
<td>14-27</td>
<td>41</td>
<td>82%</td>
</tr>
<tr>
<td>Poor</td>
<td>0-13</td>
<td>9</td>
<td>18%</td>
</tr>
</tbody>
</table>

Table 5 Depicts that maximum (82%) of the respondents were having average level of knowledge regarding breast self – examination, (18%) of the respondents were having poor level of knowledge and (0%) of the respondents were having good knowledge.

Section III: Description of post –test knowledge scores regarding breast self examination among FMPHW 1st year students.

Table 6: Frequency and percentage distribution of respondents as per their level of knowledge regarding breast self -examination. N=50

<table>
<thead>
<tr>
<th>Level of Knowledge</th>
<th>Scores</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>28-40</td>
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<td>2</td>
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</tr>
<tr>
<td>Poor</td>
<td>0-13</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 6 Depicts that maximum (96%) of the respondents having good level of knowledge regarding breast self -examination, (4%) of the respondents were having average level of knowledge and (0%) of the respondents having poor level of knowledge.

Table 7: Objection 1 and 2: Assessment of pre-test and post –test knowledge scores regarding breast self -examination among FMPHW 1st year students. N=50

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>N</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test Score</td>
<td>16.78</td>
<td>50</td>
<td>3.50</td>
</tr>
<tr>
<td>Post-test Score</td>
<td>31.94</td>
<td>50</td>
<td>2.86</td>
</tr>
</tbody>
</table>
The data in the table 7 shows that the mean post-test knowledge scores (31.94) of FMPHW Ist year students regarding breast self-examination is significantly higher than that of the mean pre-test knowledge scores (16.78).

**Table 8:** Objective 3:- Comparison of pre-test and post-test knowledge scores regarding breast self examination. N =50

<table>
<thead>
<tr>
<th>t_cal</th>
<th>df (N-1)</th>
<th>t_tab @ 5% level of significance</th>
<th>t_cal &lt;, &gt; t_tab</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.55884E-25</td>
<td>50 – 1= 49</td>
<td>2.008</td>
<td>t_cal &lt; t_tab, H_0 rejected</td>
<td>Highly Significant difference</td>
</tr>
</tbody>
</table>

Calculation t_cal, df, t_tab @ 5% level of significance, t_cal <, > t_tab, significance
The data presented in the table 8 shows that there is significant difference between pre –test and post –test knowledge scores regarding breast self- examination among FMPHW Ist year students at 0.05 level of significance. Hence Null Hypothesis (H_0) is rejected and Research Hypothesis (H_1) is accepted

Table 9 Mean, Median, Mode and Range of pretest and post- test knowledge level of FMPHW Ist year students regarding breast self -examination.

**Table 9:** Showing mean, median, mode of pre-test and post-test knowledge scores regarding breast self-examination.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test knowledge level</td>
<td>16.8</td>
<td>16</td>
<td>16</td>
<td>15-20</td>
</tr>
<tr>
<td>Post –test Knowledge level</td>
<td>31.9</td>
<td>32</td>
<td>32</td>
<td>30-35</td>
</tr>
</tbody>
</table>

**Summary and Conclusion**

**Summary**
The summary chapter discusses the major findings of the study and reviews them in relation to findings from the results of the previous studies. The finding of the study were discussed as per the objectives and hypothesis. The present study was aimed to assess the effectiveness of structured teaching programme on knowledge regarding breast self- examination among FMPHW Ist year at Ramzan Institute of Paramedical Sciences. In order to achieve the objectives of the study, pre-experimental one group pre-test and post-test research design was adopted. Convenient technique was used to select the sample. The data was collected from 50 subjects through structured knowledge questionnaire before and after the administration of structured teaching programme on knowledge regarding breast self –examination. The data was collected during march 2019 and was analyzed keeping in view the objectives of the study.

**Objectives**

1. To assess the pre-test knowledge scores regarding breast self-examination among FMPHW students.
2. To assess post -test knowledge scores regarding breast self-examination among FMPHW students.
3. To compare pre-test knowledge scores regarding breast self-examination among FMPHW students.

**Hypothesis**

H_0: There is no significant difference between pretest and posttest knowledge scores regarding breast self-examination among FMPHW Ist year students

H_1: There is significant difference between pre-test and post-test knowledge scores regarding breast self-examination among FMPHW Ist year students

**Tool of the study**
Structured questionnaire were used. It consists of,

**Section I: Demographic Performa**
Gives information about the respondent’s:- age, residence, class and any source of previous information.

**Section II: Self- Structured knowledge questionnaire**
Containing different questions about breast and breast cancer.

**Section III: Self –Structured knowledge questionnaire**
Containing different questions about breast self-examination.
Findings of study

Demographic profile
1. Majority of the subjects (72%) were in the age group of 18-20 years while as (13%) of the subjects belonged to age group of 20-22, (0%) of subjects belonged to the age group 22-24 and only (1%) of subjects belonged to age group 25-26.
2. Majority of the respondents (68%) belonged to rural areas and (32%) belonged to urban areas.
3. All the respondents (100%) were belonged to the FMPHW Ist year class.
4. Majority of respondents (46%) had previous source of information from health professionals, (28%) of the respondents had used mass media as a source of information, (22%) of the respondents had from relatives /friends and (4%) from others.

Knowledge data
The mean post-test knowledge scores (31.9 ± 2.86) was higher than pre-test knowledge scores (16.8 ± 3.50) with the MD of 15.16.

Conclusion
In the present study the mean post- test knowledge was higher than the pretest knowledge, so it shows the effectiveness of structured teaching programme.There was significant difference between pretest and post-test knowledge scores.

Recommendations
1. A similar study can be conducted on large sample of other FMPHW students to generalise the results.
2. A similar study can be conducted on staff nurse of different hospitals of Kashmir to generalize the results.
3. SIM (Self instruction Module) can be developed rather than structured teaching program
4. More emphasis should be given on practical skills among FMPHW students.
5. Staff development programmes based on procedures should be organised.
6. Educational programme should be conducted about importance of breast self- examination and its practices to female students in schools, colleges and universities to increase awareness about breast cancer and methods of its early detection, and empowering students with information about early detection methods of breast cancer as breast self -examination and expanding their role as client educators to disseminate this information to others (family, relatives and community) in a correct and good model, because most of the cases detected by women themselves.
7. Incorporate breast cancer prevention issues (healthy lifestyles, preventive measures, early detection methods of breast cancer and importance of breast self-examination and how to perform) into all school curriculum especially blindness school, as well as in university curriculum.
8. Coordination and communication with the media to provide BSE programmes on TV, and radio. In addition concerned authorities and charities distribute leaflets and awareness illustration posters of BSE among schools and universities.
9. School health nursing should be promoted to create health awareness among young generation.
10. Replication of the study can be conducted among other female groups in the community.
11. A comparative study can be conducted to find out the effectiveness between various teaching methodologies.

Nursing Implication
The findings of the study have implications in four areas

Nursing Education
The present study emphasizes enhancement in the knowledge of FMPHW students regarding breast self-examination. In order to achieve this FMPHW student in different areas should be educated about breast self-examination. Nursing schools, colleges and teachers should come forward and encourage the students to provide information regarding knowledge of breast self –examination. Although the nursing curriculum has included various breast cancer prevention strategies and BSE, the studies suggests that there is a need to develop interventions or strategies to increase BSE efficiency and thereby increase BSE practice among the FMPHW students and also other groups of women. BSE practice should be emphasized by incorporating this topic in nursing curriculum at diploma, bachelors level, at the Masters level. The BSE should be included in both medical surgical nursing and obstetrics and gynecological nursing specialty and provide them with adequate opportunities in demonstrating BSE in clinical/class room settings. The students should also be motivated to conduct various awareness programmes on BSE. Empowering diploma, nursing students with information about early detection methods and their related benefits could help in advancing their skills in performing breast self-examination and expanding their role as client educators.
**Nursing Administration**

Since the literature revealed inadequacy of knowledge of nursing personnel regarding breast self-examination. The in-service education programs, continuous education programs, orientation, and short term courses should be implemented to influence the knowledge of students and staff nurses. Administrators should encourage the staff nurses to participate in conferences, workshops, symposium and seminars regarding knowledge of breast self-examination. Guidelines related to knowledge of breast cancer should be displayed in all the units of the hospitals. Hence it is the responsibility of nurse leader for making arrangements in the hospital. Arrangement for supervision and evaluation of knowledge of students and staff nurses on regular basis are essential for nursing administration.

**Nursing Service**

FMPHW are the key person of the health team who play a major role in the health promotion and maintenance (as working mostly in community). Nursing is the practicing profession so the researcher generally integrates findings in to practice. The students and staff nurse needs to be involved in identifying the patients who are in need of knowledge regarding breast self-examination. Health information and knowledge on prevention of breast cancer can be imparted through various methods like mass media, lecture and planned teaching programme.

**Nursing research**

The essence of research is to build a body of knowledge in nursing as it an evolving profession. The findings of present study services as the basis for the professionals and the students to conduct further studies.

As there is an increased necessity to identify the underlying variables that might influence women own practice of breast self-examination. Results of the study provides useful information that could be utilized by both researchers and those involved in public health programmes to raise awareness about breast care among women and to encourage them to report any unusual changes.

The generalization of the study can be made by replication of the study. In Kashmir only few research studies have been done on assessment of knowledge of students and staff nurses regarding breast self-examination. Keeping in view all paramedical, nursing institutions must join hands to provide scientifically listed material of programmes to evolve a time bond plan for dissemination of knowledge regarding breast self-examination.

**Source of funding**

None.

**Conflict of interest**

None.

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