

Breast Self-Examination Practice and Its Associated Factor among the Women of Reproductive Age of Rapti Sonari Rural Municipality, Banke District

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ABSTRACT

Introduction: Breast self-examination (BSE) is a screening method used to detect early breast cancer which involves the women herself looking at and feeling each breast for possible lumps, distortions or swelling. BES is a simple, inexpensive, non-invasive procedure which helps a woman to know her breast and allows her to detect changes in the breast; such as breast masses or lumps.

Method: Descriptive cross sectional study design was used to assess the Practice on breast self-examination and its associated factors because the use of descriptive design for the study gathers data directly from respondents from their natural environment for the purpose of studying their practice level regarding to Breast Self-Examination. This study followed quantitative study. Quantitative study was used to identify practice on Breast self-examination and its factors association.

Result: The main findings of the study showed that 12.2% have practice the breast self-examination. Source of information regarding BSE among respondents were found 72.5% from health professional and mass media 6.5%. The researcher's study finding reveal that knowledge regarding BSE was found adequate in 44.3% of respondents. Research study also illustrates that only 19.6% have examined their breast. 50.8% of the respondent state lack of knowledge and 36.7% respondent stated lack of self-confidence level for not performing BSE. 8.3% reported that they practice it occasionally and remaining 0.4% and 3.5% practice monthly and weekly respectively. Similarly, 85.7% didn't find any abnormalities. Whereas 14.3 % have notice, after seen abnormalities 100% of them have visit hospital for check-up. Only 17.8% have informed about family history among 28. And only 7.2% of them follow the periodic health check-up. Whereas, 14.3% had done annual check-up and 85.7% had not done. In this it was found that there was no association between the different factors such as age, education, occupation, ethnicity and other socio-demographic factor of the respondent. Lack of awareness among the women about BSE was the major issue for not practicing Breast self-examination in a community level.

Conclusion: The finding of the study concluded that practice regarding BSE is inadequate and there is no any association between practice and demographic status. The study suggested that upgrade the knowledge of BSE and increase the practice of BSE. Thus, various educational intervention/awareness programs should be conducted in a community level as for self-preventive practice.

Keywords: Breast self-examination

INTRODUCTION

Breast self-examination (BSE) is a screening method used to detect early breast cancer which involves the women herself looking at and feeling each breast for

possible lumps, distortions or swelling. BES is a simple, inexpensive, non-invasive procedure which helps a woman to know her breast and allows her to detect changes

in the breast; such as breast masses or lumps (burke et al., 2007)

Breast cancer is the second most common malignancy among Nepalese women. Breast cancer places a substantial burden on the Nepalese healthcare system, but information regarding the number of women living with breast cancer is not well recorded. In countries with lower levels of resources such as Nepal, breast cancers are commonly diagnosed at late stages and women may receive inadequate treatment, pain relief or palliative care. According to GLOBOCAN 2012, an estimated 1,700 new breast cancer cases were diagnosed in Nepal in 2012, with an age standardized rate (ASR) of 13.7 new cases per 100,000 women, while 870 fatalities in women occurred, with an ASR of 7.2 fatalities per 100,000 women.

According to NATIONAL BREAST CANCER FOUNDATION, INC One in eight women in the United States will be diagnosed with breast cancer in her lifetime. Breast cancer is the most diagnosed cancer in women. Breast cancer is the second leading cause of cancer death among women. Each year it is estimated that over 252,710 women in the United States will be diagnosed with breast cancer and more than 40,500 will die. Although breast cancer in men is rare, an estimated 2,470 men will be diagnosed with breast cancer and approximately 460 will die each year. On average, every 2 minutes a woman is diagnosed with breast cancer and 1 woman will die of breast cancer every 13 minutes. Over 3.3 million breast cancer survivors are alive in the United States today.

Breast cancer is a malignant tumor that has developed from cells of the breast. In its early stages breast cancer has few symptoms. However, the earlier that breast cancer is detected, the more treatment options are available and the greater the likelihood of recovery. It is estimated that about 10-20% of breast cancer that are detected in a self-exam or a clinical breast exam are not detectable by x-ray-film

mammography. It is particularly important for women at increased risk for breast cancer to perform self-exam. It has generally been recommended that all women perform monthly breast-exams, beginning in their 20s and continuing throughout life. Similarly, they should also be aware of benefits of self-exams.

A descriptive cross sectional study conducted among 220 female students to assess knowledge about breast cancer and breast self-examination in Dharan BPKIHS shows that overall level of knowledge was found to be moderately adequate among all, however practice regarding BSE among them were found inadequate in which embarrassment, lack of privacy, unpleasant feelings were addressed for low practice. (Parajuli P. December 2010)

Research on the practice of breast self-examination and its associated factor among the women in a community level may help educational planner and to prevent various breast cancer cases in Nepal and also increase the awareness. The aim of the study is to find out the practice level existing in the community on Breast Self-examination. Therefore, as per above scenario, the increasing trend in breast cancer is suggesting having a knowledge and practice of breast self-examination which was found inadequate among reproductive women group according to the most of research studies. We hope this study provide baseline data to assist health planner in developing evidence-based strategies for the further study in future to increase the practice and decline the rate of Breast cancer.

NEED FOR STUDY

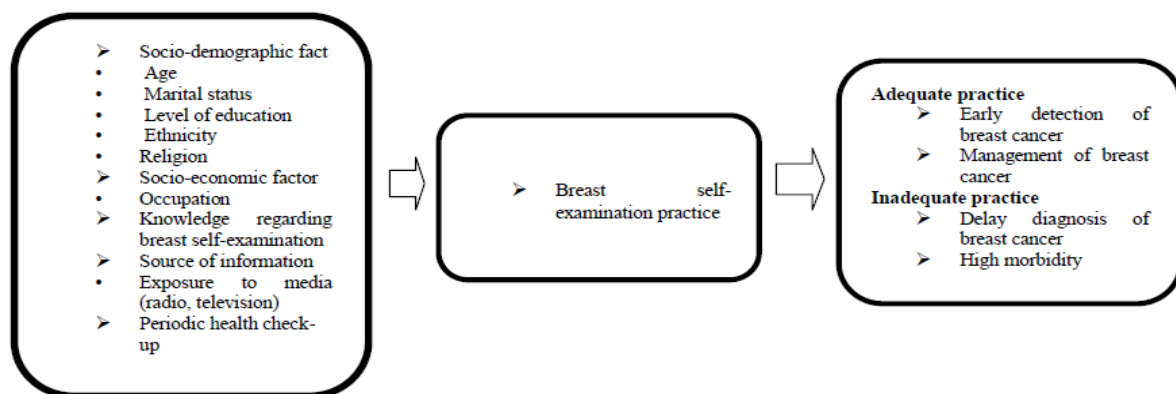
Breast cancer is the most common malignancy affecting women with more than one million worldwide. Breast cancer among women is rising fast in Nepal and becoming more fatal as women go to hospital only when the cancer has progressed to the third stage. Breast cancer is second most diagnosed cancer on Nepal after cervical cancer. Therefore, problem of

breast cancer is in an increasing trend in the developing countries that includes Nepal also.

Breast Self-examination is one of the most convenient ways to detect the breast cancer at its initial stage so that treatment can be proceed. The various report and findings identify that it is necessary to increase awareness on the knowledge and practice of Breast self-self-examination among the reproductive age women group in a community level to prevent increasing rate of breast cancer in an initial stage of life. Furthermore, a smaller number of researches had been conducted on the topic breast self-examination. So that this study provides the baseline information and awareness for the further research study regarding breast self-examination. Thus, I felt necessity to do study in practice and its associated factor among the women of reproductive age group.

Conceptual Framework

Conceptual framework of practice and its associated factor of breast self-



METHODS AND MATERIALS

Research design: Descriptive cross-sectional study design was used

Study area: The area selected for the research was Rapti Sonari Municipality, Banke District. As this is a rural municipality and enough number of women were available, so this place was selected.

Study Population: The study population was women of reproductive age group.

examination shows that the conceptual framework of this research study highlights the dependent and independent variables of the study such as Socio-demographic factors like Age, Marital status, Level of education, Ethnicity, Religion, Socio-economic factor, Occupation. Knowledge regarding breast self-examination, Source of information exposure to media (radio, television) and Periodic health check-up. Throughput consists of the process of assessment of the level of breast self-examination practice and its associated includes the assessment of adequate practice early detection of breast cancer, management of breast cancer. Inadequate practice delay diagnosis of breast cancer, incidence, risk factors, sign and symptom, management and prevention of breast cancer. The outcome might be positive or negative. Positive outcome refers to adequate level of practice on breast self-examination and negative results refers to inadequate practice.

Sample size: In article of malignant neoplasm burden in Nepal-data from the seven major cancers service hospitals in 2012, 16.3% were the case of breast cancer. So prevalence rate (p) is 16.3%, marginal error (d) is 0.05 and confidence interval of 95% (1.96)

It was calculated using the formula,

$$n = \frac{z^2 p (1-p)}{d^2}$$

So,

Prevalence of emergency contraceptives (p)
= 16.3% = 16.3/100 = 0.163

Level of significance (α) = 95% i.e. 1.96

Maximum allowable error (d) = 0.05

$q = 1 - p = 1 - 0.163 = 0.837$

So,

$$n = \frac{z^2 p (1-p)}{d^2}$$
$$= \frac{3.8416 * 0.163 * (1-0.163)}{(0.05)^2}$$
$$= 209.36$$

Substituting value in above equation, the sample size was found to be 209.36

Again, sample size (n) = 209.36 + 10% of 209.36

= 209.36 + 0.1 * 209.36

= 230

Therefore, considering 10% non-response rate, the final sample size was determined to be 230.

Sampling technique

In this study the district was chosen by convenient sampling technique similarly rural municipality was also chosen by convenient sampling technique and ward number was selected by simple random sampling or lottery method likewise, respondents were chosen by census.

Pretesting of tool

Pretesting was conducted prior to research in a sample population with similar characteristic. Pretesting of schedule was done in 10% population of total calculated sample in community. Necessary modification to the fault and error in the tools was made after pretesting.

Ethical consideration

At first, a letter of approval was taken from Om Health Campus for the study purpose. Then ethical clearance approval was taken from NHRC Ethical Clearance Board. Similarly, a letter of approval was taken from Nepalgunj Sub-municipality of Banke district for the collection. Most importantly, before beginning the data collection, an informed verbal consent was taken from each respondent. Respondents

were not forced to give information against their will. Information collected for the research was not used for any other purpose with proper maintenance of respondent's privacy and confidentiality.

Procedure for data collection:

Data collection was primary source. Data collection method was self-administration questionnaire. At first approval letter was taken from the Om Health Campus which was submitted to the Rapti Sonari rural municipality. After their acceptance of letter, second approval letter was provided by Rapti Sonari rural municipality data collection procedure was conducted. Objectives of study were explained to every individual respondent. 15-20 minutes was taken to take their interview and fill the questionnaire. Finally, the data was collected.

RESULTS

The final findings of the study are:

- ✓ Data related to demographic characteristics of the respondent.
- ✓ Data related to Practice about Breast self-examination.
- ✓ Data related to association between socio-demographic characteristics and practice of Breast self-examination

Table 1 shows that among 230 respondents, majority were of age between (31-40) 36.08%. Similarly, 56.08% of the respondents were literate and 43.91% were Illiterate. Among all the respondent 90.9% of respondent where married. More than half of the respondent 54.3% had (1-2) number of children. Where, 62.6% of them were housewife, furthermore, 46%, 2.2%, 4.3%, 1.7% and 9.1% were engaged in agriculture, business, private job and government job and student by their professions respectively. Among all 99.9% were Hindu and remaining 0.4 were Buddhist. The ethnicity of respondent is found to be Brahmin 34.8%, Dalit 1.7%, Tharu 32.8% and Janajti 31.30%.

Table 1: Respondent's Socio- demographic characteristics information (n= 230)

Socio-demographic variables	Frequency (n)	Percentage (%)
Age categories		
Less than 20	21	9.13
21-30	67	29.13
31-40	83	36.08
41-50	59	25.65
Educational status		
Illiterate	101	43.91
Literate	129	56.08
Religious status		
Hindu	229	99.6
Buddhist	1	0.4
Ethnicity		
Brahmin/Chhetri	80	34.8
Dalit	4	1.7
Tharu	74	32.8
Janajati	72	31.30
Marital status		
Married	209	90.9
Unmarried	15	6.5
Widow	4	1.7
Divorced	2	0.9
Number of children		
No child	23	10.1
1-2	125	54.3
3-4	63	27.6
More than 4	19	8.2
Source of income		
Agriculture	46	20.0
Business	5	2.2
Government job	4	1.7
Private job	10	4.3
Housewife	144	62.6
Student	21	9.1

Table 2 shows that among 230 respondents, only 19.6% have known about examination of Breast self-examination. The major sources of information they got to know about BSE was health facilities which was 72.5% likewise 7.8%, 7.8%, 6.5% and 0.9% know from self-education, peers-relatives, mass media and family respectively. And 12.2% of respondent state that they have practices the breast self-examination. Where 50.8% of respondent stated lack of knowledge and 36.7% of respondent stated lack of self-confidence level for not performing Breast self-examination among 185 respondents. Among 28 numbers of respondents who state that they perform BSE, 8.3% reported that they practice it occasionally and remaining 0.4% and 3.5% practice monthly and weekly respectively.

Table 2 Practice on breast self-examination (n=230)

Characteristics	Frequency (n)	Percentage (%)
Know about Breast self-examination		
Yes	102	44.3
No	128	55.7
Source of information		
Mass media	15	6.5
Health Facilities	74	72.5
Peers-relatives	8	7.8
Self-education	8	7.8
Family	2	0.9
Ever examined breast		
Yes	45	19.6
No	185	80.4
Reason for not examined breast(n=185)		
Lack of self-confidence level	68	36.7
Lack of knowledge	117	50.8
Reason for examined breast(n=45)		
To protect from Breast cancer	38	16.5
Health services suggestion	5	2.2
Peer-Family	42	18.3
Others reason	42	18.3
Do you practice it regular (n=230)		
Yes	28	12.2
No	202	87.8
How often do you perform BSE (n=28)		
Monthly	1	0.4
Weekly	8	3.5
Occasionally	19	8.3

(* Multiple response set)

Table 3 Practice on breast self-examination (n=28)

Characteristics	Frequency (n)	Percentage (%)
Any abnormalities		
Yes	4	14.3
No	24	85.7
If yes, what have you notice *		
Lumps	1	4
Pain	4	1.7
Discharge of fluid	3	1.3
Redness	3	1.3
Action taken after seen symptoms		
Hospital	4	100
Any family history (n=28)		
Yes	5	17.8
No	23	82.14
Periodic Health Check- Up (n=28)		
Yes	2	7.2
No	26	92.8
Annual Health Check-Up		
Yes	4	14.3
No	24	85.7

Table 3 Shows that, 85.7% didn't find any abnormalities. Where, 14.3% have notice some kind of abnormalities. Feeling of lumps in breast was the major symptoms which was 4% likewise pain, fluid discharge

and redness was 1.7%, 1.3%, 1.3% respectively. After seen abnormalities 100% of the have visit hospital. Only 17.8% have informed about family history of breast cancer among. And only 7.2% of them follow the periodic health check up. Whereas, 14.3% had done annual check-up and 85.7% had not done.

Table 3: Associated of practice with socio-demographic variables (n=230)

Characteristics	Frequency(n)		P-value
	Yes	No	
Age categories			
Less than 20	2(7.1%)	11(5.4%)	
21-30	7(25%)	56(27.7%)	0.53
31-40	10(35%)	93(46.3%)	
41-50	9(32%)	42(20.7%)	
Religious status			
Hindu	28(100%)	201(99.5%)	0.709
Buddhist	0(0.0%)	1(0.5%)	
Ethnicity			
Brahmin/Chhetri	15(53.6%)	65(32.2%)	
Tharu / madeshi	4(14.3%)	70(34.7%)	0.168
Dalit	1(3.6%)	3(1.5%)	
Janajati	8(28.4%)	64(31.7%)	
Marital status			
Married	25(89.3%)	184(91.1%)	
Unmarried	1(3.6%)	14(6.9%)	0.109
Widow	2(7.1%)	2(1.0%)	
Divorced	0(0.0%)	2(1.0%)	
Education status			
Literate	22(78.6%)	107(52.9%)	0.083
Illiterate	6(21.4%)	95(47.1%)	
Occupation of respondent			
Agriculture	7(25.0%)	39(19.3%)	
Business	0(0.0%)	5(2.5%)	
Government job	1(3.6%)	3(1.5%)	0.078
Private job	4(14.3%)	6(3.0%)	
House wife	14(50.0%)	130(64.4%)	
Student	2(7.1%)	19(9.4%)	
Number of child			
1-2	21(75.0%)	104(52.0%)	
3-4	5(17.9%)	58(29.0%)	0.106
More than 4	0(0.0%)	19(9.5%)	
No child	2(7.1%)	21(10.1%)	
Menopause status			
No	28(100.0%)	202(100.0%)	

*p value less than 0.05 significant

Table 3 represents that there is no association between breast self-examination practice and its associated factors because p value is greater than 0.05.

DISCUSSION AND CONCLUSION

The primary aim of this study is to assess the practice on breast self-examination and to find its factor associated with it .The main findings of the study showed that 12.2% have practice the breast self-examination which was similar to the

study Butwal sub-metropolitan city conduct among the 219 women of reproductive age, where the result was only 19.2% of women have practice BSE. In the researcher's study, source of information regarding BSE among respondents were found 72.5% from health professional and mass media 6.5% which was contrast to the study conducted at Ahmadu bello university Zaria, northwestern Nigeria, in 2009 where source of information about BSE among respondents, was found to be most common through mass media i.e. 45% and health professional was 32.2% respectively. The researcher's study finding revel that knowledge regarding BSE was found adequate in 44.3% of respondents and practice was found 12.2% which was supported by a study conducted in the Muslim female workers at a hazelnut factory in Urdu city where only 26.2% had knowledge of BSE and only 4.3% practice BSE. Thus, both studies are quite similar to each other. Assessing practice and associated factor of BSE among female student in Ethiopia where lack of knowledge on how to perform BSE was cited as the main reason for not practicing BSE. And having a perception that BSE is important and useful to detect breast cancer were significant predictors of practice of BSE, this study revealed that most of the participant had low knowledge and practice of BSE which is similar to my studies.

This research study also illustrates that only 19.6% have examined their breast. 50.8% of the respondent state lack of knowledge and 36.7% respondent stated lack of self-confidence level for not performing BSE. 8.3% reported that they practice it occasionally and remaining 0.4% and 3.5% practice monthly and weekly respectively. Similarly, 85.7% didn't find any abnormalities. Whereas 14.3 % have notice, after seen abnormalities 100% of them have visit hospital for check-up. Only 17.8% have informed about family history among 28. And only 7.2% of them follow the periodic health check-up. Whereas,

14.3% had done annual check-up and 85.7% had not done.

In this it was found that there was no association between the different factors such as age, education, occupation, ethnicity and other socio-demographic factor of the respondent. Lack of awareness among the women about BSE was the major issue for not practicing Breast self-examination in a community level.

CONCLUSION

A descriptive type of study was conducted on practice of breast self-examination and its associated factors among the women of reproductive age group at Rapti Sonari rural municipality, Banke district. The finding of the study concluded that practice regarding BSE is inadequate and there is not any association between practice and demographic status. The study suggested that upgrade the knowledge of BSE and increase the practice of BSE. Thus, various educational intervention/awareness programs should be conducted in a community level as for self-preventive practice.

Recommendation

- A similar study can be conducted by including interventional program.
- A comparative study can be carried out.
- A similar study can be undertaken by adopting an experimental research.
- Various educational intervention/awareness programs could be conducted in a community level as for self-preventive practice.

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Conflict of Interest: None

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Ethical Approval: Approved

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