

# Awareness of Breast Cancer among the Secondary Level Adolescent Girls Student in Kathmandu, Nepal

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## ABSTRACT

*The study entitled "Views on awareness of breast cancer among the secondary level adolescent girl" was based on descriptive research design and qualitative study with focus group discussion method. Only 8 adolescent girl students from grade XI and XII within the Janamaitri Multiple Campus, Kathmandu were selected purposively for discussion. The student's views on awareness of breast cancer were analyzed thematically by FGD guidelines. It is found that the adolescent girls have positive knowledge and perception on breast cancer but diversity of knowledge of basic causes of breast cancer based on scientific as well myth. They had good knowledge on initial sign and symptoms on breast cancer but they do not have their own live experience about it. They were in the favors of breast self-examination practices but still ignorance in what, why and how it can be practices properly. They were not familiar on detection of sign and symptoms of breast cancer properly. Some have faced the live experience of breast cancer in their family members but they do not have their own live experience. They revealed that the proper health education and regular awareness program could prevent the secondary level adolescent girls from early breast cancer.*

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**Keywords:** Breast cancer, adolescent, awareness, perception, detection, prevention, breast self-examination

## Background of the Study

Breast cancer can be defined as a disease where a large number of cells grow inside the breast. It can be seen in different parts of breast but mostly in the ducts (Stephan, 2010). It is the widespread cancer in female both in the developed and developing world. The incidence of breast cancer can be seen increasingly in the developing world due to expansion of life expectancy, urbanization and using of western life styles (Singh, 1992). Although some risk reduction might be achieved with prevention these strategies cannot eliminate the majority of breast cancer that increases in the developing countries where breast cancer is diagnosed in very late stage of case with risk. So, early detection in order to improve breast cancer outcome and survival remains the cornerstone in breast cancer prevention (WHO, 2008).

Breast cancer is very much common among female population worldwide especially in the USA, China, Japan, Australia, India and some European countries. The breast cancer is still the most common cause of death among the women (Barnard, 2003). Breast cancer in female population has increased rapidly in the world. In 2008, WHO estimated 182,400 new cases of invasive breast are expected to be diagnosed along with 67,770 new cases of non-invasive breast cancer about 40,480 female are expected to die from breast cancer. The death rates of women are higher than any other cancer besides lung cancer in the USA. Breast cancer can be diagnosed easily than skin cancer among the females (American Cancer Society, 2008).

The recommended early detection strategies for developing countries are awareness of early signs and symptoms and screening by Clinical Examination in demonstration areas (WHO, 2008). Mammography screening is expensive and it is recommended for those countries with well health policies that can afford a long term program. Many developing countries that faces the double burden of cervical and breast cancer need to implement combined cost effective and affordable interventions to tackle these high preventable diseases (Anderson, 2008). Young female's cancers are generally more aggressive and results in lower survival rates. Making early diagnosis, treatment, prevention of diseases and promotion of self-care attitude fostered early in life, may pay lifelong dividends (Rosenberg, 2003). The adolescent period is the time of rapid change that provides teaching opportunities for shaping health behaviors into adulthood. For example, teaching breast self-care may encourage positive behaviors such as performing breast self-examination and seeking regular professional breast examination (Ludwick and Gaczkowshis, 2008).

Health behaviors can help empower females to take some strong responsibility over their health promotion. For younger females, education and awareness to gate way to health promotion behaviors which set the stage for adherence to clinical breast examination and mammography screening properly later in different stages of life (Rosenberg and levy-Schwartz 2003).

Breast cancer is a process of uncontrolled growth of abnormal cell that can develop in one of several areas of the breast and the ducts that carry milk to the nipple, the small sacs that produce milk (lobules) and the glandular tissue (Singh, 1992). Breast cancer is the most common cancer in female population. There are two types of breast cancer can be seen among the women such as ductal and lobular carcinoma. Breast carcinoma may be invasive and non-invasive. They have four stages-I, II, III and IV (Stephan, 2010).

Breast cancer is very common among the women in all over the world. It is assumed that 519000 females died in 2004 due to breast cancer so, breast cancer is thought to be disease of the world, a majority (69 percent) of all breast cancer death

occurs in developing countries. Breast cancer in female population has increased rapidly (WHO, 2008). Incidence rates vary greatly with age standardized rates as high as 99.4 per 100,000 in Eastern Europe, South Africa, North America, South America and Western Asia have moderate incidence rates but these are increasing. The lowest incidence rates are found in most African countries but with increasing breast cancer incidence rates (Barnard, 2003).

Nepal is one of the developing countries with specific geographical features. It is divided Mountain, Hills and Terai. In spite of having most of the health services facilities, accessibility is the major difficulty because of communication, transportation and other problems (Singh, 1992). Nepal has population of 29164578 comprise of different races and tribes, living in different geographical areas (CBS, 2021). Nepal Government is still developing the policies and programs in controlling the prevalent infectious disease, but giving less priority to the breast cancer. Nepal Cancer Relief Society (NCRS) predicted rough incidence i.e. about 40000 to 50000 people suffer from malignant diseases and the incidence is rising every year (Nepal Cancer Relief Society, 2005). Increasing number of cases of malignant diseases is coming to the hospital rather than in earlier stages because of lack of self-awareness about the early detection of the breast cancer (NCRF, 2009). The exact number of cancer cases couldn't be estimated with certainty due to the absence of proper center registry in hospital.

Nepal is a multi lingual, ethnic and cultural country with diverse environment condition (CBS, 2011). Nepal government is working with various socio-economic and health programs to control infectious diseases in the country. In Nepal the impact on the diagnosis, treatment and prognosis of breast cancer includes the low women empowerment, role of females, education and lack of cancer screening and prevention program (Singh, 1992). The exact number of breast cancer cases could not be estimated with certainty due to the absence of proper records in the hospital. Nepal cancer Relief society estimated rough incidence i.e. about 50 to 60 thousand people are suffering from malignant diseases with prevalence of 2.3 to 2.8 per 100,000 populations (Nepal cancer Relief Society, 2005).

### **Statement of the Problems**

Young female are in high risk of breast cancer with lower survival ratio in all over the world (WHO, 2008). The adolescence period of female is the time of rapid change and growth physically and emotionally as well (Hurlock, 1998). The adolescents need to get opportunities to learn about their health and wellbeing properly in the period of secondary level education. The secondary level education is the foundation of knowledge about the adolescent period, health status, personal health behavior, sanitation and hygiene practices, health awareness and the practices of wellbeing among girls student.

If they do not get chance of learning opportunities for shaping health behaviors into adulthood, that may harm their adulthood life, maternal health life and elderly life too (Sherchan & Upreti, 2018). The breast cancer can analyze as a burning health issue among the younger women in the world.

Younger female's cancers are generally more aggressive and result in lower survival rate. The adolescence period is the time of stress and storms. If adolescents don't get chance of learning opportunities for shaping health behaviors into adulthood, that may harm their adulthood life and there is a big problem of early detection, diagnosis, prevention, treatment and rehabilitation of breast cancer (Ludwick, 2001). The higher secondary level of education is foundation of academic career. If they don't get chance of learning opportunities about breast cancer awareness in this stage, they may be in high risks of their breast cancer related issues in future life. So, this study intends to find out the solution of some research questions such as; What is the existing knowledge on breast cancer related health issues among the adolescent girls student? What are their views on breast cancer as burning health issues among the younger women? How they practiced to detect the signs and symptoms of breast cancer earlier?

### **Objective of the Study**

The main objective of this study was to analyze the views on awareness of breast cancer among the adolescent girls student of secondary levels in Kathmandu, Nepal.

### **Research Methodology**

The study was completely based on descriptive research design with qualitative in nature. The secondary level adolescent girls student were the population of the study. Due to limited resources, time and budget, only Janamaitri Multiple Campus Kuleswar, Kathmandu has selected conveniently for study due to researcher's own teaching campus for secondary level students. In this study, information were collected through conducting of focus group discussion (FGD) during researcher's regular classes. The researcher has selected only 8 adolescent girls student including of 4 girls student from class XI and 4 girls student from class XII as samples by using purposive sampling method with the criteria of their smartness, frankly speakers, talented in the subject matters, fearless, honest & sincere in nature and regular in classes. The selected sample girls student were isolated from the class and placed on the meeting hall of Research Management Cell (RMC) with in the Campus premises and well informed about the research process and discussion. Only one session of discussion was conducted. The FGD guideline was developed by the researcher itself to include various themes as per need of the objective and research questions. Generally, the perception, causes, signs & symptoms, breast self-examination, early detection, diagnosis, prevention, health care management and role of education were the basic themes of breast cancer

awareness were applied in FGD guidelines. The views on awareness of breast cancer by the adolescent girl students were collected in normal Nepali language and then rechecked the views, translated all in English language, verified the themes, analyzed and interpreted the themes manually to draw the conclusion.

## Results and Discussion

In this section, the researcher has tried to analyze the data qualitatively collected from the focus group discussion (FGD). The views on Self-awareness of Breast Cancer among the Adolescents Girl Students were analyzed by using various themes regarding of Breast Cancer.

**Perception:** It refers to personal views or ideas on the concerned subject matters (Kothari, 2007). The participants were discussed on the personal perception regarding of breast cancer. The secondary level girl students had expressed their views and ideas in the following ways.

*“At first, I have studied the concept of breast cancer in my text books during the regular class of community health and diseases topics and I thought it is a non-communicable and curable disease”* (Participant-1: FGD).

*“At first, I got the ideas on breast cancer from my own family when my grandmother was suffering from this disease and health problems when she was hospitalized and dislocated of her left breast by the doctors then I thought it is curable and now my grandmother is all right and under regular medical observation”* (Participant-2: FGD).

*“At first, I got the detail ideas on breast cancer from a Television Talk Show Program by the Doctors. They said it is a widespread women health problem and it can be seen all over the world. It is a non-communicable, genetic at somehow, irregular breastfeeding to the infants and curable disease if timely diagnosed”* (Participant-3: FGD).

*“At first, I got the detail ideas on breast cancer from my relatives and mother during their intense conversation on breast cancer. I thought it is a dangerous disease and the woman can check own self it by regular touching their breasts if there is any hardness or inner pain”* (Participant-4: FGD).

The above ideas, views and results as perception on breast cancer among the secondary level adolescent girls present positive knowledge and perception at somehow. Various researches and information stated the same or similar in the concerned. The medical sciences text books, community health text books, public health text books and other non-communicable diseases based reference books revealed the same or similar.

**Basic Causes of Breast cancer:** It refers to the origin or the reason of any problems. Health is a dynamic state (WHO, 1948) and it can be occurred by different physical, mental and environmental causes in human body. The participants involved in FGD had several ideas and views on the basic causes of breast cancer.

*“The mothers do not breast feed her new born baby properly, they are in more risk of breast cancer specially the mothers do not release the colostrum milk properly they are in more risk of breast cancer”* (Participant-1: FGD).

*“I think the male sexual partner who played more with the female sexual partner’s breasts during sexual activities is the main cause of breast cancer later”* (Participant-2: FGD).

*“I think the excess use of tobacco, alcohol and drugs during pregnancy and lactating period may be the main cause of breast cancer among the women and the mothers”* (Participant-3: FGD).

*“I have heard with my mother and grandmother that breast cancer can be transferred from one generation to another generation by genetic cause. Because my grandmother is still suffering from breast cancer and my mother is very much worried with it”* (Participant-4: FGD).

*“I think wearing of tight bra by the women may be the main cause of breast cancer. The women often wear the tight bra to keep her breast strong in all ages that may be the main cause of breast cancer. Our mothers and we are more in risk rather than our grandmothers because we use tight bra but our grandmothers did not use the bra to cover their breast tightly”* (Participant-5: FGD).

*“Our physic, food behavior, environmental effects may be the main cause of breast cancer. The unhygienic food, street food and junk foods may create the breast cancer similarly, over hot and cold climate is also the causes”* (Participant-6: FGD).

*“I had heard that there are so many dead cells and harmful cells are deposited inside of our breasts and develop the tumor that causes the breast cancer”* (Participant-7: FGD).

*“I had heard the conversation of our grandparents that it is the result of our bad works of our past life and the god punishes us by such types of critical health problems”* (Participant-8: FGD).

The above ideas, views, concept and results as basic causes on breast cancer among the secondary level adolescent girls seem diversity. Some of the causes are tested, scientific and verified while some are based on myth, misconception and ritual. Various researches, medical sciences text books, community health text books, public

health text books and other non-communicable diseases based reference books revealed the same or similar but some ideas was based on misconception. So, proper education, information and communication are needed in this concerned.

**Early Sign& symptoms:** It refers to the initially observed situation of any diseases or health problems in our body. Gradually we feel some abnormal and unnatural condition or changes in our body due to unhealthy behaviour. The sign and symptoms of breast cancer can vary from women to women due to their physic. The participants stated following ideas on breast cancer.

*“I have studied that the shape, size and colors of breasts are changed due to breast cancer”* (Participant-1: FGD).

*“At first, the nipples are swelled and bad smell comes due to the breast cancer”* (Participant-2: FGD).

*“Initially the breast seems harder than other times and rashes come out”* (Participant-3: FGD).

*“Some women do not feel any sign and symptoms initially but gradually they feel pain inside and outside of whole breast and nipple as well”* (Participant-4: FGD).

The above ideas, views, concept and results as initial sign and symptoms on breast cancer among the secondary level adolescent girls present theoretical knowledge and perception at somehow. They do not have their own live experience about it. Various researches and information stated the same or similar in the concerned. The medical sciences text books, Doctor’s observation, clinical features, community health text books, public health text books and other non-communicable diseases based reference books revealed the same or similar.

**Breast self-examination:** It’s the first technique of awareness on breast cancer. Generally the medical practitioners suggest all the women about the self-examination of breast and it helps the women to find out the early problems. The women can use the mirror and observe individually the size, shape, colour, disorder, swelling, rashes, water, milky or blood fluid from nipple etc. Similarly the women can practice of soft and smooth touch, press and circular motion with the fingers to cover entire breasts from top to bottom and side to side to detect uneven tissues, lumps, spots, pains and abnormal changes in breasts. Following ideas are stated the participants on breast self-examination.

*“I use this practice regularly and I have learnt it from my mother, she always forced me to do this practice because her mother (my grand-mother) is already suffering from this problem”* (Participant-1: FGD).

*“No, I do not do this, I do not think that I have such types of problems ever”* (Participant-2: FGD).

*“Initially, I had this practice but now I feel boring to do this regularly”* (Participant-3: FGD).

*“Initially, I felt shy to do this in front of mirror and now I am feeling well to do this practice as life style and precaution”* (Participant-4: FGD).

*“Well I am hearing this at first time and I do not have any ideas of breast self-examination practices. Can anybody give me the ideas of this practice properly?”* (Participant-5: FGD).

*“Who will provide us the techniques of breast self-examination? Our health education curriculum does not support us to do it properly”* (Participant-4: FGD).

*“How we can follow this practice regularly? Who will provide us the knowledge and ideas for appropriate practices? We need the help from you”* (Participant-6: FGD).

*“Sometimes I use this practice but I cannot detect the problems, it means I do not have any problems or I am not able detect it properly”* (Participant-7: FGD).

*“I feel I have some problems in my breast, the sizes of my breasts are not equal and I have an excessive pain during my menstrual periods and some watery liquid came out from my nipple, please suggest me for solution, I am scared what to do and where to go for solution”* (Participant-4: FGD).

The above ideas, views, concept and results are obvious among the adolescent girls but they need to understand properly about breast self-examination practice. While some are practicing but not properly, some are ignoring the practices and some have not ideas on what to do? How it can be practices properly? The secondary level adolescent girls present theoretical knowledge and perception at somehow. Various researches and information stated the same or similar in the concerned. The medical sciences text books, Doctor’s observation, clinical features, community health text books, public health text books and other non-communicable diseases based reference books revealed the same or similar.

**Early detection:** It refers to observed sign and symptoms of any health problems. Breast cancer has some certain sign and symptoms. It can be detected by medical personals or subjects own self at home. If the sign and symptoms are detected early, the chances for treatment and survival are may be better. The participants on early detection state following ideas.

*“I have the ideas of early detection techniques and I use it by myself regularly at my home” (Participant-1: FGD).*

*“I practice the breast examination by myself but could not detect any problems yet” (Participant-2: FGD).*

*“Last year I found some problems in my breast and conveyed to my mother about the problems and then my sent me to the hospital for that, I felt shy to show it and to say it with doctor, but by god grace not any signs were detected as breast cancer” (Participant-3: FGD).*

*“We do not detect any sign and symptoms initially but internally the breast cancer can be occurred” (Participant-4: FGD).*

The above ideas, views, concept and results as initial detection of sign and symptoms on breast cancer among the secondary level adolescent girls present theoretical knowledge and perception at somehow. They do not have their own live experience about it. Various researches and information stated the same or similar in the concerned. They must follow the self –examination practice to detect the problems initially for better treatment.

**Diagnosis:** It refers to medical or clinical techniques to find out the health problems or diseases. The patients visit to the doctors or hospital with various health disorders, Doctors examine clinically and diagnosis the problems scientifically. In the breast cancer problems, the doctors suggest some clinical test, screening test and Mammograms. Following ideas are stated the participants on diagnosis of breast cancer during discussion.

*“The doctors will diagnosis the problems when we will visit to the doctors” (Participant-1: FGD).*

*“At first, we visit to the doctors with our health problems and the doctors diagnosis the problems with the help of clinical test or self-experience” (Participant-2: FGD).*

*“I went to doctor’s clinic to show my breast problems with my mother and the doctor suggested me for video x-ray and some bio-chemical test for diagnosis” (Participant-3: FGD).*

*“We have not visited yet to the doctors for test of breast health problems” (Participant-4: FGD).*

The above ideas, views, concept and results on diagnosis of breast cancer problems among the adolescent girls were obvious at somehow but the diagnosis is the scientific process of identifying the health problems.

**Prevention:** It refers to early protection of expected health problems before its occurrence. The famous philosophy in health sciences “Prevention is better than the cure” is the universal truth. Everybody should follow the preventive measures of health behaviour. The breast cancer problems also follow the same rules such as healthy and nutritious food behaviour, sanitation and hygiene, regular exercises, regular medical check-up, breast self-examination, avoid smoking and alcohol, proper lactation to child etc. Following ideas are stated the participants on prevention of breast cancer during discussion.

*“We use regular food items and materials as available in our home but do not have any basic ideas for prescribed food items to prevent us from breast cancer”* (Participant-1: FGD).

*“I use more green vegetables, fresh fruits and milk to prevent from infectious diseases and breast cancer as well”* (Participant-2: FGD).

*“I go for walk daily in the morning and do some physical exercises to protect my health but I do not have any ideas to prevent breast cancer with specific exercises”* (Participant-3: FGD).

*“Sometimes I use cigarette and alcohol occasionally, is it harmful for my breast related health issues?”* (Participant-4: FGD)

*“Sometimes specially in bathing times I apply my fingers on the breasts to massage softly to keep my breast healthy”* (Participant-5: FGD).

The above ideas, views, concept and results on preventive measures of breast cancer among the secondary level adolescent girls present theoretical and practical knowledge and perception at somehow. The medical sciences text books, community health text books, public health text books and other reference books revealed the same or similar as preventive measures of health and diseases.

**Health care management:** It is the process of protection of health status from different environmental agents, life style and healthy behaviour. Generally, the people are itself responsible for proper health or weak health status. The proper care and manage of our health properly can protect from different health problems for a long periods. The participants on health care management state following ideas.

*“I use healthy food item as available at my home to care my breast health”* (Participant-1: FGD).

*“I go for regular health check-up, if I feel any disorders in my breast health”* (Participant-2: FGD).

*“I follow the proper breast health care management rules such as self-examination, exercise, massage etc.”* (Participant-3: FGD)

*“I do not have any ideas that how to care and manage my breasts and keep my breasts far from diseases or cancer”* (Participant-4: FGD).

The above ideas, views, concept and results on care and management of breast cancer among the secondary level adolescent girls present theoretical and practical knowledge and perception at somehow. The medical sciences text books, community health text books, public health text books and other reference books revealed the same or similar as care management of breast health and diseases.

**Live experience (self or family members):** The subjects with problems of breast cancer can be seen everywhere. Most of the cases can be seen in the urban areas while they are living with high sound medical facilities. But their life style, culture, modernization, less lactating mothers, less active life, high fast and junk food practices and high consumption of alcohol and tobacco are may be the main causes of breast cancer. Following ideas are stated the participants on live experience of breast cancer during discussion.

*“My grad mother is also suffering from breast cancer I cannot see her pain and stress and I always cry to see her with pain and pray with god for relief and cure”* (Participant-1: FGD).

*“My relative has the problem of breast cancer and she always go for cameo therapy and the doctors have suggested for surgery and dislocate the breast”* (Participant-2: FGD).

*“We do not have any live experience of breast cancer related issues but we have seen the women with breast cancer in the hospitals”* (Participant-3: FGD).

The above ideas, views, concept and results on live experience of breast cancer among the secondary level adolescent girls present theoretical and observational knowledge and perception at somehow. They do not have their own live experience about it. Various researches and information stated the same or similar in the concerned. The medical sciences and Doctor’s observation revealed the same or similar.

**Role of education in awareness:** Education is the main way of awareness in every aspects of life. It plays significant role in development. Most of the school students get information and awareness from the courses and the curriculum during teaching learning activities. Similarly, the students get more information on the health awareness as well as the breast cancer awareness through education in their early ages

and educational periods. Following ideas are stated the participants in role of education on breast cancer awareness during discussion.

*“I have studied that the breast cancer is a common disease among the mothers in different ages and it can be cured”* (Participant-1: FGD).

*“Our teacher said that we should be careful on our personal hygiene and sanitation during menstrual periods”* (Participant-2: FGD).

*“I have learnt that we can examine our breasts in terms of size, shape, color, rashes, spots, lumps and fluids as normal and abnormal conditions”* (Participant-3: FGD).

*“We should follow the rules of prevention of every health aspects mentioned in our text books and probably we have tried except few cases”* (Participant-4: FGD).

*“Our health education teachers always encourage us about health safety & care and suggest us that we should go to the doctors if we feel health uncomfortable in any time”* (Participant-5: FGD).

The above ideas, views, concept and results on the role of education in awareness of breast cancer among the secondary level adolescent girls present theoretical knowledge and perception at somehow. Various researches and information stated the education is the power of knowledge. Different text books, courses, curriculum, community health text books, public health text books, other diseases based reference books and teacher’s advice also play significant role in basic awareness.

### **Conclusion**

As conclusion of the study, the secondary level adolescent girls have good knowledge and perception on breast cancer. Their concepts on basic causes of breast cancer seem diversity. Some of the causes are tested, scientific and verified while some are based on myth, misconception and ritual. They had good knowledge on initial sign and symptoms on breast cancer but they do not have their own live experience about it. They have good theoretical knowledge on breast self-examination practices but they need to understand properly about breast self-examination practice. While some are practicing but not properly, some are ignoring the practices and some have not ideas on what, why and how it can be practices properly. The views on initial detection of sign and symptoms seem low because they do not have their own live experience about it. They are still ready to prevent the breast cancer through awareness. They can care and manage of breast cancer properly by the knowledge and awareness. Few have faced the live experience of breast cancer in their family but they do not have their own live experience during the study. They revealed that the education play significant role in

awareness of breast cancer. In short, proper health education and regular awareness program is must to prevent the secondary level adolescent girls from early breast cancer.

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