EFFECT OF MARITAL STATUS AND OCCUPATION ON MENOPAUSAL CANCER INCIDENCE IN WOMEN OF AJMER MUNICIPAL AREA

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Abstract:
It is an epidemiological study in Ajmer municipal area with retrospective and prospective recorded data on menopausal cancer. Present study is focused on the impact of marital status and occupation on menopausal cancer with focus on menopausal women ageing 30-70 of Ajmer municipal area. It will provide the long-term benefits to patients such as better estimation of risk in families with menopausal cancer and strategies to reduce risk, better prediction of drug response and patient prognosis, improve tailoring of treatments to patient subgroup and development of new therapeutic approach, earlier initiative of treatment, more effective use of resources for screening populations and an enhanced experience for women with or at risk of cancer and their families. Therefore, cancer education of women on ways to cope with menopause and cancer is required. cancer is multi-factorial disease where genetic vulnerability, surroundings, nourishment and other lifestyle risk factors act together. Better detection of modifiable risk factors and risk reduction of these cancers may permit implementation of useful strategies for prevention.

Epidemiology is used for the study of the distribution, determinants, patterns and factors affecting the health   and disease conditions in a distinct population. It is a foundation of public health, and helps in making policy decisions and evidence-based exercise by identifying risk factors for disease and aims for protective healthcare.

Key words: Menopausal cancer, Life style, occupation

1.Introduction

Menopausal breast, uterine and cervical cancer is multi-factorial disease where genetic vulnerability, surroundings, nourishment and other lifestyle risk factors act together. Better detection of modifiable risk factors and risk reduction of these cancers may permit implementation of useful strategies for prevention. Considering the above underlying principle, the present study on "An Epidemiological Study of Pre ,Peri and post-menopausal women cancer (breast, cervical and uterine cancer) in Ajmer municipal area" was chosen and designed for the present study. The purpose of this study was to find out, demographic and life style risk factors which affects menopausal women cancer.

Ajmer has a hot semi-arid climate with over 55 centimeters (25.4 in) of rain every year, but most of the rain occurs in the Monsoon months, between June and September. Temperatures remain relatively high throughout the year, with the summer months of April to early July having an average daily temperature of about 30 °C (86 °F). During the monsoon there are frequent heavy rains and thunderstorms but flooding is not a common occurrence. The winter months of November to February are mild and temperate with average temperatures ranging from 15–18 °C (59–64 °F) with little or no humidity. There are, however, occasional cold weather fronts that cause temperatures to fall to near freezing levels.

Table 1.1: Profile of Ajmer Municipal Area (2011 Census)

Area(square kilometer)	Total population(including institutional and houseless population)			Rural/Urban	Census Location code No.
	Persons	Males	Females		
219.36	5,42,321	2,78,545	2,63,776	Urban	800570

2.Material and Method:

In the present study a systematic effort is made to reveal the trends of the terrible disease cancer in menopausal women in Ajmer municipal area over a period of five years (2010-2014). The emphasis has been laid on epidemiology in Ajmer municipal area. The study involved convenience sample of pre, peri and postmenopausal women having breast, cervical and uterine cancer in Ajmer municipal area. No single specific criterion in deciding sample size was proposed for further analysis. A sample size of 450 was taken. 450 pre, peri and postmenopausal women having breast, cervical and uterine cancer in Ajmer municipal area participated as respondents.

In the present study, along with epidemiology, an attempt was also made to observe the effect of diet, life-style, physical activity and other demographic factors on breast, cervix and uterine cancer on menopausal women. Taking all of these different measurements into

consideration, this study was conducted in Ajmer municipal area on pre,peri and post menopausal women having breast cervical and uterine cancer. The study protocol was approved by the ethical board of different general and cancer hospital and research center in Ajmer municipal area and all study participants provided written consent for epidemiological study.

3.Statistical tool used for hypothesis testing and data analysis

• **Analysis of variance (ANOVA):** It is a collection of statistical models used to analyze the differences among and between group means.

• **Kaise-Meyer-Olkin (KMO) Test:** This test was performed to check the sampling adequacy and reliability of the data.

• **Factor analysis:** It is a multivariate technique. In which the value of observed data are expressed as a number of possible causes in order to find which variable were most important.

4.Analysis and Results

4.1 Marital Status
Out of the 450 women, twenty six (5.8%) were unmarried, while 323 (71.8%) were married. twenty nine (6.4%) were divorced and seventy two (16%) were widows. In pre-menopausal women, eight (5.75) were unmarried, ninety eight (70.75) were married, fourteen (10.07) were divorced and nineteen (13.66) were widows. In peri menopausal women, four (4.16) were unmarried, seventy six (79.16) were married, three were (3.12) divorced and thirteen (13.54) were widows. In post menopausal women, twelve (5.58) were unmarried, one hundred and twelve (52.05) were married, twelve (5.58) were divorced, and seventy nine (36.74) were widows.

Table 4.1 Marital Status Frequency and Percentage Distribution of Respondents

Marital Status		Frequency	Percent	Valid Percent	Cumulative Percent
Marital Status	**Unmarried**	26	5.8	5.8	5.8
	Married	323	71.8	71.8	77.6
	Divorced	29	6.4	6.4	84.0
	Widow	72	16.0	16.0	100.0
	Total	450	100.0	100.0	
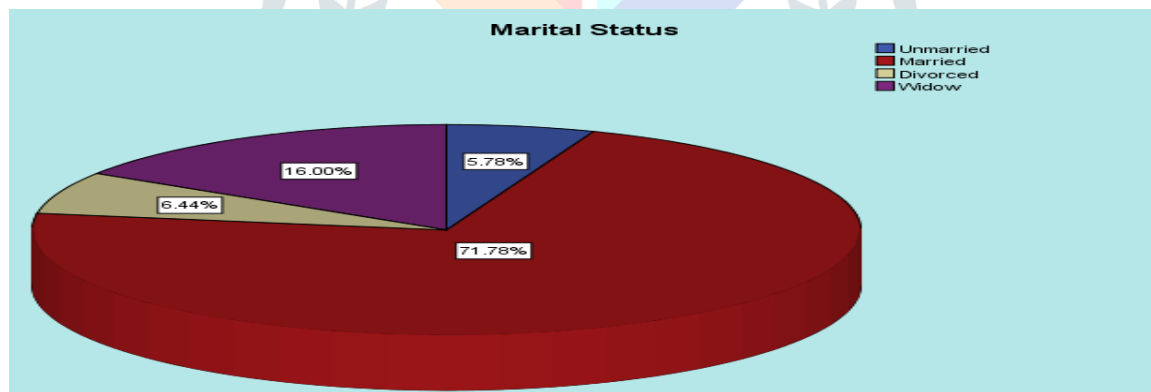
Fig. 4.1: Marital Status Percentage Distribution of Respondents

4.2 Occupation
Some potentially important finding was drawn from analysis of registered women. One hundred and seven (23.8%) women were labor /farmer. 60.4% women were house wives, 12.2% women were working and 3.6% were studying. The relation between occupation and breast, cervical and uterine cancer risk was examined on the basis of work place environment. It suggested increased risk of developing cervical cancer, which is associated with a greater percentage of labor women and the increased risks of developing uterine cancer. It associated with unhygienic work place, the risk of developing breast cancer was still not significantly associated with occupation.

Table 4.2.1: Occupation Frequency and Percentage Distribution of Respondents

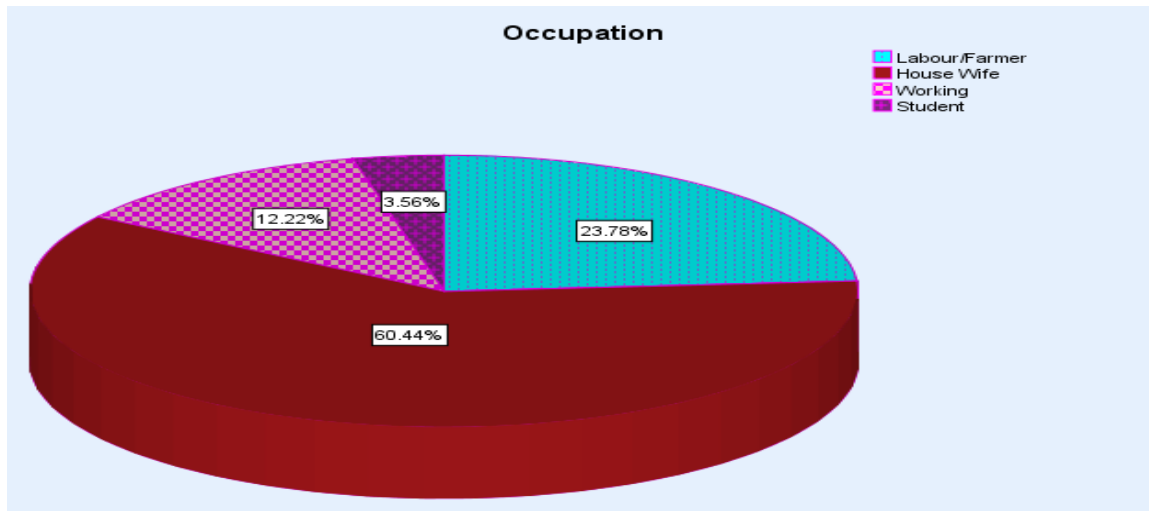|		Frequency	Percent	Cumulative Percent
Occupation	Labor/Farmer	107	23.8	23.8
	House Wife	272	60.4	84.2
	Working	55	12.2	96.4
	Student	16	3.6	100.0
	Total	450	100.0	

Fig. 4.2.1: Occupation Percentage Distribution Of Respondents

Table 4.2.2 Descriptive statistics of variables (Marital Status)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Marital Status	Breast	150	2.53	.857	.070	2.39	2.66	1	4
	Cervix	277	2.52	.895	.054	2.42	2.63	1	4
	Uterine	23	2.13	.626	.130	1.86	2.40	1	4
	Total	450	2.50	.873	.041	2.42	2.59	1	4

(Descriptive)

Table 4.2.3 Descriptive statistics of variables (Occupation)

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Occupation	Breast	150	1.86	.531	.043	1.77	1.95	1	3
	Cervix	277	1.89	.480	.029	1.83	1.94	1	3
	Uterine	23	1.96	.475	.099	1.75	2.16	1	3
	Total	450	1.88	.497	.023	1.84	1.93	1	3

(Descriptive)

5.Conclusion: it is concluded that both factors are impacting on cancer

5.1 Marital status.

Out of the 450 respondents, 5.8% were unmarried women, while 71.8% women were married. 6.4% were divorced women and 16% women were widow. Our study reveals that married women have many fold chances of cancer risk. Findings of Johnson et al. (2000), Goodwin et al. (1987) also reported similar trends but they also reported that the better survival of married women has at least three components. First, married women tend to be diagnosed at an earlier stage of cancer. Secondly, married women more frequently receive treatments. Third, even after controlling for stage at diagnosis and treatment, married women have better survival. Their studies matched with our present work that married women are at a higher risk of acquiring cancer.

5.2 Occupation

With women now occupying a great division of the workforce, it is worth questioning whether there are occupational risk factors for menopausal cancer. Study of occupational risk factor for female breast, cervical and uterine cancer in the present studies has revealed some potentially important findings. Out of the total respondents 23.8% were labor /farmer, 60.4% were house wives, 12.2% were working and 3.6% were studying. The relation between occupation and breast, cervical and uterine cancer risk was examined on the basis of work place environment. It was found that the increased risk of developing cervical cancer is associated with a greater percentage

in labor women and the increased risks of developing cancer of the uterus was associated with unhygienic work place. But the risk of developing breast cancer could not be significantly associated with occupation in the present studies. Although James et al. (2012) reported that women in jobs with potentially high exposures to carcinogens and endocrine disruptors had elevated breast cancer risk. Research of Margaret et al. (2008) indicated that the women who worked in agriculture and subsequently worked in automotive-related manufacturing units had elevated risk of breast cancer. These findings prove that there is a link between occupational risk factor and menopausal cancer.

6. Acknowledgement :

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