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**A COMMUNITY BASED STUDY ON "PREVALENCE
AND RISK FACTORS OF BREAST
LUMP AMONG REPRODUCTIVE AGED WOMEN OF
JALPAPUR V.D.C. OF SUNSARI DISTRICT, 2003"**

**SUBMITTED
TO THE
NEPAL HEALTH RESEARCH COUNCIL
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It is my proud privilege to express my profound sense of gratitude and sincere thanks to the **Nepal Health Research Council and back supported funding organizations** for their support for my study which has been completed with logical and fruitful conclusion.

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Place: **B.P.K.I.H.S., Dharan**

Date: **Jan 2004**

Tara Shah

Abstract:

A descriptive exploratory study on the prevalence of breast lump and its associated risk factors among reproductive aged group. A household survey was done. All women (15 to 49 years) of Jalpapur were enrolled in the study. Training program was organized to the co-workers to develop skill on physical examination. Pre-testing of the tool was done in Dharan Municipality of Sunsari district. It is near by area from Jalpapur for feasibility and practicability of the study. Data collection procedure was started after validation and pre-testing of the tools. Prevalence was drawn on the basis of physical examination of breast in sampled population. Risk factors were calculated on the basis of responses given by the participants and obesity was calculated by the body mass index (BMI) calculation technique provided by World Health Organization. Ethical consideration was kept in mind such, as formal consent was obtained from authorized person of concerned VDC. Informed consent was taken from the participants, prior to data collection. Participants who refused to participate in the study were excluded from it.

Using descriptive and inferential statistics were analyzed and interpret of collected data. Finally compiling of report and dissemination of finding was done.

S.No.	Contents	Page No.
1.	Introduction	1-3
	Introduction	1
	Study site and its justification	2
	Statement of the problem	2
	Objectives	2
	Study Variables	3
	Research Hypothesis	3
2.	Literature Review	4-7
3.	Research Design and Methodology	8-11
	Research Method and type	8
	Study site and its justification	8
	Target Population & Sample Population	8
	Pre-testing the data collection tools	9
	Validity and reliability of research	10
	Biases	10
	Limitation of study	10
	Flowchart	11
4.	Data analysis and Interpretation	12-38
5.	Discussion	39-43
6.	Conclusion, Implication & Recommendation	44
	Reference	
	Appendices:	
I.	English version of Tools	
II.	Nepali version of Tools	
III.	Guide to assist women for breast self-examination	
iv.	Guide to perform physical examination of breast	
V.	Guidelines used for age verification 15 to 49 years	
VI.	Modified socio-economic status scale	

S. No.	List of Tables	Page No.
1.	Distribution according to castes	12
2.	Distribution according to ward no. in Jalapur VDC	13
3.	Distribution according to age group	14
4.	Distribution according to educational status	15
5.	Distribution according to occupational status	16
6.	Distribution according to last menstrual period	18
7.	Distribution according to Socio-economic status	19
8.	Distribution according to their pregnancy status	20
9.	Distribution according to past history of breast feeding	20
10.	Distribution according to duration of appearance of breast lump	22
11.	Distribution according to feeling increasing size of breast lump	23
12.	Distribution according to identification of breast lump	23
13.	Distribution according to treatment of breast lump	24
14.	Distribution according to Self-breast examination (BSE)	24
15.	Distribution according to findings of inspection of breast	25
16.	Distribution according to lump present in the breasts	26
17.	Distribution according to prevalence of no. of breasts lump	27
18.	Distribution according to location of lump in different quadrants	28
19.	Distribution according to shape of the breast lump	29
20.	Distribution according to consistency of the breast lump	30
21.	Distribution according to tenderness of breast lump	30
22.	Distribution according to movability of the breast lump	31
23.	Distribution according to size of the breast lump	31
24.	Distribution according to discharge on pressing from the nipple	32
25.	Distribution according to axillaries lymph nodes present.	32

S. No.	List of Tables	Page No.
26.	Distribution according to age of first menstruation	33
27.	Distribution according to Family history of breast cancer	33
28.	Distribution according to their age of first childbirth	34
29.	Distribution according to Biopsy done in the past	34
30.	Distribution according to use of family planning Pills/hormonal therapy	35
31.	Distribution according to Duration of family planning pills used	35
32.	Distribution according to Obesity	36
33.	Distribution according to habit of drinking coffee/tea	36
34.	Distribution according to eating habit of fried food	37
35.	Distribution according to types of fried food used	38
36.	Distribution according to taking frequency of fried food	38

S. No.	Figures	Page No.
1.	Distribution according to Religion of respondents	17
2.	Distribution according to Socio-economic status	19
3.	Distribution according to self-reported cases	21
4.	Distribution according to breast lump	26
5.	Distribution according to Numbers of breast lump	27
6.	Different shape of breast lumps	29
7.	Distribution according to the habit of taking tea	37

CHAPTER- I

Introduction:

Breast lump is localized swelling, protuberance or mass in the breast. It is one of the prime indicators of breast disorders. A lump might be a cyst, a benign tumor or a malignancy. The majority of these lumps will be nothing to worry about; it is only a small proportion of breast lumps that are malignant i.e. around 20-30%.¹

But the clinical signs of breast cancer are not easily distinguished from those of benign breast disease. A lump is usually a size of a pea before a skilled examiner can detect it. Any abnormal findings should be investigated further. Breast cancer is leading cancer among women worldwide, with more than 540, 000 new cases occurring each year. Over 40% of these cases are in the developing countries.² The incidence of breast cancer is rising all over the world.³ In south Asia there is significant increase in incidence of breast cancer among the women of reproductive age group.⁴

Since breast cancer prevention is still theoretical, efforts have focused on early detection. Breast cancer is more easily treated and often curable if it is found early. Self- breast examination and screening mammography combined with clinical breast examination is the most effective detection method. It is estimated that 50% of more or all breast cancer clients could obtain a prolongation of survival by increasing public awareness, early detection and efficient treatment. This can be achieved by screening.⁴

Screening is search for recognized disease by means of rapidly applied examinations and tests in apparently healthy women.⁶ Breast cancer has a long natural history, where it usually develops an early stage of lump formation to progression into malignant condition (2 ½ to 17 yrs.).⁷ Such a long natural history makes carcinoma breast an ideal disease for applying screening programme. Mainly two types of breast screening tests are available viz. Physical examination of the breast for detection of lump and mammography. Physical examination can either be done by the female herself (Breast self examination or BSE) or by the trained health professionals. Mammography is more accurate method for

screening breast cancer, but it is costly and less available particularly in the developing countries. It may not be feasible to use everywhere in Nepal, hence physical examination is the best way for screening for breast cancer.

Need and Justification of the Study.

Professional organizations recommend the practice of monthly breast self-examination by a woman and that every woman should get her breasts examined by a trained health care provider every three years up to the age of 40 years and annually thereafter. It is not practiced in the developing countries, although the risk of breast cancer is the same due to ignorance of people and lack of trained health manpower.

The clinical examinations of the breast and breast self-examination have been advocated for many years as the first screening modalities for detection of the breast cancer. The recent advances in mammography are considered as very accurate in diagnosis of the stages of breast cancer, but due to its side effects or radiation hazards people avoid to undergo this procedure even in the developed countries. On the other hand in the developing countries due to lack of facilities/resources, general public cannot avail these facilities that easily.

This is a needy community because it is a remote with low literacy, low socio-economic and lack of awareness about breast self-examination. Majority of the population in this village are Muslims. Most of them are using Hormonal contraceptive devices like Depo-provera and oral pills, because of permanent family planning is not acceptable for them. This is considered as backward or/and vulnerable area of Sunsari district. That's why the investigators select this site.

Statement of the Problem:

A community based study on "Prevalence and risk factors of breast lump among reproductive aged women."

Objectives:

General:

To identify the burden of breast lump in selected age group and associated risk factors of breast cancer in breast lump cases.

Specific:

Chapter- II

- To estimate 15 to 49 years aged women population in Jalpapur V.D.C.
- To highlight self- reported cases of breast lump.
- To conduct physical examination of breast by the investigators.
- To ascertain the prevalence of breast lump among sampled population.
- To identify the distribution of associated risk factors in the lump cases.

Operational Definitions:

1. Breast Lump:

Breast lump include any extra growth or mass in the breast, ascertained by the investigator and co-workers during physical examination of breast.

2. Breast Self-Examination:

When the Participants will be conducting examination on their own, considered as breast self-examination in this study.

3. Physical Examination of Breast:

The term physical examination of breast is refers to conduct examination of breast by the investigator and co-workers.

Study Variables:

Age, Education, Religion, Marital status, Socio-economic status, Gravidity, Menstrual status, Hormonal therapy, Obesity, etc.

Research Hypothesis:

1. There is a relationship between age and prevalence of breast lump.

Chapter- II

Literature Review:

A disorder in which palpable lump(s) are felt in the tissue of one or both breasts. Such breast lumps may be either benign or malignant. There are many causes for lumps in the breast. These range from normal physiologic changes to abnormal breast diseases. Some lumps are age dependent. It is also important to remember that hormonal changes just prior to menstruation may cause a lumpy or glandular feeling to the breast tissue. The discovery of a lump in the breast usually brings the thought of cancer immediately to mind. However, it is important to remember that 80 to 85 percent of breast lumps are benign, especially in women less than age 40 to 50. Benign causes include fibro- adenoma, fat necrosis and breast abscess. The incidence is estimated at over 60% of all women. It is common in women aged 30 to 50 and is rare in postmenopausal women. The incidence is lower in women taking birth control pills. Risk factors may include heredity and diet (Excessive dietary fat, caffeine intake). Recent statistics say that 1 in 8 or 9 American women will develop breast cancer at some point in her life. Risk increases exponentially after age 30. The average age of women diagnosed with breast cancer is 60. Other risk factors include: family history of breast cancer, particularly in mother or siblings, menstrual history consistent with early menarche (i. e. before 12 years) or late menopause (after age 50), no pregnancies or first pregnancy after the age 40; and radiation exposure. Although the majority of breast cancers occur in women who are in their 30s or 40s. This is rare; in these cases, the cancers may have a strong genetic link.⁷

Breast health surveys (1996) suggested a lump in the breast was the most well-known breast cancer symptom. More than 85% of women surveyed were able to nominate a lump as being possibly related to breast cancer. Cancer is diagnosed in over a quarter of a million people in the U.K. each year, of which there are over 35,000 new cases of female breast cancer. It is the commonest malignancy to

affect women, equating to around 1-2 cases per 2000 population. Around 3-5% of cases are diagnosed before 40 years of age, around 2% before 35 years .⁶

A retrospective cohort study of participants in the breast cancer-screening program in Japan estimated the risks of cancers the breast and other sites associated with benign breast disease (BBD). Women with BBD were at significantly increased risk of breast cancer. The magnitude of breast cancer risk varied according to histo-pathological type. We compared this result with other data reported previously from western countries and Japan. In this study to investigate the risk of breast cancer development in women with BBD. 387 screen-detected BBD women and 1,489 normal women, taken from participants in the breast cancer screening during 1978-1986, were followed through 1991. While 2,811 person- years in the BBD group and 11,018 person- years in the normal group were accumulated, 5 women in the BBD group and 6 women in the normal group developed breast cancer. Using the Mantel- Haenszed method, relative risks (RR) were estimated for all women with BBD and women in some BBD types. Significantly elevated risk of breast cancer was observed in all women with BBD (RR= 3.26, 95% confidence interval (CI) 1.08- 9.83).¹⁹

The study reported that there is similarities of background characteristics between proliferative BBD (including AH) and breast cancer.²⁰

Breast cancer is the second leading cause of death from cancer for women in the United States (Forte, 1995) ¹⁰ Its incidence has been steadily rising at an annual rate of 1 percent during the past 50 years in United States (Harvey et al, 1984).⁸

Breast cancer is the fifth most common cancer in India. Exact figures regarding its incidence and mortality are not available. According to the population based tumor registry cell of the I.C.M.R. (Indian Council of Medical Research), breast cancer constitutes about 12 percent of all cancers detected in Delhi and about 24 percent of all cancer in women.⁹ An increase in the age-adjusted incidence rate of breast cancer has also been reported in women of Bombay (India) from 17.9 to

24.9 per 1,00,000 population between 1965 and 1985. The commonest age group affected by breast cancer is 40 to 45 years (Yeole, et al; 1990).¹⁰

Breast cancer is often associated with a positive family history. Unmarried women tend to have more breast tumors than married ones. Early menarche and late menopause are established risk factors for breast cancer. Estrogens, as well as progesterone are also important factors in increasing its risk. Evidence of prior breast biopsy for benign breast disease is associated with an increased risk of breast cancer. High fatty diet and obesity are also linked with its risk. Breast cancer is common in higher socio-economic groups, other factors like radiation and oral contraceptive are considered as risk factors of breast cancer (Park, 2001).⁶ In contrast of above-mentioned risk factors some studies have indicated that lower Socio-Economic Status (SES) is associated with higher rates of breast cancer and its mortality. Studies have found that people with lower SES are more likely to have cancer at the advanced stage.¹¹

Breast cancer has a long natural history. Carcinoma of the breast is not a pathologic entity that develops overnight. It starts with a single cell, which divides or doubles within 30 to 210 days. It takes approximately 16 doubling times for a carcinoma to become 1 cm or greater in size. Assuming that it takes 30 days for each doubling time, it would take minimum of two and half years for a carcinoma to become palpable. If the doubling time were 210 days, it would take up to 17 years before which carcinoma would be palpable (Seltzer, et al; 1992).⁷

Breast Self-Examination (BSE) has been proposed as a means of reducing the breast cancer problem. Although it is reported to be not as effective as mammography or examination by a trained physician, it may be a valuable approach, particularly in countries that cannot afford sophisticated screening services for entire female population at risk. BSE is simple, inexpensive, non-invasive and non-hazardous method.¹² WHO expert committee recommended that breast self-examination is of interest for the early detection of breast cancer, especially in areas where mammography and regular physical examination of the breasts are not practicable as public health policies.¹³

Devi (1998) utilized "Twelve Stroke" clock method in her study on breast self-examination. In her method, the breast is felt with the fingers along an imaginary twelve divisions of the clock. It minimizes the possibility of 'cutting corners', i.e. It allows little chances of missing any lump of the breast.¹⁴

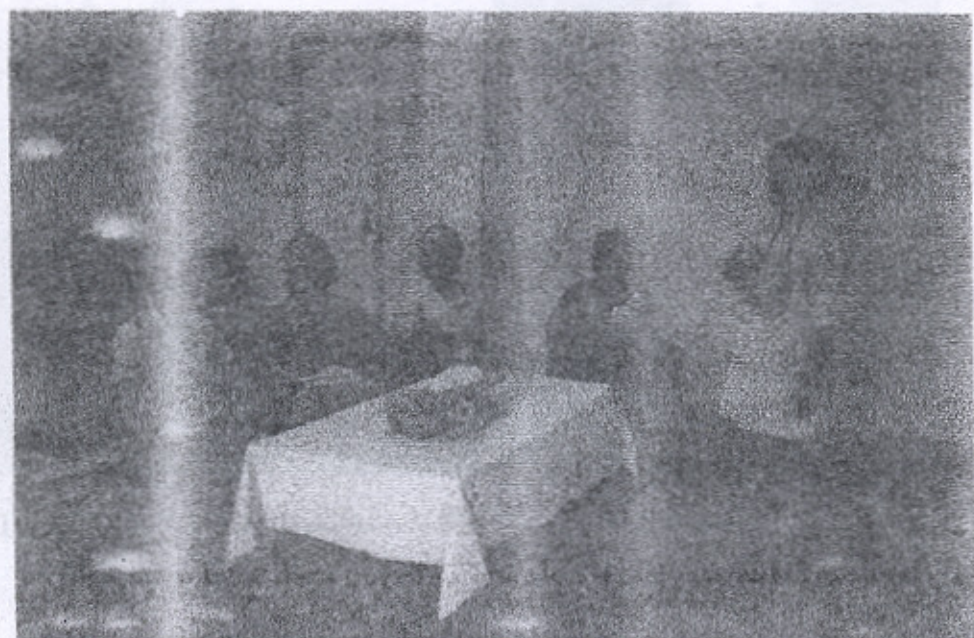
Screening is defined as the search for unrecognized disease or detection by means of rapidly applied tests, examinations or other procedures in apparently healthy individuals the 'lead time' is the advantage gained by screening that is the period between diagnosis by early detection and diagnosis by other means. The usual outcome of disease is considerably improved, when the disease is detected at the earliest possible moment.⁶

The success of breast screening services hinge to a large extent on the attainment and maintenance of high levels of uptake and compliance by the target population (Vaile, et al; 1993).³

The key features of successful community organization projects on breast cancer screening promotional activity were a thorough understanding of the community, active participation by members of the community, use of existing community structures and involvement of all relevant local constituencies.¹⁵ Jatoi (2002) stated that clinical breast examination readily detects cancers larger than 1 cm. Additionally, in U.S. the Breast Cancer Detection and Demonstration Project (BCDDP) studied that 39% of mammography detected cancers smaller than 1 cm were also detectable by clinical breast examination.¹⁶

The best time for breast examination is after few days of menstrual period a suggested by Phipps, et al (1979).¹⁷

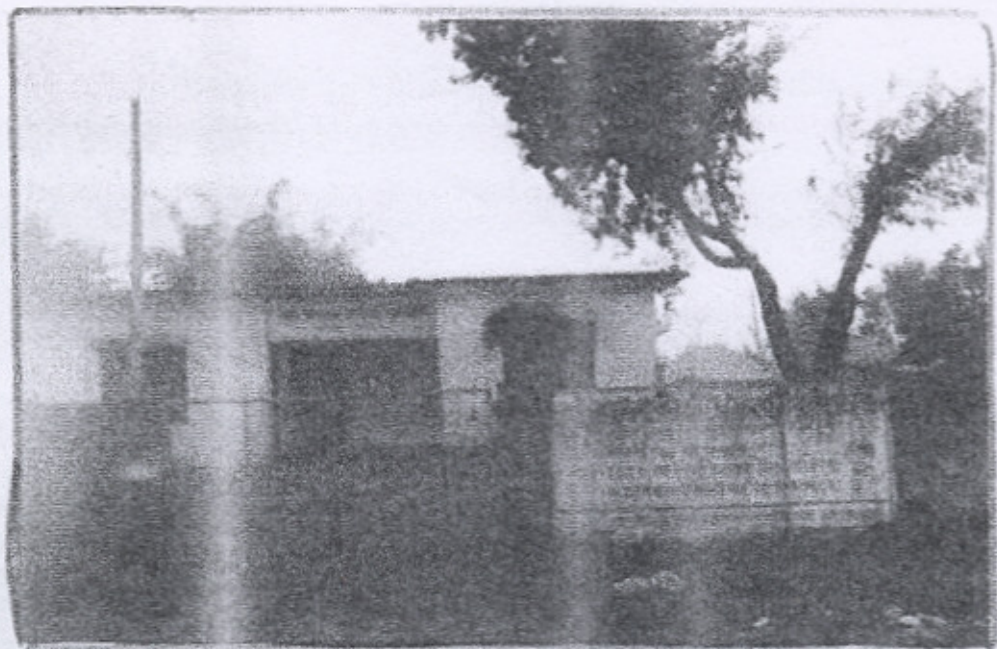
A GLIMPS OF VISIT TO JALPAPUR, V.D.C., SUNSARI DISTRICT



CONDUCTING TRAINING TO THE CO-WORKERS



THE TEAM ON THE WAY TO JALPAPUR, V.D.C.

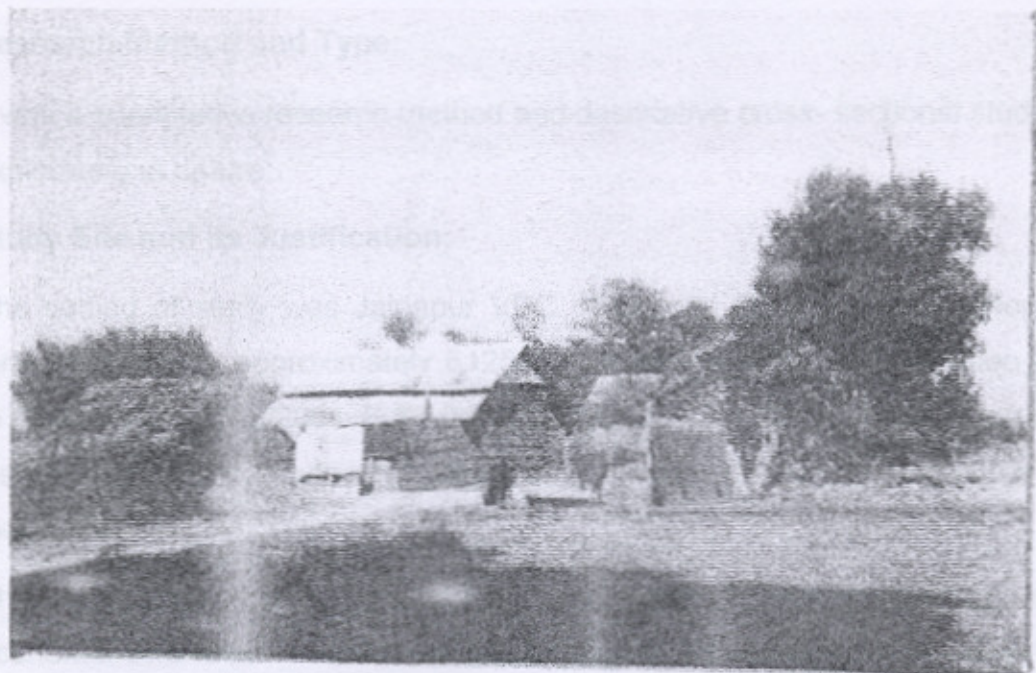


VILLAGE DEVELOPMENT COMMITTEE OFFICE, JALPAPUR



SUB-HEALTHPOST, JALPAPUR

WOMEN OF JALPAPUR



ONE OF THE HOUSES OF JALPAPUR



WOMEN OF JALPAPUR

Chapter- III

RESEARCH DESIGN AND METHODOLOGY:

Research Method and Type:

It was a quantitative research method and descriptive cross- sectional study exploratory in nature.

Study Site and its Justification:

The setting of study was Jalapur VDC of Sunsari District, Eastern Nepal. It is a terai area having approximately 6125 populations (Estimated population according to Fiscal year 2060/2061 B.S. OR 2003/2004 A.D.). The village is situated at a distance of 50 km south and west from Dharan and 10 km south from Ineruwa municipality.

This is a needy community because it is a remote with low literacy, low socio-economic and lack of awareness about breast self- examination. Majority of the population in this village are Muslims. Most of them are using Hormonal contraceptive devices like Depo- provera and oral pills, because of permanent family planning is not acceptable for them. This is considered as backward or/and vulnerable area of Sunsari district. That's why the investigators select this site.

Target Population:

Target population of the study was all women 15- 49 years of age, irrespective of their education, occupation, income, religion, marital status, residing at Jalapur VDC. Population enumeration technique was used.

Sample Population:

Registering all women in the age group of 15 to 49 years, who were physically present at home were enrolled in the study, did a house-to-house survey. If any selected subject refused to participate in the study, she was accordingly excluded from the study. Houses found locked were visited thrice for three consecutive days after that If couldn't be contacted any family members then locked houses were excluded from this study. Pregnant and lactating mothers were also excluded from the study.

Sample Size:

Sample size was 541, which represent 64% of population. Estimated population of 15 to 49 years according to 2060/2061 data is 1374, out of that 262 is estimated pregnancy and near about same numbers are lactating also (Total=524 were pregnant & lactating). Coverage of more than 10% is considered as adequate sample in population based study.

Sampling Frame:

Before started to collect data, investigator and co- workers met local leaders for permission. The investigators and co- workers were done a house-to-house survey. First of all, identify the eligible subjects to be included in the study. Population enumeration was done, so sampling frame was not needed.

Tools and Techniques for Data Collection:

Interview schedule and breast examination checklist was prepared by the investigators and consulted with experts of concerned departments. Risk assessment tool given by cancer line U.K. was adopted to identify the associated risk factors of breast cancer in this study. Training on technique of physical examination of breast was given to the co- workers by the investigators. The data was collected in Jalpapur VDC, during the month of September & October 2003. Prior to the data collection, permission to conduct a study was obtained from the head of BPKHS, Secretary of village Development Committee (VDC) of Jalpapur. Data collection was done through house-to-house survey.

The investigator and co-workers were interviewed the respondents to obtain the socio- demographic, obstetric data and record it. The respondents were taught about the importance of breast self- examination (BSE), best time of breast examination every month (i.e. 7- 10 days after menstruation). "Twelve stroke" method was utilized for physical examination of breast; findings were recorded in proforma.

Pre-testing the Data Collection Tools:

A pre-testing of the tool was undertaken with the following objectives: -

1. To check the feasibility and practicability of the study.
2. To check the language and adequacy of contents in the tools.
3. To estimate time required administering the tools.

Pre-testing of tools was done in Dharan Municipality of Sunsari district. Breast Cancer Screening Camp was organized on 2060.1.20 BS (3rd May 2003) total 86 women were enrolled. It was conducted to test the feasibility, practicability, language, content and time required for registration, interview and examination of breasts in non-lump and lump cases.

Minor changes were made in language of the tool. Investigator and co-workers felt that simple local spoken Nepali language was better than English. Married women easily agreed for breast examination during the screening camp. One multiple and 5 single Breasts Lump was found among the 86 subjects (Prevalence= 6.9%).

Total time spent on registration of a woman was 5 minutes, for the interview 5 minutes for both lump and non-lump subjects. The time required for breast examination in non-lump cases was 15 minutes and in lump cases was 20 minutes. On an average 25 minutes were required to be spent for interviewing/examining non-lump cases and 30 minutes for lump cases.

Validity and Reliability of the Research:

Content validity of the research maintained by distributed tools to the experts of surgery, and community health nursing department of BPKIHS. The investigators were incorporated the suggestions given by the experts in the tools before data collection.

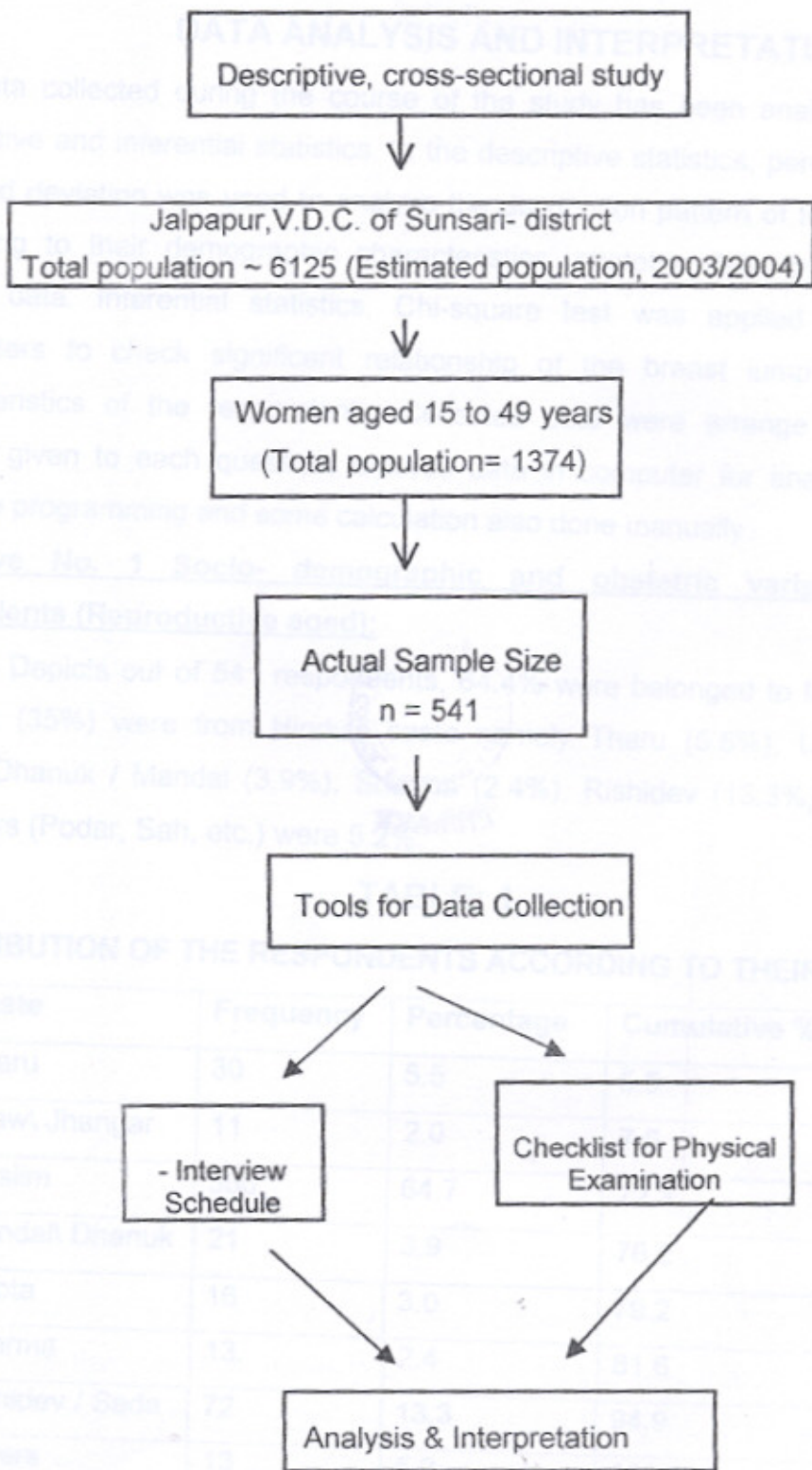
Biases:

Examination findings biases were minimized by giving planned training to the co-workers on techniques of examination. Skill test was done by repeated re-demonstration of procedure by co-workers on lump located dummy, which helped to check the proficiency of skill. Larger Number of Sample was reduced sampling error (Bias).

Limitation of the Study:

This study was limited to only those women who were in the age group between 15-49 years and residing at Jalapur VDC, Sunsari irrespective of their education, occupation, income, religion, marital status and Patho-physiological conditions.

Figure 1: Flow Chart of Methodology for 'Prevalence of Breast Lump' among Women aged 15 to 49 years



DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR CASTES

Caste	Frequency	Percentage	Cumulative %
Tharu	30	5.5	
Urwa, Jhangar	11	2.0	
Muslim	64	7.7	
Mandal / Dhanuk	21	3.9	
Gupta	16	3.0	
Sharma	13	2.4	
Rahdev / Bada	72	13.3	
Others	13	2.4	

CHAPTER- IV

DATA ANALYSIS AND INTERPRETATION:

The data collected during the course of the study has been analyzed by using, descriptive and inferential statistics. In the descriptive statistics, percentage, mean, standard deviation was used to analyze the distribution pattern of the respondents according to their demographic characteristics, obstetric data and breast lump related data. Inferential statistics, Chi-square test was applied over different parameters to check significant relationship of the breast lump with different characteristics of the respondents. Collected data were arranged serially, code number given to each question, entered data in computer for analysis in SPSS software programming and some calculation also done manually.

Objective No. 1 Socio- demographic and obstetric variables of the respondents (Reproductive aged):

Table: 1 Depicts out of 541 respondents, 64.4% were belonged to Muslim' castes and rest (35%) were from Hindu's caste namely Tharu (5.5%), Uraw/ Jhangar (2.0%), Dhanuk / Mandal (3.9%), Sharma (2.4%), Rishidev (13.3%), Gupta (3%) and others (Podar, Sah, etc.) were 5.2%.

TABLE: 1

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR CASTES:

Caste	Frequency	Percentage	Cumulative %
Tharu	30	5.5	5.5
Uraw\ Jhangar	11	2.0	7.6
Muslim	350	64.7	72.3
Mandal\ Dhanuk	21	3.9	76.2
Gupta	16	3.0	79.2
Sharma	13	2.4	81.6
Rishidev / Sada	72	13.3	94.9
Others	13	5.2	100.0

Table 2 shows the residential ward Number of the respondents. The maximum participants of about 19.4% belonged to ward No. 3 and about 4.6% of them belong to ward No. 9.

TABLE: 2

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR RESIDENTIAL WARD NUMBERS OF JALPAPUR VDC:

Residential Wards	Frequency	Percentage	Cumulative %
Ward = 1	47	8.7	8.7
Ward = 2	33	6.1	14.8
Ward = 3	105	19.4	34.2
Ward = 4	72	13.3	47.5
Ward = 5	62	11.5	59.0
Ward = 6	66	12.2	71.2
Ward = 7	68	12.6	83.7
Ward = 8	63	11.6	95.4
Ward = 9	25	4.6	100.0
Total	541	100.0	

Mean age with Standard Deviation $\bar{x} = 31.62 \pm 9.27$ years

Table 3 shows the age pattern of the respondents. About 1/5th of the respondents' falls in the age group of 40-44 years that is 19.8% and the 10.2% respondents belonged to 45-49 years of age. No case found with breast lump in 15 to 19 years. Mean age of the respondents was 31.62 ± 9.27 years. Pearson chi-square test was applied which shows corrected $X^2=6.8$, d.f. = 5, $P= 0.23$; it is not significant.

TABLE: 3

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR AGE GROUP:

Age Group	Lump cases		Non-lump cases		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
15-19	0	0	72	13.3	72	13.3
20-24	3	13.6	54	10.4	57	10.5
25-29	2	9.1	73	14.1	75	13.9
30-34	3	13.6	83	10.0	86	15.9
35-39	2	9.1	87	16.8	89	16.5
40-44	8	36.4	99	19.1	107	19.8
45-49	4	18.2	51	9.1	55	10.2
Total	22	100	519	100	541	100
Mean age with Standard Deviation $x = 31.62 \pm 9.27$ years						

The table 4 shows educational status of the respondents' majority of the respondents (83.4%) was illiterate. While 2.5% respondents were educated up to primary, 2.8% completed secondary level of education and only 1.5% of respondents were completed their education up to metric (S.L.C.) and above. No one was professional worker.

TABLE: 4

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR EDUCATIONAL STATUS:

Educational Status	Frequency	Percentage	Cumulative %
Illiterate	451	83.4	83.4
Literate	54	10.0	93.3
Primary Level	13	2.4	95.7
Secondary Level	15	2.8	98.5
SLC and Above	8	1.5	100.0
Total	541	100.0	

The table 5 shows occupational status of the respondents. Most of the respondents 397 (73.4%) were involved in household work as a housewife. Out of remaining 26.6% of respondents, 1.7% was involved in business, 0.9% in service and 10% were laborers, 9.8% in agriculture, and 2.4% were student, 1.8% involved in politics and social work.

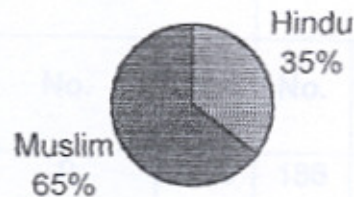
TABLE: 5**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR OCCUPATIONAL STATUS:**

Occupational Status	Frequency	Percentage	Cumulative %
House Wife	397	73.4	73.4
Business	9	1.7	75.0
Service	5	0.9	76.0
Labour	54	10.0	86.0
Agriculture	53	9.8	95.7
Student	13	2.4	98.2
Politics & Social Works	10	1.8	100.0
Total	541	100.0	

Figure: 1 shows that the majority of the respondents 64.7% were belonged to the Muslim religion and remaining 35.3% respondents were from the Hindu religion. Presence lump among the participants according to their religion was significantly differed, where $X^2 = 4.5$, d.f. = 1, $P = < 0.04$.

FIGURE: 1

Religion of the Respondents



The table 6 shows that duration of last menstrual period on the day of examination of the respondents. Some (35.8%) of the respondents had their last menstrual period less than seven days. Few (12.3%) respondents were between 7-10 days of last menstruation, one fifth of the respondents (20%) were between 11-21 days of last menstrual period, 118 (22.7%) of the respondents had last menstrual period in between 22-30 days prior to the examination and about 47 (9.1%) of the respondents had their last menstrual period was >30 days prior to the interview and examination of breast.

TABLE: 6

**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR
LAST MENSTRUAL PERIOD ON THE DAY OF BREAST
EXAMINATION**

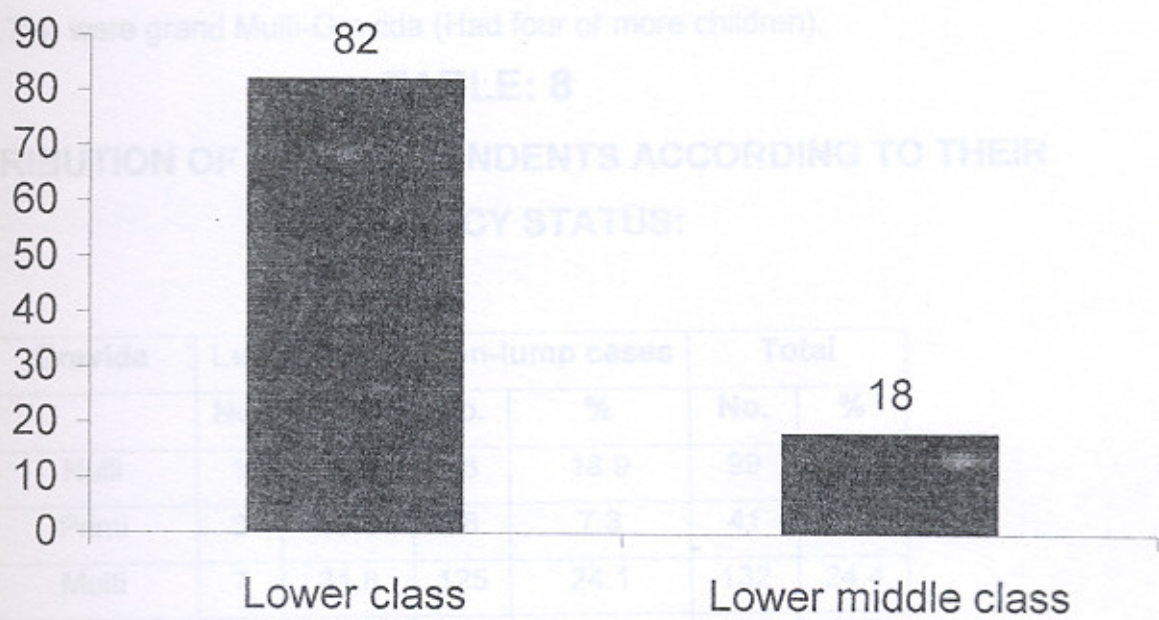
Days of Menstruation	Lump cases		Non-lump cases		Total	
	No.	%	No.	%	No.	%
Less than 7 days	9	40.9	186	35.8	195	36.0
7 to 10 days	2	9.1	64	12.3	66	12.2
11 to 21 days	6	27.3	104	20.0	110	20.3
22 to 30 days	1	4.5	118	22.7	119	22.0
More than 30 days	4	18.3	47	9.1	51	9.4
Total	22	100	519	100	541	100

TABLE: 7

**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR
SOCIO-ECONOMIC STATUS SCALE:**

Socio-economic Class	Lump cases	Non-lump cases	Total
----------------------	------------	----------------	-------

The figure 2 & Table 7 shows the socioeconomic class of the respondents. The socioeconomic class of the respondents was calculated on the basis of education and occupation of the head of the family and the per capita income months of the family members according to modified socioeconomic scale of Kuppuswamy (Mahajan 1995). According to this scale most of the respondents (81.8%) belonged to lower socioeconomic class whereas only 18.2% respondents belonged to the lower middle class. No respondent fell in upper class and middle class according to this scale.

FIGURE: 2**Percentage Distribution of the Respondents as per Socioeconomic Class****TABLE: 7****DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR SOCIO-ECONOMIC STATUS SCALE:**

Socio- economic Class	Lump cases		Non-lump cases		Total	
	No.	%	No.	%	No.	%
Lower Middle Class	4	18.2	93	17.9	97	17.9
Lower class	18	81.8	426	82.8	444	82.1
Total	22	100	519	100	541	100

Table 8 shows the pregnancy status of the respondents, 18.3% respondents were Nulligravida (No child), 41 (7.6%) of the respondents were Primi Gravida (Had one child), 132 (24.4%) respondents were Multi-Gravida (Had two to three children) and 269 (49.7%) were grand Multi-Gravida (Had four or more children).

TABLE: 8

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR PREGNANCY STATUS:

Gravida	Lump cases		Non-lump cases		Total	
	No.	%	No.	%	No.	%
Nulli	1	4.5	98	18.9	99	18.3
Primi	3	13.6	38	7.3	41	7.6
Multi	7	31.8	125	24.1	132	24.4
Grand- multi	11	50.0	258	49.7	269	49.7
Total	22	100.0	519	100.0	541	100.0

Table 9 shows the past history of breast-feeding. All most all respondents 86.4% had past history of breast- feeding whereas 13.6% of respondents had no history of breast-feeding.

TABLE: 9

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR PAST HISTORY OF BREAST FEEDING:

Breast Feeding	Lump cases		Non-lump cases		Total	
	No.	%	No.	%	No.	%
Yes	18	81.8	346	66.7	364	67.3
No	4	18.2	173	33.3	177	32.7
Total	22	100.0	519	100.0	541	100.0

Figure 3 shows the self-reported cases of the breast lump. Out of 541 respondents total number of self - reported cases of breast lump was 22 (4.1%) and 519 (95.9%) respondents had no lump.

Objective No. 2 Self- reported cases of breast lump

FIGURE: 3

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO DURATION OF APPEARANCE OF BREAST LUMP:

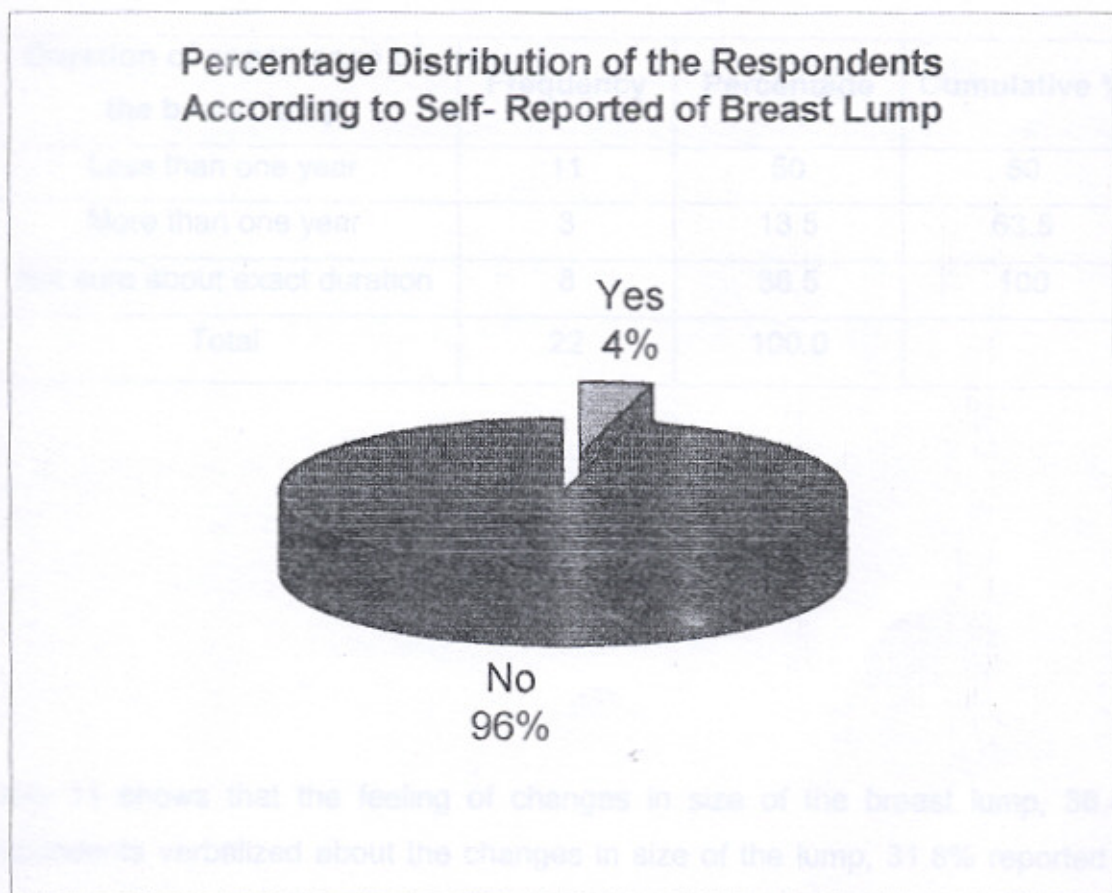


Table 10 shows duration of appearance of the breast lump. Out of 22 self reported cases, fifty percent respondents had lump for less than 1 year, 13.5% had breast lump more than 1 year of duration and 36.4% had not certain about the accurate date of appearance of the breast lump.

TABLE: 10

**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO
DURATION OF APPEARANCE OF BREAST LUMP:**

Duration of appearance of the breast lump	Frequency	Percentage	Cumulative %
Less than one year	11	50	50
More than one year	3	13.5	63.5
Not sure about exact duration	8	36.5	100
Total	22	100.0	

Table 11 shows that the feeling of changes in size of the breast lump, 36.4% respondents verbalized about the changes in size of the lump, 31.8% reported no changes occur in the shape and size of the lump and 31.8% respondents were not sure about the change in the size of the breast lump.

TABLE: 11

**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO FEELING
OF INCREASING SIZE OF THE BREAST LUMP:**

Increasing Size of the lump	Frequency	Percentage	Cumulative %
Yes	8	36.4	36.4
No	7	31.8	68.2
Not –sure	7	31.8	100.0
Total	22	100.0	

The table12 shows that about 13.6% of the respondents were taking drugs for the treatment of breast lump, whereas 86.4% of the respondents didn't get treatment.

TABLE: 12

**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO
IDENTIFICATION OF BREAST LUMP:**

Identification of the lump by	Frequency	Percentage	Cumulative %
Self	18	81.8	81.8
Doctor (Physician)	2	9.1	90.9
Others (Nurses, Paramedics)	2	9.1	100
Total	22	100	

Table 13 shows that the distribution of respondents according to take treatment of lumps. Some 13.6% of respondents got treatment and 86.4 % respondents had not received any treatment for breast lump.

TABLE: 13

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO TREATMENT OF BREAST LUMP:

Treatment done for lump	Frequency	Percentage	Cumulative %
Yes	3	13.6	13.6
No	19	86.4	100
Total	22	100.0	

Table14 shows out of 22 respondents, 45.5% respondents checked their lump regularly, but not conducted examination of whole breast, 36.6% respondents checked their lumps sometime and 40.9% respondents did not check their lump.

TABLE: 14

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO SELF-BREAST EXAMINATION (BSE):

Conducted BSE	Frequency	Percentage	Cumulative %
Never	9	40.9	40.9
Sometime	3	13.6	54.5
Regular (Checked lump only)	10	45.5	100
Total	22	100	

Objective No.3 Findings of the Physical Examination of Breast:

Table 15 shows out of 541 respondents, almost all 97% of respondents had similar shape of both breasts, 3% of the respondents had irregular in shape. Majority 8.5% respondents had irregular in size of both breasts. Very few 0.2%(1) respondents had inflammation over the breast. Few 1.5% respondents had external growth on the breast. Very few 1.1% respondents had dimpling of the nipple and 0.2% had present discharge on inspection.

TABLE: 15

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO FINDINGS OF INSPECTION OF BREAST:

Findings of Inspection of the Breast	Yes		No		Total	
	No.	%	No.	%	No.	%
Similarity in shape	525	97.0	16	3.0	541	100.0
Similarity in size	495	91.5	46	8.5	541	100.0
Signs of inflammation present	1	0.2	540	99.8	541	100.0
External growth present	8	1.5	533	98.5	541	100.0
Dimpling of the nipple present	6	1.1	535	98.9	541	100.0
Discharge from the nipple present	1	0.2	540	99.8	541	100.0

Objective No. 4 Findings of Palpation of the breast and Ascertain Prevalence of breast lump:

Table 16 and Figure 4 depict the lump detected in the breasts on palpation of the respondents. Seven (1.3%) respondents had lump in the right breasts while 10 (1.8%) in the left breast; and remaining 4 (0.7%) had a lump in both the breasts. In all 3.9% were the respondents in whose case the direct lump was prevalent.

TABLE: 16**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO LUMP PRESENT IN THE BREASTS:**

Breasts Lump	No.	(%)
BREAST LUMP:		
Right Breast	7	(1.3)
Left Breast	10	(1.8)
Both Breasts	4	(0.7)
Total	21	(3.9)

Figure: 4
Percentage Distribution of the Breast Lump among the Respondents:

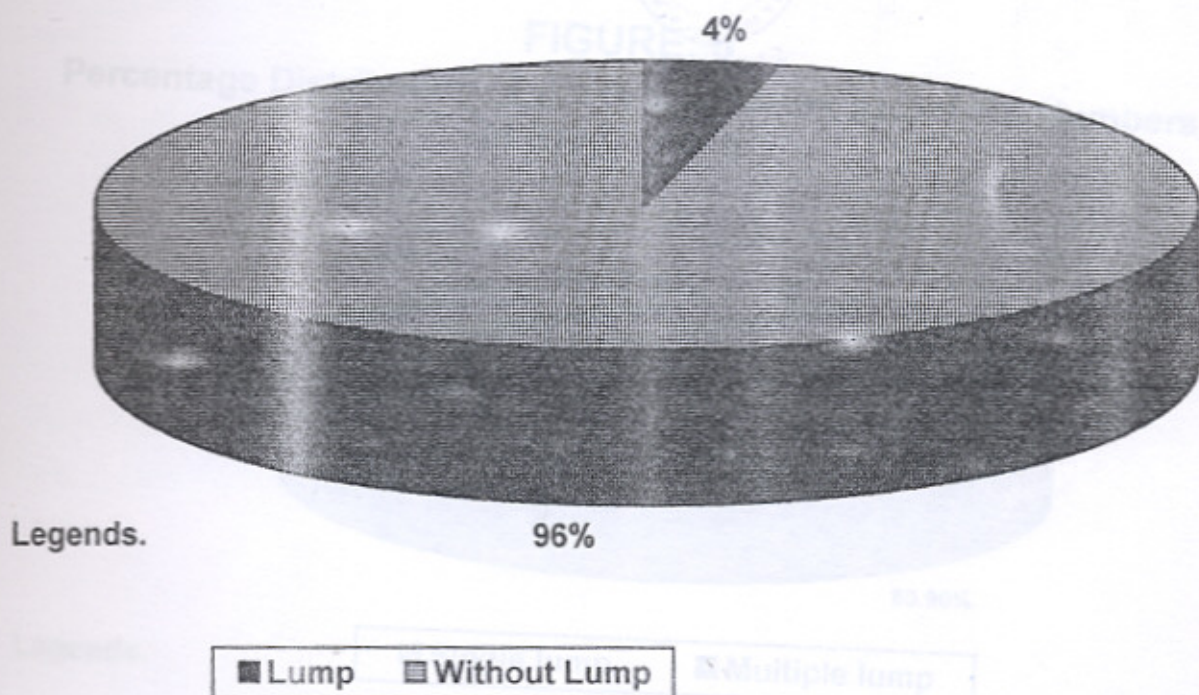
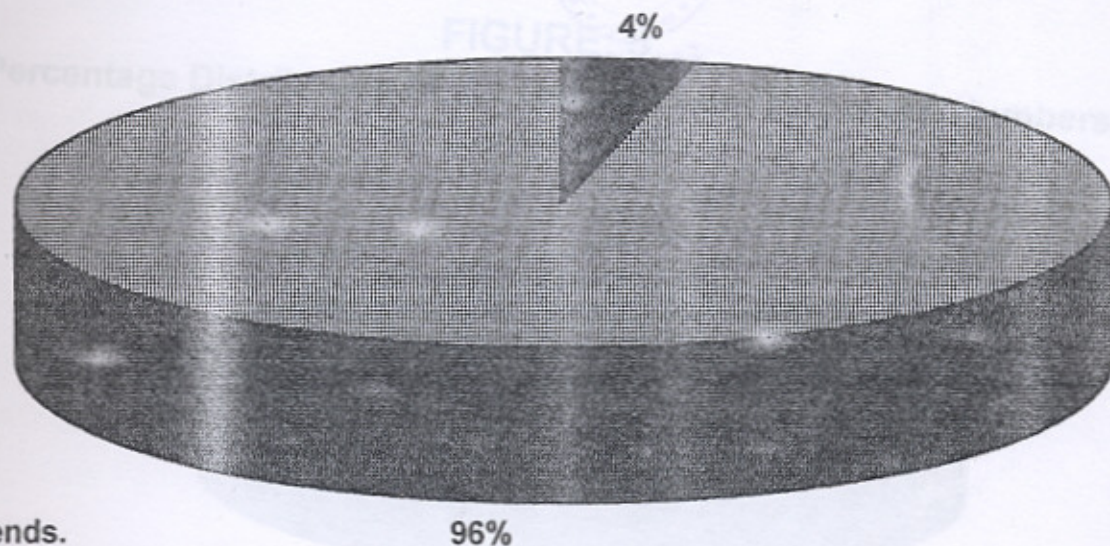


TABLE: 16**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO LUMP PRESENT IN THE BREASTS:**

Breasts Lump	No.	(%)
BREAST LUMP:		
Right Breast	7	(1.3)
Left Breast	10	(1.8)
Both Breasts	4	(0.7)
Total	21	(3.9)

Figure: 4
Percentage Distribution of the Breast Lump among the Respondents:

Legends.

■ Lump	■ Without Lump
--------	----------------

Table 17 and Figure 5 show as under the prevalence of single or multiple cases of breast lumps in the respondents. Out of 21 breast lumps detected, 17 (80.9%) respondents had a single breast with a lump while 4 (19.1%) had multiple breast lumps.

TABLE: 17

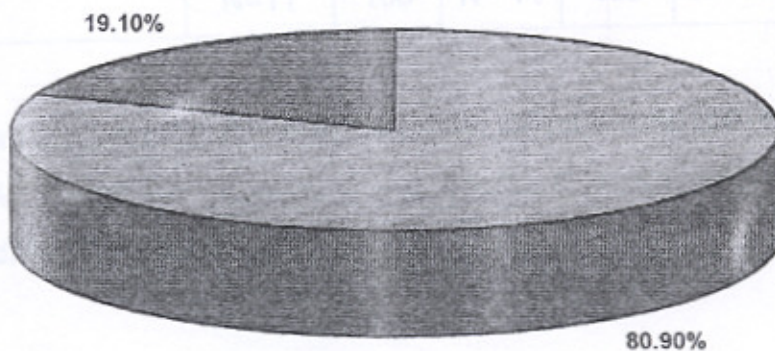
DISTRIBUTION OF THE RESPONDENTS ACCORDING TO PREVALENCE OF NUMBER (SINGLE OR MULTIPLE) BREAST LUMPS:

(N=21)

Breast Lumps	No.	(%)
Single	17	(80.9)
Multiple	4	(19.1)

FIGURE: 5

Percentage Distribution of the Respondents as per the Numbers of Breast Lump:



Legends.

■ Single lump	■ Multiple lump
---------------	-----------------

Table 18 shows that there were 11 lumps in the right breast of the respondents. Four (36.4%) lumps were in the upper outer quadrant and 1 (9.1%) of the lump was found in lower outer quadrant. Four (36.4%) were in the upper inner quadrant; and 2 (18.1%) were in lower inner quadrant of right breast of the respondents. There were 14 lumps in left breast of the respondents. Half of them 7 (50%) lumps were found in upper inner quadrant; while 3 (21.4%) lumps were in upper outer quadrant. 2 (14.3%) was in lower outer quadrant, 2 (14.3%) were in lower inner quadrant of the breast.

TABLE: 18

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO LOCATION OF THE BREAST LUMP IN DIFFERENT QUADRANTS OF THE BREAST:

Location of the breast lump	Right Breast		Left Breast		Total	
	No.	%	No.	%	No.	%
Upper outer quadrant	4	36.4	3	21.4	7	28.0
Lower outer quadrant	1	9.1	2	14.3	3	12.0
Upper inner quadrant	4	36.4	7	50.0	11	44.0
Lower inner quadrant	2	18.1	2	14.3	4	16.0
Total	N=11	100	N= 14	100	N= 25	100

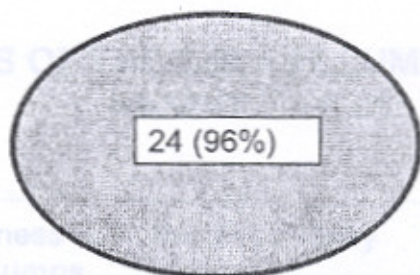
Table 19 and figure 6 reveal the shape of the breast lumps among the respondents. Twenty-four (96%) breast lumps were oval to round in shape whereas 1 (4%) breast lump had difficult to defined borders.

TABLE: 19**SHAPE OF THE BREAST LUMPS AMONG THE RESPONDENTS:**

Shape Of The Breast Lumps	Frequency	Percentage
- Round to Oval	24	96.0
-Difficult to Define Borders	1	4.0
Total	N= 25	100.0

FIGURE 6:**Different Shapes of the Breast Lumps:**

Round to Oval



Difficult to Defined Borders



Table 20 brings out that the consistency of the breast lump. Fifteen (60%) lumps were soft and 10 (40%) lumps were hard.

TABLE: 20**CONSISTENCY OF THE BREAST LUMPS AMONG THE RESPONDENTS:**

Consistency Of The Breast Lumps	Frequency	Percentage
Soft	15	60.0
Hard	10	40.0
Total	N = 25	100.0

Table 21 indicates the tenderness of the breast lumps among the respondents. Seventeen (68%) lumps were tender.

TABLE: 21**TENDERNESS OF THE BREAST LUMPS AMONGST THE RESPONDENTS:**

Tenderness of the breast lumps	Frequency	Percentage
Yes	17	68.0
No	8	32.0
Total	N= 25	100.0

Table 22 depicts movability of the breast lumps. All most all (96%) lumps were movable in nature and few (4%) lumps were fixed.

TABLE: 22

MOVABILITY OF THE BREAST LUMPS:

Movability of the breast lumps	Frequency	Percentage
Yes	24	96.0
No	1	4.0
Total	N= 25	100.0

Unidimension Measurement of the Breast Lump.

Table 23 reveals the size of the breast lumps among the respondents. In 20 cases the size of the breast lumps were measurable; length of 6 (25%) lump was 1 cm while length of 14 (58.3%) single lumps was 2 cms and 4 (16.7%) single lumps was 4 cms. Range was 1 to 4 cms in sizes.

TABLE: 23

SIZE OF THE BREAST LUMPS AMONG RESPONDENTS:

Measurements of the breast lumps	Frequency	Percentage
1 C.M	6	25.0
2 C.M	14	58.3
4 C.M	4	16.7
Total	N= 24	100.0

- In one case the size of the breast lump was not measurable.
- Size range was 1 to 4 C.M. and Mean size length with standard deviation was 1.54 ± 0.80 C.M.

TABLE: 24

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO DISCHARGE PRESENT ON PRESSING FROM NIPPLE:

Discharge from Nipple	Frequency	Percentage
Yes	2	0.4
No	539	99.6
Total	541	100

Age in year	Frequency	Percentage	Cumulative %
12	10	47.6	47.6
13	3	14.3	61.9
14	7	33.3	95.2
15	1	4.8	100
Total	21	100	

Table 25 depicts axillaries lymph nodes presents on palpation of the axilla. Where 0.6% cases had axillaries lymph nodes and 99.4% cases had no axillaries lymph nodes.

TABLE: 25

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO AXILLARIES LYMPH NODES PRESENTS:

Axillaries Lymph Nodes Presents	Frequency	Percentage
Yes	3	0.6
No	538	99.4
Total	541	100

Objective no. 5 The associated risk factors of breast cancer in breast lump cases:

Table 26 shows the age of first menstruation (Menarche) among the lump cases. Present study revealed that near about half cases had their first menstruation at the age of 12 years. Very few only one case (4.8%) had first menstruation at the age 15-years. Mean age with standard deviation was 12.9 ± 1.02 years.

TABLE: 26

Distribution of the Respondents According to Age of First Menstruation:

Age in year	Frequency	Percentage	Cumulative %
12	10	47.6	47.6
13	3	14.3	61.9
14	7	33.3	95.2
15	1	4.8	100
Total	21	100	

Table 27 shows whether the respondents' first-degree relatives had breast cancer. Out of 21 respondents, 9 (42.8%) respondents didn't know about having breast cancer in first-degree relatives those are mother, sisters. More than half respondent didn't know about history breast cancer.

TABLE: 27

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO FAMILY HISTORY OF BREAST CANCER:

Family history of breast cancer	Frequency	Percent	Cumulative %
Don't know	9	42.8	42.8
Nobody	12	57.2	100.0
One relative	0	0	
More than one relative	0	0	
Total	21	100	

Table 28 revealed that majority (71.6%) respondents had their first childbirth before the age of 18 years remains at the age of in between 20 to 22 years. Mean age of getting first child with standard deviation was 17.3 ± 2.1 years.

TABLE: 28
DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR AGE OF FIRST CHILDBIRTH:

Age of first childbirth (Years)	Frequency	Percentage	Cumulative %
15	4	19.0	19.0
16	6	28.7	47.7
17	2	9.6	57.3
18	3	14.3	71.6
20	4	19.0	90.6
21	1	4.7	95.3
22	1	4.7	100
Total	21	100	

Table 29 shows that the biopsy done in their past life. Out of 21 respondents, 1 respondent (4.7%) had done biopsy in their past and report was benign (Non-malignant), 9.6% respondents didn't know about exact procedure of biopsy.

TABLE: 29
DISTRIBUTION OF THE RESPONDENTS ACCORDING TO BIOPSY DONE IN THE PAST:

Biopsy done in the past	Frequency	Percent	Cumulative %
Don't know	2	9.6	9.6
No	18	85.7	95.3
Yes	1	4.7	100
Total	21	100	

* Frequency of biopsy done= only once in one case and report was non-malignant.

Table 30 shows that out of 21 respondents, 23.8% respondents using family planning pills and remain 76.2% didn't take any hormonal therapy or family planning.

TABLE: 30

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO USE OF FAMILY PLANNING PILLS OR HORMONAL THERAPY:

Family planning pills OR Hormonal therapy Used	Frequency	Percent	Cumulative %
Yes	5	23.8	23.8
No	16	76.2	100.0
Total	21	100.0	

Table 31 depicts that out of 5 respondents, 40% respondents were using family planning pills for less than 6 months and 40% cases were using pills for more than 2 years.

TABLE: 31

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO DURATION OF FAMILY PLANNING PILLS USED:

Duration of Family planning pills Used	Frequency	Percent	Cumulative %
< 6 months	2	40.0	40.0
6 months to 2 years	1	20.0	60.0
> 2 years	2	40.0	100.0
Total	5	100.0	

Table 32 reveals that 19.1% respondents were obsessed (> 24.9 BMI according to WHO), near about half of the respondents (42.8%) were under-nourished and some (38.1%) respondents had average/ normal weight.

TABLE: 32**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO OBESITY:**

Body Mass Index (BMI)	Frequency	Percentage	Cumulative%
<18.5 (Under weight)	9	42.8	42.8
18.5- 24.9 (Average weight)	8	38.1	80.9
25 and above (Over weight)	4	19.1	100.0
Total	21	100.0	

Table 33 shows habit of taking tea and/ or coffee. Out of 21 respondents majority (61.9%) were drinking tea and some (38.1%) were not drinking tea. No one was taking coffee or chocolates.

TABLE: 33**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR HABIT OF DRINKING COFFEE AND/OR TEA:**

Habit of Drinking Tea	Frequency	Percentage	Cumulative%
Yes	13	61.9	61.9
No	8	38.1	100.0
Total	21	100.0	

Figure 7 shows drinking habit of tea daily. Out of 13 respondents, more than half respondents (53.9%) were taking tea twice daily and few respondents were taking 3 to 4 times a day; some respondents (38.5%) were taking tea rarely.

FIGURE: 7

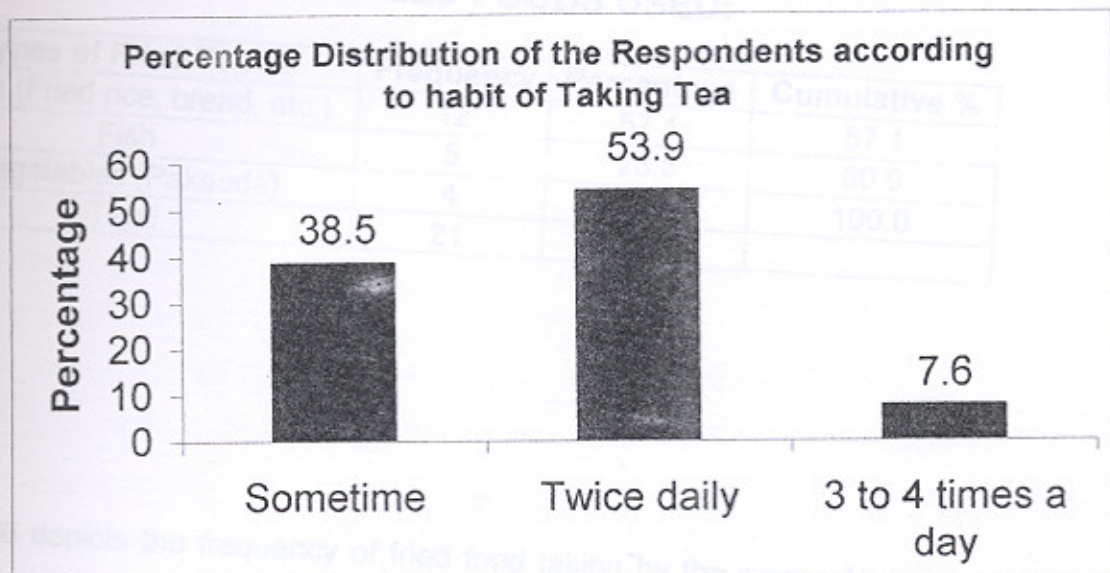


Table 34 depicts habit of taking fried food. Out of 21 respondents majority (61.9%) were taking fried food whereas some (38.1%) respondents didn't take fried foods.

TABLE: 34

DISTRIBUTION OF THE RESPONDENTS ACCORDING TO EATING HABIT OF FRIED FOODS:

Taking Fried Food	Frequency	Percentage	Cumulative %
Yes	13	61.9	61.9
No	8	38.1	100.0
Total	21	100.0	

Table 35 reveals that majority of the respondents (57.1%) were taking fried rice and bread, one third of the respondents were taking fried fish and some (19.1%) respondents were taking fried vegetables that is pakauda.

TABLE: 35**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO TYPES OF FRIED FOODS USED:**

Types of Fried Foods	Frequency	Percentage	Cumulative %
Foods (Fried rice, bread, etc.)	12	57.1	57.1
Fish	5	23.8	80.9
Vegetables (Pakauda)	4	19.1	100.0
Total	21	100.0	

Table 36 depicts the frequency of fried food taking by the respondents. Out of 21 respondents, around half (47.7%) respondents were taking fried food rarely and very (4.7%) were used to take oily things in their all meals that are three times a day. Some (19.1%) used to take fried things not more than once a day and remain (28.5%) were taking twice a day.

TABLE: 36**DISTRIBUTION OF THE RESPONDENTS ACCORDING TO TAKING FREQUENCY OF FRIED FOOD:**

Frequency fried food	Frequency	Percentage	Cumulative %
Sometime	10	47.7	47.7
Once a day	4	19.1	66.8
Twice a day	6	28.5	95.3
All meals (Thrice a day)	1	4.7	100.0
Total	21	100	

CHAPTER: V

DISCUSSION:

Despite advancement and multifold improvement in scientific knowledge, presently there is no known method for primary prevention of breast cancer. Under the present circumstances, therefore early detection and treatment of breast cancer as a secondary preventive measure seems to be the most appropriate approach for reducing mortality due to breast cancer and for improving quality of life in these clients.

Many clinical methods have been considered for an early diagnosis of breast cancer including BSE, regular physical examination of breast and a variety of methods of imaging for early lesions in the breast, particularly mammography. At present, mammography either alone or in conjunction with physical examination is the only early detection method of proven value for screening.

Randomized trials of screening of breast cancer have clearly demonstrated a substantial reduction of the order of 40% in the breast cancer mortality among women aged over 50 years i.e. when regularly screened every two to three years by mammography. No other screening modalities has been demonstrated to be benefit, nor as screening of younger women. The major problem of breast cancer screening at present is the need for greater understanding of the heterogeneous natural history of the disease. The extent to which earlier diagnosis improves prognosis is poorly understood, but remains crucial for determining the full potential of screening.²¹

BSE is a technique that all women can use to assess their own breasts. Thus it is a useful self-care activity for all adult women. The American Cancer Society recommends BSE. Teaching the skills of BSE can be life saving and is one of the most important activities of nurses. With regular BSE, malignancy may be discovered at an early stage and treated accordingly. Regular monthly BSE is an essential health maintenance activity.

Breast lumps are common and most women will detect a breast abnormality at some time in their lives, this is irrespective of the promotion of breast self-examination (BSE) by the medical profession. It should be possible to increase a woman's ability to deal better with this anxiety-provoking situation, and to reduce the number of women presenting with locally advanced disease by an appropriate health education.

Breast self-examination and clinical examination of the breast is recommended as complementary method of screening for group of women in the reproductive age. But this does not mean that BSE should be promoted as a screening test for cancer. The natural course of breast cancer is not completely understood. Although stage at diagnosis is related to survival, and mammographic screening trials suggest that early diagnosis (often before a lump is palpable) can lead to effective treatment which prolongs life, earlier treatment of a palpable lump detected by BSE is not guaranteed to improve survival (Mant, 1991).²¹

The present study utilized, both BSE and physical examination of breast, because at present the aim of the examination was to screen the respondents for breast lump, which is considered as early detection of breast cancer.

There are several methods of performing BSE and physical examination of breast, like inspection; palpation with three or four fingers or using finger pads. Palpation by concentric or radial movement or combination of the movements (Twelve O'clock method). However, American Cancer Society has recommended circular pattern in addition to the inspection. Combination of circular and radial methods is likely to have a better screening potential. However, this comment is invalid in view of lack of comparative studies of the methods. More studies are necessary to arrive at a concrete conclusion for selection of the best method for recommendation.

The present study utilized 'Twelve Stroke' method for BSE/physical examination of the breast and this method was found easier by the respondents and less confusing for moving the direction of hand during palpation (Devi, 1997).¹⁴

Between the year 1991 to 1993, Donald carried out a cross-sectional age stratified community random sample survey of more than 8,000 subjects 65 years old and above to determine the prevalence of and risk factors for dementia in Canada. To avoid the expense of full diagnostic work ups, investigators used Modified Mini-Mental State Examination to screen for dementia or cognitive impairment.²² This is similar to the present study as it is descriptive cross-sectional study. It was a community-based study on prevalence of breast lump amongst those women in the age 15 years old women. Systematic random sampling technique was used. To avoid the expense for the full diagnosis through mammography, fine needle aspiration cytology (FNAC) and biopsy tests were avoided and only physical examination was done to screen the target population for the breast lump.

Breast self-examination (BSE) have consistently identified that a set of limitations were negatively related to BSE practice such as lack of confidence in one's examination, fear of an abnormality, forgetting, and lack of time. Therefore, instruction in BSE has been positively associated with frequent and thorough practice (Leuver, 1989).²³

Present study was conducted in an urban slum having low socio-economic group. The study population primarily belonged to lower socio-economic class. Most of the respondents were housewives and most of them were grand-multi and multi-gravida/para.

The study revealed that the one out of every eight women had a lump in breast. Literature shows that one-fourth of all breast lumps are found to be cancer. Majority of the lumps in the present study were single.

The largest portion of glandular breast tissue occurs in the upper lateral quadrants of the breasts. From this quadrant there is an anatomical projection of breast tissue into the axilla. This projection is termed the axillary tail of Spence. The majority of the breast lumps are located in the upper lateral breast quadrant and in the tail of Spence (Malasanos, et al, 1981).²⁴ Studies reveal that lumps were located in the upper outer quadrant of the breasts in 60% cases. Lumps

found in the upper outer quadrant are of maximum concern to the doctors.⁴⁴ Present study brings out that half of the lumps were found in upper inner quadrants and very few were found in lower outer quadrants of the both breasts.

Present study found that majority of the lumps were round to oval in shape, while some lumps were round and very few lumps had irregular borders. According to different studies most of the benign lumps are round and oval in shape, whereas palpable irregularity of the breast tissue may vary from diffuse, fine irregularities and poorly defined lump are very common, particularly in thin women. Irregular shape of the breast lumps is having most concern to malignant in nature.

Present study reveals that most of the lumps were soft and very few lumps were hard in nature. As per literature, physical findings suggestive of a malignancy include a hard lump. In the instant study, 40% cases were identified and they need further careful evaluation.

Breast cancer is usually noted as a painless lump and discovered incidentally by the client, by routine physical examination or by mammography.¹³ Pain and tenderness are non-specific findings and herald cancer less than 10 percent of the time. Painful lumps reflect inflammation of the breast tissue. Present study revealed that majority of the lumps were tender and some were painless.

The size of the primary lump, a clinical predictor of outcome, can be determined easily by palpation. Lumps less than 2 cms in size are generally associated with the most favorable outcome.²⁶ Detection of the breast lump declines as the size is decreased. Present study revealed that majority of the lumps was 2 cms long.

In the present study all most all lumps were movable on palpation. Different studies have brought out that hormonal changes during the menstrual cycle lead to a cystic pattern of change in the breast size along with lumpiness and tenderness, that is maximal just before menses. The breast is smallest 4 to 7 days after of the menstrual cycle. During days 3 to 4 prior to the onset of menses, mammary fullness, many women experience fullness, heaviness, tenderness

and pain, and the breast volume is significantly increased. Present study brings that near about half of the respondents were in less than 7 days after their menstruation cycle and few respondents were had more than 30 days.

On general appearance normal breasts are reasonably symmetrical in size and shape, though not usually absolutely equal. This symmetry remains constant at rest and with movement. The present study reveals that some respondents had alteration in size and shape of the breast.

Present study has revealed that very few respondents had inflammation in their breast, but they did not have breast lump. Very few respondents found external growth on the breasts.

Nipples, though variable in each client, are normally similar in size and shape. A slight inversion of one or both nipples is common and is a significant finding only when of recent origin. Ulceration, rashes, or nipple discharge requires evaluation. Any dimpling or retraction suggestive of a potential malignancy. In the present study very few respondents had dimpling and discharge from the nipples.

Few respondents were found with axillary lymph nodes, but they did not have breast lump.

Present study revealed that samples were not taking tea and coffee regularly, they were not taking coffee and very few were obese. Most of the respondents had menarche in between 12-14 years and mean age was 12.9 ± 1.02 years and mean age of first childbirth was 17.3 ± 2.1 years. Some respondents were using injectable contraceptive devices that are Depo- provera, which is just reverse of risk factors found in developed countries.

CHAPTER: VI

CONCLUSION, IMPLICATION AND RECOMMENDATIONS

Conclusion .

The data collected during the study from Jalpapur VDC of Sunsari district, conclusively bring out that women aged between 15 to 49 years, were not free from breast lumps. After a detailed analysis, the following emerge: –

- (a) Out of 541 respondents, 21 (3.9%) had breast lumps.
- (b) Of these 21 respondents, 80.9% had single lumps
- (c) Out of a total of 25 lumps, 44% cases of lumps were in upper inner quadrants of the breasts.
- (d) In 96% cases the lumps were round to oval in shape.
- (e) In 60% cases, of lumps were soft in consistency.
- (f) In 68% cases the lumps were tender.
- (g) Total 58.3% cases of lumps were of the size of 2 cms.
- (h) There is not significant relation of age with breast lump:

Implication Of The Study.

This study was helpful for screening of breast lump among a sampled population. It facilitated to encourage the respondents to carry out breast self-examination. They were explained the importance of conducting the breast self-examination regularly. Hence this study was beneficial for the respondents as it well help them further to detect the lump by themselves.

Recommendations.

Having carried out the study, some significant aspects have emerged and based on them suggestions/recommendations is submitted for future referral and action as deemed fit. They are: -

- (a) There is a need for launching an intensive screening programme for evaluation of breast lump.
- (b) There is a need for an information, education and communication campaign with an aim to emphasize early detection methods.
- (c) There is need to undertake a study on a larger scale for generalization of the result.
- (d) There is also a need for follow up action for the detection of the breast lump, as found in present study.

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Appendix-I: English version of Tools

Interview Schedule

Date: _____

Serial No.: _____

A. Identification Data:

Name of Participant: _____ Name of guardian: _____

Address: District..... VDC..... Ward no.....

B. Socio-demographic Data:

I. Age.....(years)

II. Educational status.....

III. Occupation.....

IV. Religion

V. Marital Status

VI. For socioeconomic status scale (As per Kuppuswamy)

a) No. family members Education of head of the family

c) Occupation of head of the family d) Total income RS...../month

Total per capita income per month Rs.....

C. Obstetric Data:

Last date of menstrual period

Only for married Participants

i. Gravida _____ ii History of breast feeding: Yes / No

USE ONLY FOR SELF-REPORTED PARTICIPANTS:

1. Do you have lump for how long?

a) > 3 yrs b) 3-17yrs c) < 17yrs

2. Whether the size of lump is increasing?

a) Yes b) No c) Not Sure

3. Who felt lump at initial stage?

a) Self b) Doctor c) Any other

4. Did you get any treatment for lump?

a) Yes b) No c) Not sure

5. Do you examine your breast regularly?


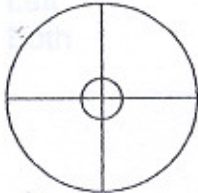
a) Yes b) No c) Not sure

If yes,

Please, would you repeat the procedure of BSE? (Findings fill in proforma)



SCHEDULE TO RECORD FINDINGS OF BREAST SELF -EXAMINATION:

Sr. No.	Findings of Examination	Yes	No
A.	ON INSPECTION		
	<p>1. Similar shape of both breasts If No, which breast is altered than before</p> <p style="margin-left: 150px;">- Right - Left</p> <p>2. Uniformity in size of both breasts If No, which breast is bigger</p> <p style="margin-left: 150px;">- Right - Left</p> <p>3. Dimpling of the nipple present If yes, in which nipple</p> <p style="margin-left: 150px;">a) Right b) Left c) Both</p> <p>4. Discharge from the nipple present If yes, in which nipple</p> <p style="margin-left: 150px;">a) Right b) Left c) Both</p>		
B.	ON PALPATION		
	<p>I. Breast lump present If yes, only then proceed further</p> <p>I. Side of lump</p> <p style="margin-left: 150px;">a) Right breast b) Left breast c) Both breasts</p> <p>II. Location of the lump</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Right Breast</p> </div> <div style="text-align: center;">  <p>Left Breast</p> </div> </div>		

III. Number of lump present

- a) Single
b) Multiple

Lump is movable

If yes, which lump is movable

- a) Single
b) Multiple - 1

IV. Lump is painful on touching

If yes, which is painful

- a) Single
b) Multiple - 1

V. Size of the lump

- a) Single b) Multiple

1) Pea (smallest) _____

2) Ritha _____

3) Egg (largest) _____

VI. Can you define borders of the lump

If yes, which lump

- a) Single
b) Multiple - 1
- 2

1. On pressing, discharge from nipple present

If yes, which side

- a) Right
b) Left
c) Both

2. Axillary lymph nodes present

If yes, which side

- a) Right
b) Left
c) Both

SCHEDULE TO RECORD FINDINGS OF PHYSICAL EXAMINATION:

A.	ON INSPECTION		
1	Similar shape of both breasts If No, which breast is altered than before <ul style="list-style-type: none"> - Right - Left 		
2	Uniformity in size of both breasts If No, which breast is bigger <ul style="list-style-type: none"> - Right - Left 		
3	Sign of inflammation present If yes, in which breast <ul style="list-style-type: none"> a) Right b) Left c) Both 		
4	External growth present If yes, in which breast <ul style="list-style-type: none"> a) Right b) Left c) Both 		
5	Dimpling of the nipple present If yes, in which nipple <ul style="list-style-type: none"> a) Right b) Left c) Both 		
6	Discharge from the nipple present If yes, in which nipple <ul style="list-style-type: none"> a) Right b) Left c) Both 		
B.	ON PALPATION		
1	Breast lump present If yes, only then proceed further <ul style="list-style-type: none"> I. Side of lump <ul style="list-style-type: none"> a) Right breast b) Left breast c) Both breasts II. Location of the lump <ul style="list-style-type: none"> Right <ul style="list-style-type: none"> → Upper outer quadrant → Lower outer quadrant → Upper inner quadrant → Lower inner quadrant Left <ul style="list-style-type: none"> → Upper outer quadrant → Lower outer quadrant → Upper inner quadrant → Lower inner quadrant 		

S.N.	Findings of examination	Yes	No
	<p>III. Number of lump present</p> <p>a) Single</p> <p>b) Multiple</p> <p>IV. Lump is movable</p> <p>If yes, which lump is movable</p> <p>a) Single</p> <p>b) Multiple</p> <p>V. Tenderness present</p> <p>If yes, which lump is tender</p> <p>a) Single</p> <p>b) Multiple</p> <p>VI. Consistency of the lump</p> <p>If yes,</p> <p>a) Single b) Multiple</p> <p>1) Soft _____</p> <p>2) Hard _____</p> <p>VII. Size of the lump is measurable</p> <p>If yes,</p> <p>a) Single b) Multiple</p> <p>1) Length _____ cm _____ cm</p> <p>2) Weight _____ cm _____ cm</p> <p>VIII. Shape of the lump</p> <p>a) Oval _____</p> <p>b) Round _____</p> <p>c) Difficult to define border _____</p>		
2.	<p>Discharge from nipple present on pressing</p> <p>If yes, which side</p> <p>a) Right</p> <p>b) Left</p> <p>c) Both</p>		
3.	<p>Axillary lymph nodes present</p> <p>If yes, which side</p> <p>a) Right</p> <p>b) Left</p> <p>c) Both</p>		

Use only for lump cases:

1. What was the participant's age at time of first menstrual period?
a) Unknown b) 7-11 c) 12-13 d) >13
2. What was the participant's first live birth of a child?
a) Unknown b) No births c) < 20 yrs. d) 20-24 e) 25-30 f) > 30
3. How many of the participant's first-degree relatives- mother &/ or sisters have had breast cancer?
a) Unknown b) 0 c) 1 d) > 1
4. Has the participant ever had a breast biopsy?
a) Unknown b) No c) Yes
If yes,
 - I. How many previous breast biopsies (Positive or negative) has participant had?
a) 1 b) > 1
 - II. Has participant had at least one biopsy with a typical hyperplastic?
a) Unknown b) No c) Yes
5. Has the participant ever used contraceptive pills or Depo- provera?
a) Unknown b) No c) Yes
If yes, for how long.....
a) <6 months b) 1-2 yrs. c) > 2yrs
6. Is the participant obese?
a) Weight..... b) Height..... c) BMI.....
7. Do you take tea or coffee regularly? Yes/ No
If yes, specify:
a) Once a day b) Twice a day c) Thrice a day d) >3 times a day
8. Do you take deep fried food regularly? Yes/ No
If yes, specify type of food:.....
Frequency per day/ week/ month
a) Once b) Twice c) Thrice d) 4 or more times
9. What types of oil or fat are used most often for meal preparation?
a) Mustard oil b) Butter/ ghee c) Refined oil d) others.....
e) Nothing particular

Appendix-II: Nepali version of Tools

अन्तरवार्ता सूची:

मिति.....

कम संख्या:.....

(क) परिचयात्मक विवरण....

सहभागीको नाम.....

घरमूलीको नाम.....

ठेगना: गा.वि.स.। नगरपालिका वार्ड न.

जिल्ला.....

(ख) सामाजिक तथा व्यक्तिगत विवरण:

(१) उमेर.....वर्ष

(२) शिक्षास्तर

(३) पेशा

(४) धर्म.....

(५) वैवाहिक स्थिति

(६) समाजिक तथा आर्थिक अवस्था निकाल्नको लागि **Kuppuswamy** को अनुसार)

(क) परिवारको संख्या.....

(ख) घरमूलीको शिक्षास्तर :

ग) घर मूलीको पेशा.....

(घ) जम्मा मासिक आम्दानी रु.....

(ड.) मासिक व्यक्तिगत आय रु

(ग) प्रसूती सम्बन्धी विवरण:

(१) अन्तिम महिनावारी भएको कति दिन भयो ?

विबाहित सहभागीको लागि मात्र :

(१) गर्भको संख्या:.....

(२) बच्चालाई स्तनपान गराएको हो । होईन

गाँठो छ भनेर महिला स्वयंले चर्चा गरेमा मात्र भर्ने :

(१) तपाईंलाई गाँठो आएको कति वर्ष भयो ?

(२) तपाईंलाई गाँठोको आकार बढेको जस्तो लाग्छ?

(क)लाग्छ

(ख) लाग्दैन

(ग) पक्का थाहा छैन

(३) शुरुमा कसले गाँठो पत्ता लगायो ?

(१) आफैले

(२) डाक्टर

(३) अन्य कसैले.....

(४) तपाईंले गाँठोको लागि कुनै उपचार गराउनु भएनो छ ?

(क) छ

(ख) छैन

(ग) पक्का थाहा छैन

(५) तपाईंले आफ्नो स्तनको जाँच लगातार रूपमा गर्नु हुन्छ ?

(क) गर्छु

(ख) गर्दिन

(ग) कहिले काहीँ

यदि गर्नु हुन्छ भने, कृपया एक पटक जाँच गरेर देखाउनुस् ?

महिलाद्वारा गरिएको स्तन जाँचको अभिलेख :

निरीक्षण गर्दा

छ

छैन

I.
क

दुवै स्तनको आकार बराबर छ?
यदि छैन, भने कुन चाहिँ पहिला भन्दा बढ्यो?

दायाँ
बायाँ

दुवै स्तनको बनावट एकै प्रकारको छ?
यदि छैन, भने कुन चाहिँ भिन्न छ?

दायाँ
बायाँ

मुन्टा भित्र पसेको छ?
यदि छ भने, कता पटिको।

दायाँ
बायाँ
दवै पटि

मुन्टाबाट पानी वा पीप बग्छ?
यदि बग्छ भने, कता पटिबाट ।

दायाँ
बायाँ
दवै पटि

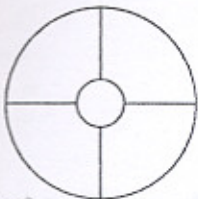
(ख) छामेर जाँच्दा

स्तनमा गाँठो छ ?

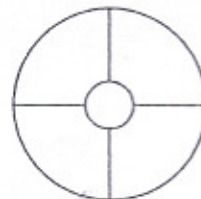
यदि छ भने

१) गाँठो कहाँ छ ? क) दायाँ (ख) बायाँ (ग) दुवैमा

२) गाँठो कहाँ निर छ ?



दायाँ



बायाँ

३) कतिवटा गाँठो छ ?

क) एक (ख) एक भन्दा बढी

(४) गाँठो हलिन्छ ।

(क) एक - (कुन चाहिँ.....) (ख) सबै

(५) गाँठो छुँदा दुख्छ ?

यदि दुख्छ भने कुन चाहिँ गाँठो दुख्छ ।

(क) एक (कुन चाहिँ.....) (ख) सबै

(६) गाँठोको आकार कत्रो छ ?

(क) केराउको दाना जत्रो

(ख) रिठा जत्रो

(ग) अण्डा जत्रो

(a) एक (कुन चाहिँ.....) b) सबै

(७) के तपाईंले गाँठोको छेउ भेटाउनु हुन्छ ?

यदि भेटिन्छ, भने कति वटाको (क) एक (कुन चाहिँ.....) (ख) सबै

II.

निचरेर हेर्दा मुन्टावाट पानी वा पीप बग्छ ?

यदि बग्छ, भने कता पट्टि वाट

(क) दायाँ

(ख) बायाँ

(ग) दुवै

III.

काखीमा गाँठो छ ?

यदि छ, भने कता पट्टी

(क) दायाँ

(ख) बायाँ

(ग) दुवै

३) कतिवटा गाँठो छ ?

क) एक

(ख) एक भन्दा बढी

गाँठो भएको सहभगीको लागि मात्र

(१) महीनावारी शुरु हुंदा तपाईंको उमेर कति वर्ष भएको थियो ?

(२) तपाईंको सबभन्दा नजिकको नातेदार (आमा वा दिदी बहिनी) लाई स्तन क्यान्सर छ ?

(क) थाहा छैन (ख) कसैलाई पनि छैन (ग) एक जना लाई छ (घ) एक भन्दा बढीलाई छ ।

(३) पहिलो बच्चा जन्मिदा तपाईंको उमेर कति वर्षको थियो ?

(४) तपाईंको स्तनबाट मासु निकालेर जाँच गरेको थियो ?

(क) थाहा छैन (ख) छैन (ग) छ

यदि मासुको जाँच गरेको छ भने

(१) कति पल्ट गरेको थियो ?

(२) तपाईंको मासु जाँचहरु गरेकोमा कनै एउटाको रिपोर्ट नराम्रो छ भनेको थियो ?

(क) थाहा छैन (ख) नराम्रो थिएन (ग) नराम्रो थियो

(५) तपाईंले कहिले परिवार नियोजनको चक्की/ वा हरमोनल थेरापी खानु भएको थियो ?

(क) थाहा छैन (ख) छैन (ग) छ

यदि छ, भने कति समय सम्म खानु भयो ?

(६) सहभागी मोटो छ कि छैन भनेर जाँच गर्ने ।

(क) वजन.....किलो (ख) उँचाई सि.मि. (ग) BMI.....

(७) तपाईंले सधैं चिया वा कफी खानु हुन्छ ? खान्छु / खाँदिन

यदि खानु हुन्छ , भने दिनमा कति.....

(८) तपाईंले तारेको कुराहरु बढी खानु हुन्छ ? खान्छु । खाँदिन

यदि खान्छु , भने कस्तो किसिमको खाना.....

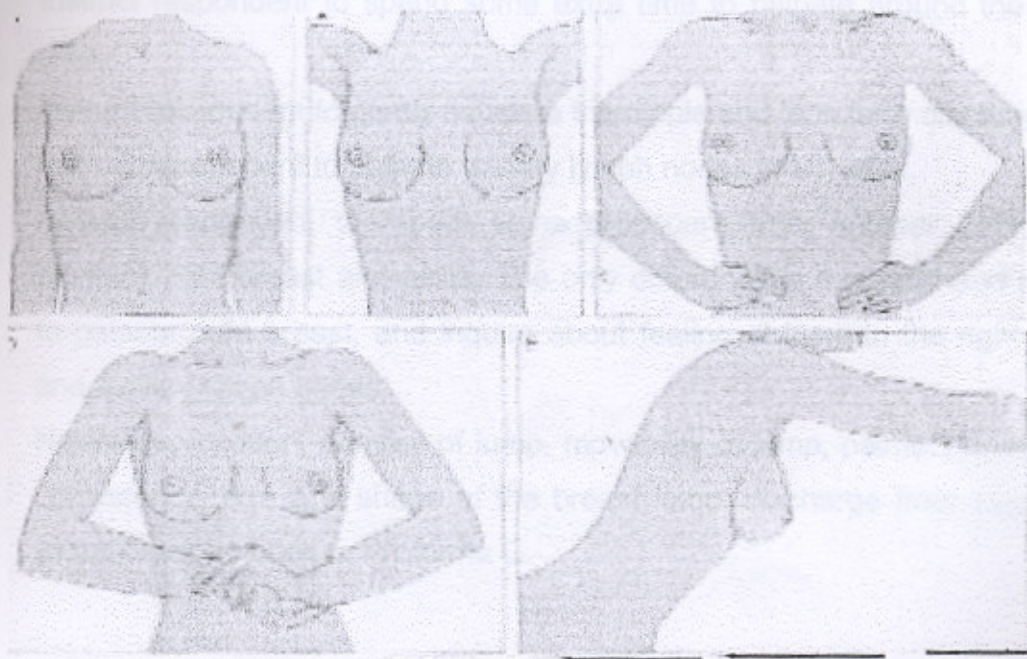
दिनमा कति पटक खानु हुन्छ ?

Appendices-III

GUIDE TO ASSIST WOMEN FOR BREAST SELF-EXAMINATION

A. Stepwise Procedure for Inspection

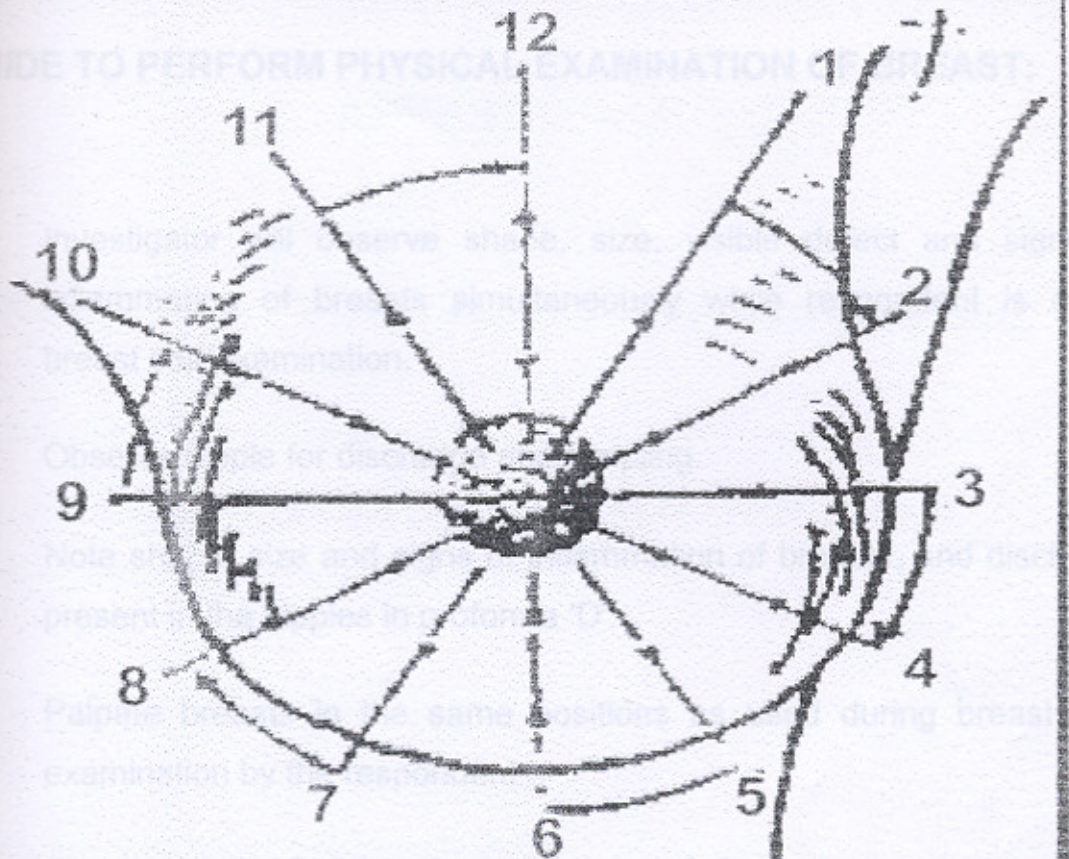
1. Explain procedure to the respondent and obtain verbal consent.
2. Ensure privacy.
3. Ensure adequate light in the room (either electricity or natural light).
4. Help respondent to undress up to the waist.
5. Help respondent to stand before mirror, in case mirror is not available then ask respondent to stand straight before wall and try to touch her both breasts against wall.
6. Help respondent to observe nipple for discharge, dimpling.
7. Instruct respondent to change different positions of the hands as mentioned below and note shape and size of the breasts, discharge and dimpling of nipple in Proforma C.
 - a) Kept arms at sides
 - b) Raised hands over head
 - c) Pressed hands firmly on hips
 - d) Pressed hands together
 - e) Leaned forward at the waist, allowing the breasts to hang down.



B. STEPWISE PROCEDURE FOR PALPATION

1. Help respondent to lie down on her back.
2. Help respondent to place a small pillow or folded towel under left side of shoulder and keep left hand under head.
3. Instruct respondent to divide the whole breast into twelve divisions just like a watch.
4. Instruct respondent to use the pads of three fingers, compress the breast tissue gently against the breast wall.
5. Instruct respondent to start palpation from collar-bone at 12 O'clock position, make small movements with the finger pads and advance downward toward the nipple.
6. Instruct respondent to advance outward from the nipple to the one O'clock position.
7. Instruct respondent to work way around the two O'clock position.
8. Same procedure is followed from the nipple towards 3 O'clock position then 4 O'clock position and back toward nipple. Similarly the process is continued till every segment of the clock is covered (Figure 1).
9. Instruct respondent to palpate breasts either in clockwise or anti-clockwise motion.
10. Instruct respondent to spend some extra time to palpate around the nipple area.
11. Instruct respondent to gently squeeze the nipple and look for a discharge.
12. Instruct respondent to palpate axillary lymph nodes in left side.
13. Instruct respondent to repeat same procedure from number 2 to 11 to examine right breast and axilla. The only difference is that left hand is used to palpate right breast, and inquire about feeling at lump in the right breast and axillary lymph nodes.
14. Note side, location, number of lump, movability of lump, painful on touching, consistency, size and shape of the breast lump, discharge from nipple and axillary lymph nodes in Proforma C.

Collar-bone



APPENDIX – IV

GUIDE TO PERFORM PHYSICAL EXAMINATION OF BREAST:

1. Investigator will observe shape, size, visible defect and signs of inflammation of breasts simultaneously while respondent is doing breast self-examination.
2. Observe nipple for discharge and dimpling.
3. Note shape, size and signs of inflammation of breasts, and discharge present in the nipples in proforma 'D'.
4. Palpate breasts in the same positions as used during breast self-examination by the respondent.
5. Examine breasts by using the pads of three fingers in clockwise motion.
6. Examine both breasts step by step.
7. In case lump is found, measure size and check shape, consistency and nature of the lump.
8. Gently squeeze the nipple and look for discharge.
9. Palpate both axilla for lymph nodes.
10. Note site, location, number of lump, movability of lump, tenderness, consistency, size, shape of the breast lump, discharge from nipple, and axillary lymph nodes in proforma 'D'.

APPENDIX – V

GUIDELINES USED FOR AGE VERIFICATION 15 TO 49 YEARS:

1. Do you have any birth certificate?
2. At what age did you have menarche?
3. At what age did you get married?
4. For how long have you been married?
5. What is the age of your eldest child?
6. When your first child was born how old were you?
7. How many years after independence were you born?
8. Any other important event in your family in the year of your marriage.
If yes, what was the event

SCORING INDICATORS

Question	Weightage
1. Do you have any birth certificate?	7
2. At what age did you have menarche?	6
3. At what age did you get married?	5
4. For how long have you been married?	4
5. What is the age of your eldest child?	3
6. When your first child was born how old were you?	2
7. How many years after independence were you born?	10
8. Any other important event in your family in the year of your marriage.	6
If yes, what was the event	5
	3
	2
	1

APPENDIX – VI

MODIFIED SOCIO-ECONOMIC STATUS SCALE:

The modified socio-economic status (SES) scale for urban & rural population developed by Kuppuswamy attempts to measure the socio-economic status of individual in the community, which is based upon three variables – education, occupation and income. A weightage is given for each variable according to a seven points predefined scale. The total of those three weightages gives the SES score, which is graded to indicate five classes.⁴⁷⁻⁴⁹

SCORING INDICATORS

	Items	Weightage
A.	Education of head of household	
	1. Professional degree, post-graduate and above	7
	2. B.A. or B.Sc. degree	6
	3. Intermediate or post high school diploma	5
	4. High school certificate	4
	5. Middle school completion	3
	6. Primary school or literate	2
	7. Illiterate	1
B.	Occupation of head of household (last occupation in case of retired persons)	
	1. Profession	10
	2. Semi-profession	6
	3. Clerk, shop owner, farm owner, etc.	5
	4. Skilled worker	4
	5. Semi-skilled worker	3
	6. Unskilled worker	2
	7. Unemployed	1

	Items	Weightage
C.	Per capita income (Rs. per month)*	
	1. 16,8000 or above	12
	2. 8,400 - 16,779	10
	3. 6,300 - 8,379	6
	4. 4,200 - 6,279	4
	5. 3,520 - 4,179	3
	6. 840 - 2,499	2
	7. Below 840	1

Total score indicates SES:

- 26 – 29 = Upper
- 16 – 25 = Upper middle
- 11 – 15 = Lower middle
- 5 – 10 = Upper lower
- Below 5 = Lower

मन्जुरीनामा फाराम

Title of the study: A community based study on prevalence and risk factors of breast lump among reproductive aged group women.

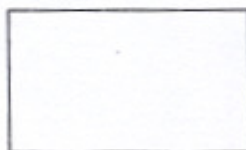
म श्रीमती तारा शाह हाल वी.पी.कोइराला स्वास्थ्य विज्ञान प्रतिष्ठान घोषा, धरानमा काम गर्दछु । मैले १५ देखि ४५ वर्षको महीलाहरूमा स्तन सम्बन्धी समस्याको बारेमा अध्ययन गर्न लागेको छु । यो समस्या निदान गर्नकोलागि तपाईंको सहभागिता चाहिन्छ । यदि तपाईं सहमत हुनुहुन्छ भने केही प्रश्नहरू सोध्नुको साथै स्तन परिक्षण गर्दु । यो तपाईंको इच्छानुसार हुन्छ कुनै जबरजस्ती छैन । यसले तपाईंमा कुनै गाठागुठी रहेछ भने जांचबाट पत्ता लगाउन सकिन्छ र पछि सर्जरी तथा प्याथोलोजी विभागको डाक्टरहरूलाई सम्पर्क गराई रोग पत्ता लगाउन मदत मिलेछ । साथै यस अध्ययनको शिलशिलामा पहिचानको लागि मात्र नाम ठेगाना सोधेको हो । यो पूर्ण तवरले गोप्य राखिनेछ, अहिले म तपाईंलाई स्तन जांच कसरी गर्ने भन्ने वारे सिकाउछु र एउटा सानो पुस्तिका दिन्छु जसले पछि तपाईंलाई स्तन जांच सम्बन्धी पूर्ण ज्ञान दिन्छ तपाईंको २० देखि ३० मिनेट समय लिन्छु ।

मैले माथि उल्लेखित सम्पूर्ण कुरा बुझे ।

प्रजनन उमेरका महीलाको सही वा औठा:

मिति: सही:

वा
औठाछाप



स्वयंद्वारा स्तन परीक्षण

(Breast Self-Examination)

को

छोटी परिचय

स्तन क्यान्सर महिलाहरमा हुने प्रमुख क्यान्सर हो । यो विश्वमा प्रत्येक वर्ष ५,४०,००० विरामीहरु पाइएको थियो । त्यसमध्ये ४०% रोगी विकासोन्मुख देशमा पाइएको छ । हाभीले श्राहा पाए अनुसार यसको कुनै खास रोकथामको उपाय छैन, तर छिटै पत्ता लगाउन सकेको खण्डमा क्यान्सर फैलिनबाट बचाउन सकिन्छ । त्यो उपाय हो स्वयं स्तन जाँच ।

स्वयं स्तन परीक्षण एउटा सजिलो र सस्तो प्रविधि हो । यो जाँच महिला आफैले गर्न सकिन्छ अर्थात यसको लागि कुनै तालिम प्राप्त स्वास्थ्य कर्मी वा डाक्टरको आवश्यकता पर्दैन ।

स्तन परीक्षण किन गर्नु ?

१. समयमै स्तन क्यान्सर रोग पत्ता लगाउन ।
२. स्तन क्यान्सर रोग फैलिनबाट बचाउन ।
३. स्तन क्यान्सर रोगीको उमेर लम्ब्याउन ।

स्तन परीक्षण कहिले गर्नु ?

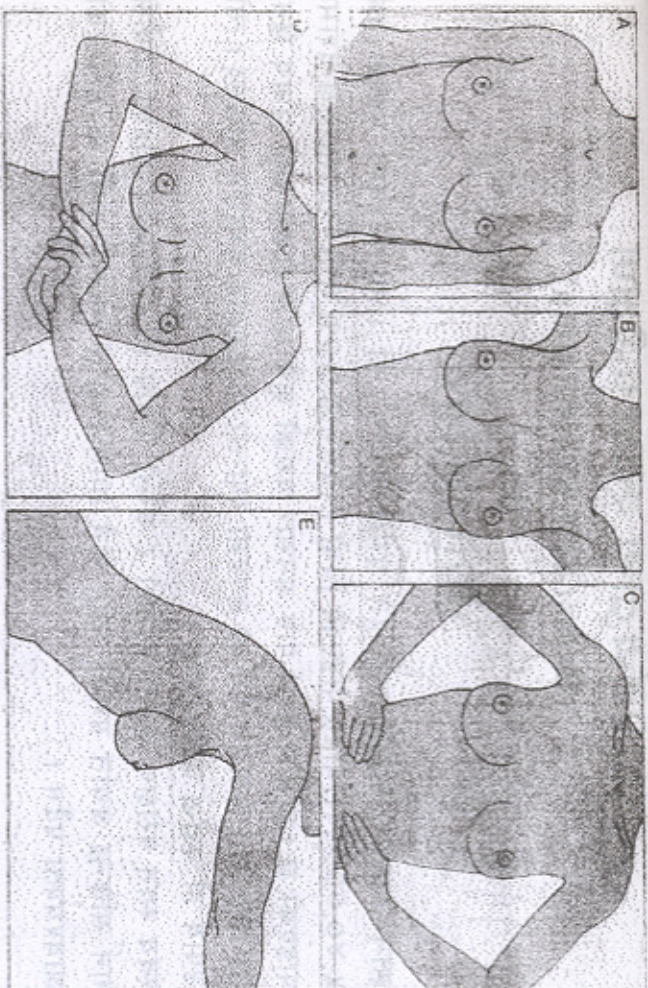
१. हरेक महिना ।
२. महिनावारी भएको सातदेखि दश दिन भित्र ।

स्तन परीक्षण कसरी गर्नु ?

१. एकान्त ठाउँ रोज्ने (ढोकाको चुकुल बन्द गर्ने)
२. कोठा पूर्ण रुपमा उज्यालो हुनपर्दछ ।
३. कम्मरसम्म कपडा हटाउने ।

(क) हेराई (Nispection) बाट जाँच गर्ने तरिका:

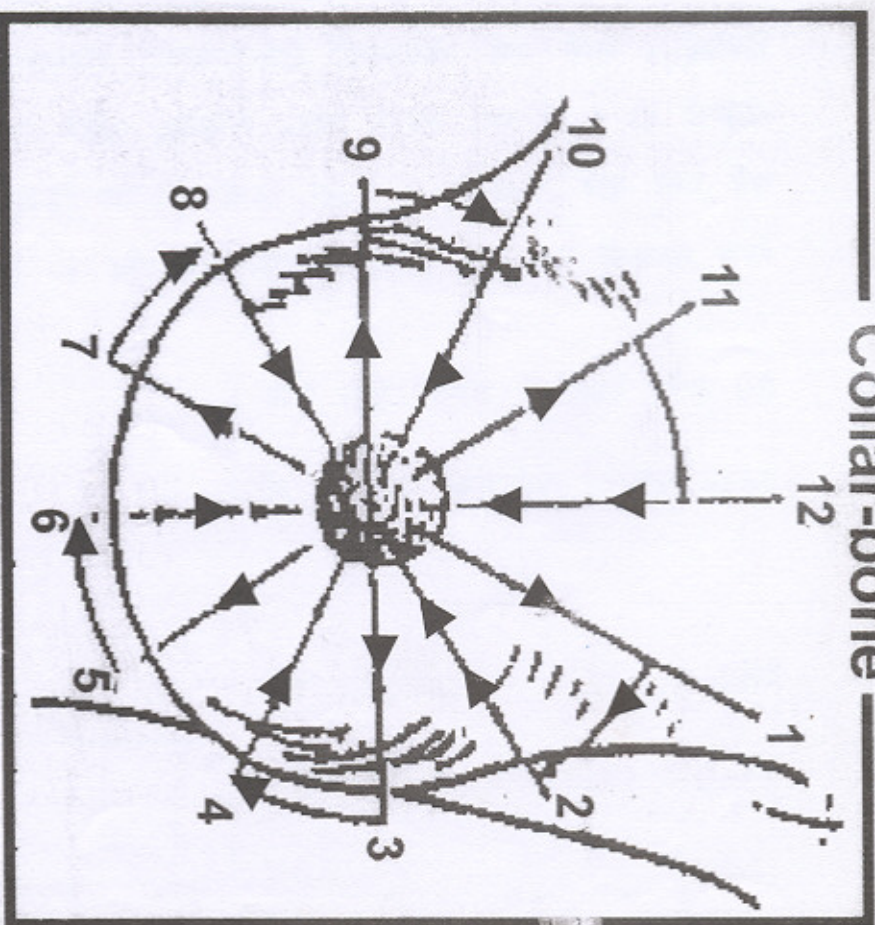
१. ठूलो ऐना भए ऐनाको अगाडि उभिने र हेर्ने दुवै स्तनको आकार र बनावट एकै नासको छ कि छैन ? स्तनको आकार र आकृति हेर्नको लागि हातको



स्वाशितेर (Palpation) जाँच गर्ने तरिका:

1. सिधा (उत्तानो) भएर सुत्ने ।
2. ठूलो ऐना नभए भित्तातिर फर्केर उभिने दुवै स्तन संगै भित्तामा छोईनुको अर्थ हो बराबर छ ।
3. कुम्भ मुनि सानो तकिया वा कपडा पट्याएर राख्ने ।
4. बाँया स्तनको जाँच गर्ने बेलामा बाँया हात टाउको मुनि राख्ने र दाहिने हातको मध्य ३ वटा औँलाको मध्यम भागबाट कलरको हड्डीमा १२ बजेको सम्फेर थिन्डै तल (मुन्टा) तिर जाने फेरी सिधा थिचेर २ तिर जाने यस प्रकारले पूरा १ बजेको स्थानमा आउने फेरी सिधा थिचेर २ तिर जाने यस प्रकारले पूरा स्तनको जाँच गर्नुको साथै काखी छामेर हेर्ने र अन्तमा मुन्टा निचरेर हेर्दा पानी वा पीप बग्छ कि बग्दैन हेर्ने वा बिचार गर्ने ।
5. बाँया स्तनको जाँच गरे जस्तै दाहिने पट्टि पनि ३ नम्बरमा उल्लेख गरिएको सम्पूर्ण तरिका दोह्याउने । खाली बाँया हातको सट्टामा दाहिने हात राख्ने र बाँया हातले जाँच गर्ने ।
6. यदि स्तनमा कुनै किसिमको गाँठो भेटिएमा नजिकको अस्पतालमा गएर जाँच तथा गिर्खाको मूल्याङ्कन गराउने अति आवश्यक छ । जाँच्ने तरिका चित्रमा देखाईको छ ।

Collar-bone



जाँच:-

प्रत्येक महिलाले जति सक्दो छिटो (महिनावारी भएपछि) आफैले प्रत्येक महिना जाँच गर्ने र सम्भव भएसम्म ४० वर्षको उमेरसम्म ३ वर्षमा एक पटक र त्यसपछि वर्षमा एक पटक डाक्टर वा अन्य तालिम प्राप्त स्वास्थ्य कर्मीबाट स्तन जाँच गराउने अति उत्तम हुन्छ ।