

Assessment of Sociodemographic factors Role in Cancer Cervix among Reproductive Age Women

Dr.T.Gowri Devi¹, Dr.C. Niranjan Paul²

¹(Assistant Professor, Department of Community Medicine, Viswabharathi Medical College, Kurnool, Andhra Pradesh)

²(Professor, Department of Community Medicine, Viswabharathi Medical College, Kurnool, Andhra Pradesh).
Corresponding Author: Dr.T.Gowri Devi M.D,

Abstract: **Introduction:** Cancer of the cervix is the second most common cancer among women. Worldwide cancer cervix accounts to 15% of all cancers diagnosed in women. **Aim:** The present study is aim to describe the socioeconomic and demographic status for cancer cervix among reproductive age women of the study population. **Study design:** Prospective randomized comparative study. **Materials and Methods:** A total of 1400 women in the reproductive age group (15-49 years) were selected for this study. A Proforma was designed based on the objectives. Information was recorded from each case on separate proforma. The study subjects (700 rural and 700 urban) were interviewed at their residence and relevant information was collected. Health education was imparted to them at the end of the interview. **Results:** Lower socioeconomic class were observed more in rural areas compared to urban areas. Awareness was less (9%) in rural women compared to urban women. Health seeking behaviour was good in urban women (93.4%) than rural (88%) **Conclusion:** Identification of cancer cervix sociodemographic factors and improving the level of awareness among the community will help programmers to plan interventions in bringing down the incidence of cancer cervix in future.

Key Words: Reproductive age women, Sociodemographic factors

Date of Submission: 16-04-2018

Date of acceptance: 04-05-2018

I Introduction

Cancer originates as a single cell phenomenon. Factors responsible for carcinogenesis include: irritation, embryonic rests, somatic mutation, extra chromosomal mutation and breakdown of immune defense mechanisms, hormonal alterations and viruses [1].

Cancer of the cervix is the second most common cancer among women. About 5,00,000 new cases are diagnosed per year of about 2,88,000 deaths every year. Worldwide cancer cervix accounts to 15% of all cancers diagnosed in women.

In India about 1,00,000 new cases of cervical cancer are expected to occur every year, which form about 18% of the global incidence and about 2/3rd of cases detected at late stages and this is likely to increase to 25% by 2010. According to the National Cancer registry, cancer cervix is the leading malignancies in India [2].

The present study is aim to describe the socioeconomic and demographic status for cancer cervix among reproductive age women of the study population.

II Materials And Methods

This is a prospective comparative study conducted in the year 2015 in Department of Community Medicine, Viswabharati Medical College at Kurnool. Ethical committee approved to do this study. A total of 1400 women in the reproductive age group (15-49 years) were selected for this study and interviewed at their residence itself. Women were selected from urban (700 members) and rural areas (700 members) in and around Viswabharati Medical College.

A Proforma was designed based on the objectives. Pilot testing was conducted at urban and rural areas. Pretest served to rectify and revise the proforma as well as the research procedures in general. Informed consent was taken from the population included in this study.

Inclusion criteria: All reproductive women (15-49 years)

Exclusion criteria: Women who had undergone hysterectomy

Those who were very sick

We selected every third household from the northeast point of the area till we reached the required sample size. Those women in the household who were coming under the exclusion criteria were excluded from the study and the next 3rd household was selected. The same procedure was adopted in the other two villages.

For the data collection in urban and rural area, the local multipurpose health worker and panchayat attendants extended their full cooperation and helped us during the survey. If any woman was not in the house at the time of interview she was interviewed in the next visit.

Information was recorded from each case on separate proforma. Proforma was pertaining to age, occupation, education, literacy, income of the family, hygienic measures, religion, health seeking behaviour, type of family, surrounding cleanliness, smoking habit, Awareness factors related to cancer cervix. The study subjects (700 rural and 700 urban) were interviewed at their residence and relevant information was collected. Health education was imparted to them at the end of the interview.

After collection of data; was entered into spread excel sheet. Data analysed, formulated in the form of tables, histogram. Statistical analysis was done using Graphpad software. P value <0.05 was considered as statistically significant.

III Results

Among study population in both rural and urban areas, most of them were in the age group of 20-24 years (35.1%, 28.5%), followed by 25-29 years (32.8%, 20.8%), 15-19 years (16.8%, 26.5%) respectively. Most of them were Hindus in rural area (73.1%) and an almost equal ratio of Hindus and Muslims were found in urban areas. Literates were less in rural area (62.2%) as compared to urban area (77.4%). Joint families were more in rural areas compared to urban areas. Lower socioeconomic class were observed more in rural areas compared to urban areas.

Awareness was less (9%) in rural women compared to urban women and this difference was statistically significant (Chi square value = 96.1, $p < 0.05$). Health seeking behaviour was good in urban women (93.4%) than rural (88%) and this difference was statistically significant (Chi square value = 12.24, $p < 0.05$) (Table 1).

Table 1: Assessment of Sociodemographic factors responsible for Cancer cervix

SocioDemographic factors	Rural		Urban	
	No.	%	No.	%
Religion				
Hindu	512	73.15	322	46.0
Muslim	98	14.00	321	45.85
Christian	90	12.85	57	8.15
Socioeconomic status				
Upper	12	1.71	96	13.71
Upper middle	10	1.42	46	6.57
Lower middle	32	4.57	132	18.85
Upper lower	162	23.45	96	13.71
Lower	484	68.85	330	47.16
Type of Family				
Nuclear	152	21.71	464	66.28
Joint	554	77.71	220	31.42
Extended	4	0.58	16	2.30
Awareness of risk factors				
Yes	63	9%	208	29.7%
No	637	91%	492	70.2%
Health seeking behaviour				
Good	616	88%	654	93.4%
Not Good	84	12%	46	6.6%

Smokers were more in lower class both in rural and urban areas. This difference was found to be statistically significant ($p < 0.05$) (Fig 1).

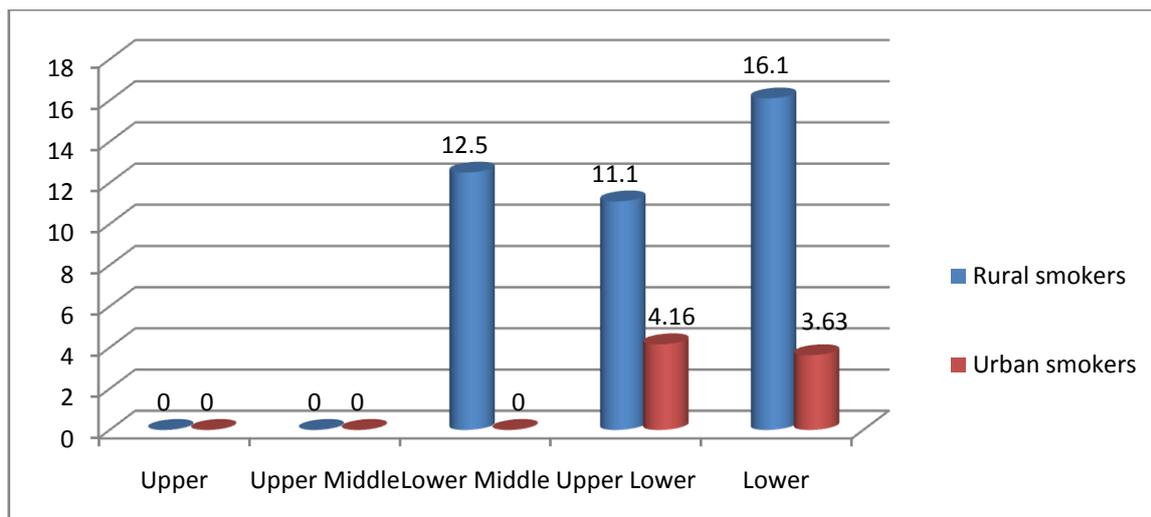


Fig 1: Socioeconomic status in relation to smoking

The highest prevalence of poor genital hygiene was seen among the illiterates both in rural area and urban area. In rural area, 71.96% of the illiterates had poor genital hygiene, whereas in urban area 18.9% illiterates had poor genital hygiene and this was found to be statistically significant (Chi square value = 23, $p < 0.05$).

Prevalence of poor genital hygiene was high among lower socio economic status in both rural (38.4%) and urban (12.7%) areas. This difference was found to be statistically significant (Chi square value = 32.36, $p < 0.05$) (Fig 2).

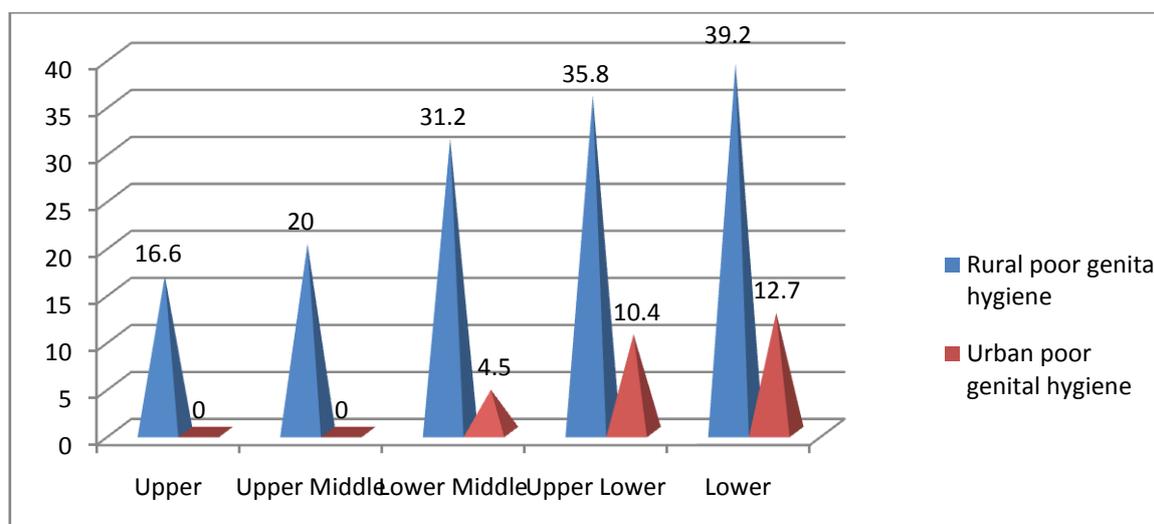


Fig 2: Socioeconomic status in relation to genital hygiene

IV Discussion

Cancer is the most arrogant, independent, uncontrolled, highly destructive and proliferative tissue invasive, hardly inevitable, apparently immortal population of bodies own cells with the potentiality to metastasize and pollute the system with a fatal terminal [3].

Morbidity and mortality reduced drastically in the last 40 years in developed countries because of reduction in risk factors; however the main reason being the presence of extensive screening programmes [4].

Lower socioeconomic class were observed more in rural areas compared to urban areas. BhugriYasmin et al [5] in their study found higher risk in the lower class. In a study done by Dutta PK et al [6] noticed the reason for relationship between poor socioeconomic status and HPV infection were poor nutrition and poor obstetric care. Ann L Coker et al [7] noted poor socioeconomic statuses were associated with poor survival in the large sample of older women with cervical cancer.

Smokers were more in lower class both in rural and urban areas. McIntyre-Setman et al [8] revealed among infected women current smokers (OR 1.7 95% CI 1.4-2.1) and past smokers (OR 1.7 95% CI 1.2-2.4)

were more likely to be diagnosed with \geq CIN than non-smokers. Plummer et al [9] in their study evaluated the role of smoking as a cofactor of progression from HPV infection to cancer.

Current evidence suggests that the virus is necessary but is not a sufficient cause of disease and researchers are now trying to define other co-factors i.e., risk factors [10]. Awareness was less (9%) in rural women compared to urban women. Health seeking behaviour was good in urban women (93.4%) than rural (88%) in this study. Gawande VV et al [11] case control study from Nagpur revealed the significance of illiteracy, poor genital hygiene, long duration of married life and multiparity in cancer cervix. Roy chowdhury study [12] showed significant association in between poor genital hygiene and cancer cervix.

Bhiswas L et al [13] was also found that early age at first coitus (women who reported their first intercourse at \leq 12 years of age) have shown maximum risk when compared to that of women who reported their first intercourse at \geq 18 years of age.

Gajalakshmi V [14] conducted a survival study of cervical cancer at Chennai, revealed fivefold higher risk of death among cancer cervix that were diagnosed at or above 54 years age where as it was less in women $<$ 45 years; statistically significant.

Franceschi S et al [15] observed that other than HPV infection, high parity, a woman's report of her husband's extra marital sexual relationships were significantly associated with invasive cervical carcinoma. Poor hygienic conditions were associated with an increased risk of HPV infection among control women.

V Conclusion

Identification of cancer cervix sociodemographic factors and improving the level of awareness among the community will help programmers to plan interventions in bringing down the incidence of cancer cervix in future. Public Private Partnership should be encouraged for community based service like screening, early detection and treatment for women in the age group of 15 to 45 years in rural and urban areas. Information Education committee (IEC) activities may be necessary to create awareness among the study group for genital hygiene and to control genital infection.

References

- [1]. Devita, Hellman, Rosenbergs, Cancer – Principles & Practice of oncology, Lippincott Williams & Wilkin, . 8(Hagerstown 2008) 1497-1507.
- [2]. National Cancer Registry Program. Consolidation report of population based cancer registries, 2001-2004, Bangalore, IGMR, 2006.
- [3]. Ranjith Jen, Cancer : an Overview cancer practical guide.
- [4]. WHO (1999): Health situation in the South East Asia Region, 1994-1997, Regional office for SEAR, New Delhi.
- [5]. Bhugriyasmin, Pathoepidemiology of cancer cervix in Karachi South- Biomed experts patho epidemiology – 2007.
- [6]. PK. Dutta, A. Upadhaya, M. Dutta, AC. Urmil, MP. Thergaonkar, SS. Ganguly, A case control study of cancer cervix patients attending Command Hospital, Pune. Indian J Cancer, 27(2), 1990 Jun, 101-8.
- [7]. Ann L Coker, Socioeconomic status and cervical cancer survival among older women; Findings from the SEER – medicare linked cohorts Gynecologic, Oncology, 102(2), 2006 Aug, 2005-16.
- [8]. K. McIntyre Setman, PE. Castle, R. Guido, M. Schiffman, CM. Wheeler, Smoking is a risk factor for cervical intra epithelial neoplasia grade 3 among oncogenic human papilloma virus DNA positive women with equivocal or mildly abnormal cytology, Cancer Epidemiol Biomarkers Prev, 14(5), 2005 May, 165-170.
- [9]. M. Plummer, R. Herrero, FX. Bosch, N. Munoz, S. Franceschi, CJ. Meijer et al, Smoking and cervical cancer; Pooled analysis of the IARC multi centric case control study, Cancer causes control, 14(9), 2003 Nov, 805-814.
- [10]. K. Park, Park's Textbook of Preventive and Social Medicine, 19 ed (Jabalpur, India :Banarasidas, 2007) 339.
- [11]. VV.Gawande, SN. Wahab, SP. Zodpey, ND.Vasudeo, Risk factors for cancer cervix – a case control study, Indian J Cancer, 35(4), 1998 Dec, 164-70.
- [12]. NN. Roy chowdhury, Epidemiological trends in incidence of the cancer of the cervix, J Obst&Gynae India, 28, 1978, 1025-29.
- [13]. LN. Bhiswas, P. Maiti, SubrataSengupta. Sexual 8 risk factors for cervical cancer among rural Indian women: A case-control study, International epidemiological association. 1997;26(3).
- [14]. V. Gajalakshmi, S. Raja Raman, V. Shanta, A Survival study of cervical cancer in Chennai, India, Indian J Cancer, 37(4), 2000 Dec, 158-164.
- [15]. S.Franceschi, T. Raj kumar, S. Vaccarella, V. Gaja Lakshmi, A. Sharmila, Snilders PJ et al, Human Papilloma virus and risk factors for cervical cancer in Chennai India – A case control study, International Journal of Cancer, 107(1), 2003 Oct, 127-33.

Dr.T.Gowri Devi M.D." Assessment of Sociodemographic factors Role in Cancer Cervix among Reproductive Age Women."IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 4, 2018, pp 50-53.