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Research Article

A study to assess the knowledge regarding breast cancer among the women age group 40 to 60 years in urban slums of Pune city

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Abstract
Breast cancer in women is a major health burden in both developed and developing countries. It is the second leading cause of death in women worldwide as well as in Bangladesh. Still breast cancer is not on the top of the priority list for the policy maker's donors and health professionals. To concentrate on this fast growing health problem we need to know the overall situation concerning incidence, prevalence, risk group, diagnostic, treatment status survival, and mortality rate first to make a comprehensive policy to cope with breast cancer situation in Pune. **Aim:** This study proposed to assess the knowledge level of breast cancer among 100women aged between 40-60 years residing in urban slums of Pune city area. **Materials and methods:** Their level of knowledge will reflect or give us an idea about the mass general lower educated population Pune. Data collection tool comprises of Demographic Performa: Firstly, a structured rating scale to measure the level of knowledge regard of the respondent was prepared. Secondly, 11 experts did validity from nursing field. Data analysis was done by using descriptive statistics, frequency percentage. **Results:** The Reliability of tool was done by re-test method and the reliability of tool was found 0.95. It means the tool is reliable. Majority of women were from age group of 51-55 having 31% where as only 20% from age group 56-60. Most of the women 43% were in secondary level where as 10% were in graduate. 55percentage of women does not have previous knowledge regarding breast cancer. Majority of them 85% were married, 10% are widow and 5% were unmarried.
Keywords: Cancer labour, health burden

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1. Introduction

The term "breast cancer" refers to a malignant tumour that has developed from cells in the breast. Usually breast cancer either begins in the cells of the lobules, which are the milk-producing glands, or the ducts, the passages that drain milk from the lobules to the nipple. Less commonly, breast cancer can begin in the stromal tissues, which include the fatty and fibrous connective tissues of the breast. Over time, cancer cells can invade nearby healthy breast tissue and make their way into the underarm lymph nodes, small organs that filter out foreign substances in the body. If cancer cells get into the lymph nodes, they then have a pathway into other parts of the body [1].

Breast cancer is always caused by a genetic abnormality (a "mistake" in the genetic material). However, only 5-10% of cancers are due to an abnormality inherited from their mother or father. About 90% of breast cancers are due to genetic abnormalities that happen as a result of the aging process and the "wear and tear" of life in general [2].

Invasive (Infiltrating) breast cancer:

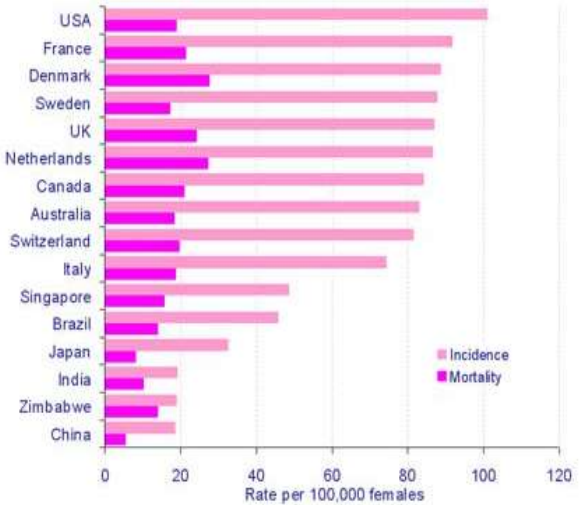
Invasive, or infiltrating, breast cancer has the potential to spread out of the original tumor site and invade other parts of your breast and body. There are several types and subtypes of invasive breast cancer [3]. Initially, breast cancer may not cause any symptoms. A lump may be too small for you to feel or to cause any unusual changes you can notice on your own. Often, an abnormal area turns up on a screening mammogram (x-ray of the breast), which leads to further testing. In some cases, however, the first sign of breast cancer is a new lump or mass in the breast that you or your doctor can feel. A lump that is painless, hard, and has uneven edges is more likely to be cancer. However, sometimes cancers can be tender, soft, and rounded [4].

Prevalence and incidence:

Cancer is a Pan societal problem that affects 2/3 of the world population [5]. Among them Breast cancer is the most common cancer diagnosed in women, both in developing and developed countries. It is the 2nd leading cause of death in women worldwide [6]. Proximately one out of eight women develops breast

cancer all over the world [7]. The burden of the disease in both developed and developing countries is increasing and if no action is taken, it will go beyond our control. According to IARC 1.5 million new cases of breast cancer was diagnosed in 2002, and among them approximately 411,000 died. Based on current estimate of an average annual increase in incidence ranging from 0.5% to 3% per year, the projected incidence increase in 2010 will be 1.4-1.5 million [8].

Geographic variation of breast cancer:
Breast cancer incidence varies considerably, highest rate in developed world and lowest rate in developing world. Around 361000 new cases of breast cancer occur in Europe and 210,000 in USA each year. (Figure 1) [9].



Breast cancer epidemiology
For a large number of women newly diagnosed in world, it has been ascertain that, breast cancer is a neglected disease in terms of other numerically more frequent health problems. Breast cancer is the most commonly occurring cancer in women, comprising almost one third of all malignancies in females. The lifetime risk of a woman developing invasive breast cancer is 12.6 % 2 one out of 8 females in the United States will develop breast cancer at some point in her life [2]. The death rate for breast cancer has been slowly declining over the past decade, and the incidence has remained level since 1988 after increasing steadily for nearly 50 years. Twenty-five percent to 30% of women with invasive breast cancer will die of their disease.

Differences in population of breast cancer
Breast cancer variation among population, or the regional differences in the types have been attributed to the following: prevalence of major risk factors, availability and use of medical practices such as cancer screening, availability and quality of treatment, completeness of reporting, and age structure. In the United Kingdom, Stockton et al. found that in the 1980s before the national breast cancer-screening program began; the rate of advance stage cancer was reduced dramatically. It is believed that this down staging was due to increased awareness that resulted from the greater presence of public education messages about early education [10].

Risk factors and sign symptoms for breast cancer
A risk factor is anything that increases your chance of getting a disease, *For example* Smoking is a risk factor for cancers of the lung, mouth, larynx, bladder, kidney, and ischemic heart diseases. But having risk factor does not mean than the disease is certain.
Risk factors also can be divided into risk determinants and risk modulators. Determinants cannot be changed or influenced on the other hand risk modulators can be changed or influenced.

A. Determinant risk factors:
Gender: Being a woman is risk factors for breast cancer. Incidence of breast cancer in
male is very low. Men account for approximately 1% of all breast cancer cases [11].

Growing age: Incidence of breast cancer is low before 40. In absolute term advancing age is the greatest risk for developing breast cancer. About 17% of the invasive breast cancer diagnoses are women in their 40s.while, 78% of the women diagnoses the same invasive breast cancer when they are in 50s or older [12].
Table 1: Advancing age is a risk factor for Breast cancer.

A Woman's chances of breast cancer increases with age	
From age 30 to age 39	0.44% (1 in 227)
From age 40 to age 49	1.49% (1 in 67)
From age 50 to age 59	2.79% (1 in 36)
From age 60 to age 70	3.38% (1 in 26)

Source: National Cancer Institute, www.cancer.gov, 2004.
Genetic predisposition: Recent studies have shown that about 5% to 10% of breast cancer cases are hereditary as a result of gene changes (called mutations). The most common mutations are those of the BRCA1 and BRCA2 genes [12].

2. Materials and Methods
The study aimed to assess the knowledge regarding breast cancer. Hence, a structured self-administered questionnaire was prepared, in which the group of samples which involved 100 women age group 40

years to 60 years of the upper indranagar bibvewadi urban slum area were administered the questionnaire related to knowledge regarding breast cancer [13]. Samples were selected by using non-probability convenient sampling technique. This study was conducted in upper indranagar, bibvewadi urban slum area in pune city. The structured self-administered questionnaire consisted of two sections. Sections I- consisted of demographic data such as age, education, marital status, previous knowledge, source of information and family history of any illness. Section II- This section comprised of 20 items on knowledge with a maximum score of 20, categorized under two broad areas. A score of '1' was given for each correct response and 'zero' for wrong response [6]. The maximum score was 20 and minimum was 'zero'.

The reliability was done in urban slums of Pune city. After obtaining the permission from the guide, the Marathi version of the tool was administered to the 10 samples selected as per the criteria. The Reliability of tool was done by re-test method and the reliability of tool was found 0.95. It means the tool is reliable.

The pilot study was conducted on 10 selected women to assess the feasibility of the study and to decide the plan for data analysis samples were selected from urban slums area of Pune city based on sampling criteria. Data was analysed by statistical test [14]. The findings indicate that 30% of women have knowledge about breast cancer.

3. Results

The data was analysed and presented in the following section:

Section-1

Distribution of the sample in relationship of demographic data.

Table No-2

Demographic description of the sample by frequency and percentage

N=100

Parameters		Frequency	Percentage
Age	40-45	25	25
	46-50	24	24
	51-55	31	31
	56-60	20	20
Education level	Primary	28	28
	Secondary	43	43
	Under graduate	19	19
	Graduate	10	10
Marital status	Married	85	85
	Unmarried	05	05
	Widow	10	10
Attainment of menopause	Women who have not attained menopause	63	63
	Women who have attained menopause	37	37
Significant other suffering from breast cancer	Yes	16	16
	No	84	84
Previous knowledge	Yes	45	45
	No	55	55
Source of information	Books	10	10
	T.V/radio	20	20
	Friend	8	8
	Neighbour	7	7

Table no. 3

Distribution according to age group

N=100

Parameters		Frequency	Percentage
Age	40-45	25	25
	46-50	24	24
	51-55	31	31
	56-60	20	20

Table no.4

Distribution according to education level

N=100

Parameter		Frequency	Percentage
Education	Primary	28	28
	Secondary	43	43
	Undergraduate	19	19
	Graduate	10	10

Table no 5. Distribution according to marital status

N=100

Parameter		Frequency	Percentage
Marital status	Married	85	85
	Unmarried	5	5
	Widow	10	10

Table No. 6
Distribution according to attainment of menopause

N=100

Parameter		Frequency	Percentage
Age of menopause	Women who have not attained menopause	63	63
	Women who have attained Menopause	37	37

Table No. 7
Distribution according to significant other suffering from breast cancer

N=100

Parameters		Frequency	Percentage
Significant other suffering from breast cancer	Yes	16	16
	No	84	84

Table NO.8
Distribution according to previous knowledge of breast cancer

Parameter		Frequency	Percentage
Previous Knowledge regarding breast cancer	Yes	45	45
	No	55	55

Table.No.9
Distribution according to source of information
N=45

Parameters		Frequency	Percentage
Source of information	Books	10	10
	T.V/Radio	20	20
	Friend	8	8
	neighbor	7	7

4. Discussion

Different studies show diverse result ranging from poor to good knowledge about breast cancer. Among the Nigerian Nurses, knowledge about symptoms, methods of diagnosis and Self Breast Examination(BSE) was generally very good [15].Thirty five percent Pakistani Nurses had good knowledge of breast cancer risk factors [16]. Iranian nurses knowledge on risk factors of breast cancer was not satisfactory [17].Moreover, Fifty eight percent of Singaporean nurses were above median knowledge score [18].Most of the Jordanian Nurses (88.3%) were able to correctly answer the awareness questions[19]. Similar type of study has been conducted on different study population also like Teacher Healthy women [20].

In the proposed study both male and female knowledge level will be assessed but the literature review shows that female are more knowledgeable than male regarding breast cancer [14].and young women seems to be more knowledgeable about breast cancer sign symptoms and risk factors than the older women [21] The possible reason may be older women suffer more frequently different diseases at the same time so, it would be difficult for them to correlate with aetiology of the symptoms.

The purpose of the study was to assess the knowledge regarding breast cancer among 100women aged 40 to 60years.The study was conducted in urban slums area of selected Pune city. The pilot study was conducted on 10 selected women to assess the feasibility of the study and to decide the plan for data analysis.

Sample characteristics

According to observations made by investigators out of 100 samples-

- Majority of women were from age group of 51-55 having 31% where as only 20% from age group 56-60.
- Most of the women 43% were in secondary level where as 10% were in graduate.
- 55% of women does not have previous knowledge regarding breast cancer.
- Majority of them 85% were married, 10% are widow and 5% were unmarried.

Conclusion

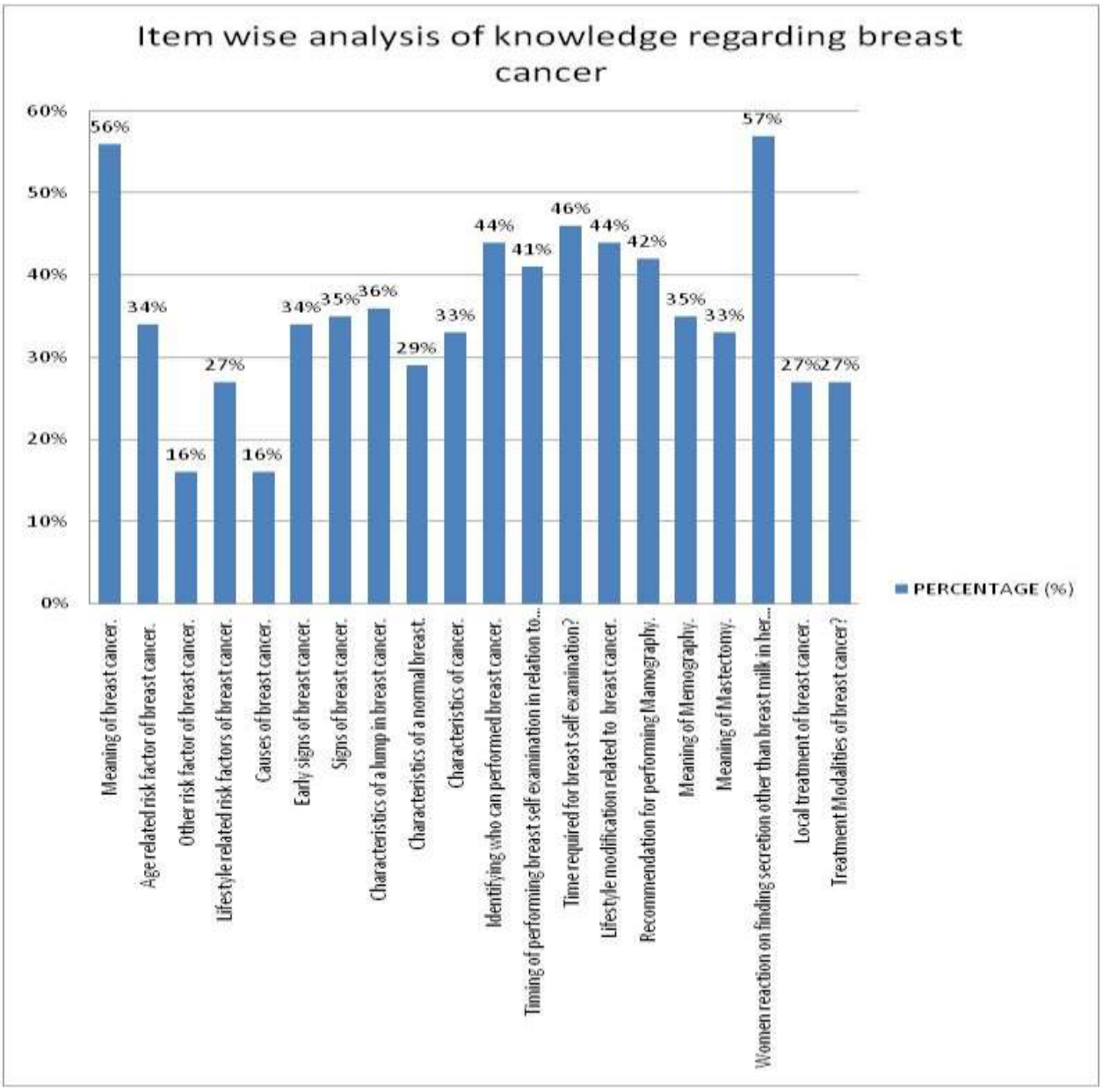
The overall finding of the study show that woman are having inadequate knowledge about “Breast cancer”. Only 1% of them have adequate knowledge, 42% show moderate and 57% of respondents have poor knowledge. The respondents were found to be need to improve their knowledge regarding Breast Cancer.

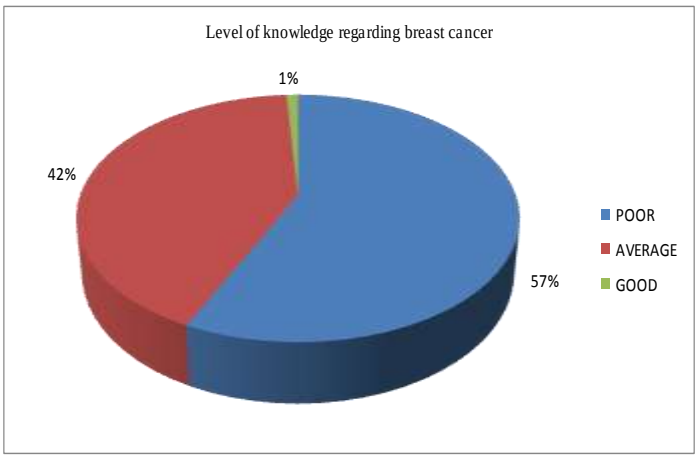
The present study in short gave the researchers a new experience, a chance to widen and their knowledge and a venue to interact with these urban women. The constant encouragement, guidance, support from the guide and other faculty members of our college and the respondents and the colleagues contributed to the fruitful completion of the study.

Section-2
Analysis of the data to assess the knowledge level of women regarding breast cancer
Section-2

Figure 2: Item wise analysis of knowledge regarding breast cancer

N=100





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