

Saptari district is a part of Province No. 2, is one of the seventy-seven districts of Nepal. Its district headquarter is Rajbiraj. This district covers an area of 1,363 km² and has a population (2011) of 639,284 which makes it the 10th most populated district of Nepal. Saptari is renowned for its agricultural output, and is bordered on the east by the Saptakoshi river north by Udaypur district and south by neighbor country India. Among the 9 rural municipal and 9 municipalities present study was conducted in Rajbiraj municipality.

C. Sample Size:

A descriptive cross sectional study was conducted on January 2019 in the Gynae outpatient department of different hospitals and nursing homes situated in Rajbiraj Municipality, Saptari, Nepal. Every alternate sample was taken to meet the required sample size. Thus, the eligible women meeting the inclusion criteria i.e. age group of 20-29 years, 30-39 years and above 40 years attending gynecology OPD were interviewed. Overall 85% of the global deaths by cervical cancer occur annually in low income countries⁵. On the basis of this static, the sample size determine using the following formula

$$N = Z^2 P(1-P) / e^2$$

Here;

n = Desired sample

z = confidence interval 1.96

p = prevalence taken 85 % (0.85)⁵.

p = 85% (0.85)

q = 1 - P

= 1 - 0.85

= 0.15

Confidence level (z) = 1.96%

Permissible error (e) = 0.05

According to formula, sample size (n) = $z^2 pq / e^2$

Here,

n = sample size, z = 1.96% confidence interval, e = permissible error

$$n = \frac{(1.96)^2 * 0.85 * 0.15}{(0.05)^2}$$

$$n = 3.8416 * 0.127 / 0.0025$$

$$n = 0.4878832 / 0.0025$$

$$n = 195.153$$

So, the Sample Size was 195

D. Sampling Technique

- First stage:- Saptari district was selected purposively.
- Second stage:- Among 9 municipality in Saptari district Rajbiraj municipality was selected purposively, because there are more hospital situated than other municipalities.
- Third stage:- All five hospitals situated in Rajhbiraj municipality were selected for study. due to Gynecology services present in the hospital.
- Fourth stage:- Respondents were selected by random method who had visited Gynecology OPD for any service.

E. Tools and Technique of Data Collection

The interview schedule was prepared after the necessary pre-testing was used as a tool of data collection and face to face interview was conduct as a technique.

F. Data Management and Analysis

- Data coding, entry and editing of the data was done manually.
- Data analysis was carried out using SPSS program.
- Analysis and interpretation of the data was done based on findings of interactions, interview and supporting literatures.

IV. RESULT

Altogether 195 married women from different community visited at hospitals and nursing home situated in Rajbiraj municipality in Saptari District, Nepal were participated in the study.

Age in years	Frequency	Percentage
20-29	61	31.3
30-39	120	61.5
40 and above	14	7.2
Total	195	100
Religion of Respondents		
Hindu	190	97.43
Muslim	5	2.56
Total	195	100
Educational Status		
Literate	81	41.53
Illiterate	114	58.46
Total	195	100
Family structure		
Joint	191	97.94
Nuclear	4	2.05
Total	195	100

Table 1: Age group of respondents (N=195)

The maximum participants (61.5%) were 30-39 years old. Similarly, 97.4 percent of participants represented the Hindu community. Among the participants 41.5 % women were literate, similarly most of respondents 97.94% have represents joints family. Out of 195 married women of reproductive age group in the study area, According to table I. Majority of the study participants were between 38-56 age groups.

Heard about cervical cancer	Frequency	Percentage
Yes	28	14.4
No	167	85.6
Total	195	100

Table 2: Knowledge of Cervical Cancer respondents (N=195)

Majority of the participants (85.6%) never heard about cervical cancer, only (14.4%) participants were aware about cervical cancer.

Relationship between age of respondents and knowledge on cervical cancer		
Age group	Knowledge on cervical cancer	
	Yes	No
20-29	9(14.75%)	52 (85.25%)
30- 39	17(14.17%)	103(85.83%)
40 and above	2(14.29%)	12(85.71%)
Total	28(14.36%)	167 (85.64%)

Table 3: Relation Between Age Of Respondents And Knowledge Of Cervical Cancer

Majority of respondents belongs to age group 30-39 years 85.83% had no knowledge about cervical cancer and only 14.17% respondents had adequate knowledge about cervical cancer, were in the 30-39 age group.

Religion of respondents	Heard pap smear test			Total
	Yes	No	Don't know	
Hindu	2	3	185	190
Percentage	1	2	97	100
Muslim	0	0	5	5
Percentage	0	0	100	100
Total	2	3	190	195
Percentage	1	2	97	100

Table 4: Relationship between religion and Knowledge of Pap smear test

Table IV shows that only 2% of the respondents had knowledge regarding meaning of pap smear test. Similarly 98% respondents were not aware that Pap smear is a screening test for cervical cancer.

Relation between educational status and knowledge of cervical cancer			
Educational status	Yes	No	Total
Literate	28 (34.57%)	53 (65.43%)	81(41.53%)
Illiterate	0 (0%)	114 (100%)	114(58.47%)
Total	28(14.35%)	167(85.64%)	195 (100%)
$X^2 = 46.015$	df = 1	p- value = 0.000 (significant)	

Table 5: Relationship between educational status and knowledge of cervical cancer

Above table shows that significant relationship between educational status of respondents and knowledge about cervical cancer.

V. DISCUSSION

In the present study only 14.4% women had heard about cervical cancer, Similar research findings were reported by in Korea and Nepal respectively¹⁴. Only 11% of the study participants had adequate knowledge about carcinoma cervix and screening. Similar findings are seen in studies done in Cameroon by and in Ethiopia¹². The level of knowledge is higher in case of developed countries. Study done in reported that 76% had adequate knowledge of cervical cancer.

Similarly 14.51 % women who represent 20-35 years age groups had knowledge of cervical cancer and 14.21% women above 35 years age group had knowledge of cervical cancer in present study also. Further association was found between religion of respondents and knowledge of pap smear test here only 2% Hindu community women had knowledge of pap smear test and 98% Hindu and Muslim community women had no any idea about pap smear test for diagnosis of cervical cancer. This may be because women who are illiterate and unemployed have not any opportunity for social interaction hence they were not aware about the disease, and benefits of screening.

This study revealed that only 14.4% had adequate knowledge regarding cervical cancer. The finding is similar

with the finding of Singh et al. (2014) that showed 32.7% of the respondents had adequate knowledge. With respect to hear about pap smear test, 99% had inadequate knowledge.

VI. CONCLUSION

Present study concluded that above two third of the women have inadequate knowledge on cervical cancer. The level of knowledge regarding cervical cancer is influenced by the education level of women. Therefore, there is need to conduct awareness program of cervical cancer to increase the level of knowledge regarding cervical cancer through the medium of health personnel, friends and mass medias like television, radio and newspaper as these are the common source of information. Cervical cancer screening health camps can also be conducted at the community level.

VII. RECOMMENDATIONS

- 1) Different awareness programs should be conducted focusing on cervical cancer in community.
- 2) Effective programs should be conducted to aware the people about misperception of cervical cancer.
- 3) Cervical cancer screening health camps can also be conducted at the community level.

ACKNOWLEDGEMENTS

One of the authors (Shrawan Kumar Yadav) acknowledges Shalom Institute of Health and Allied Sciences, SHUATS for provided opportunity to pursue Master's course in public health.

VIII. FINANCIAL SUPPORT AND SPONSORSHIP

Nil

IX. CONFLICTS OF INTEREST

The authors declare no conflict of interest

REFERENCES

- [1] Beining RM. Screening for cervical cancer. An exploratory study of urban women in Tamil Nadu, India [Dissertation]. university of Iowa, 2012
- [2] Cervical Cancer: World Health Organization (WHO). Regional office for Africa; 2012
- [3] CIMO. (2013). Malawi-Zambia Health Care Project (MaZaFi 3) <<http://www.cimo.fi/ohjelmat/north-south-south/nss-verkostot/mazafi3>> Read 5.9.2014
- [4] Duodecim. (2013). Kohdunkaulan Syöpä. <http://www.terveyskirjasto.fi/terveyskirjasto/tk.koti?p_artikkeli=dlk00144> Read 24.9.2014.
- [5] Gyawali B, Keeling J, Teijlingen EV, Dhakal L, Aro AR. Cervical cancer screening in Nepal: ethical considerations. *medico legal and Bioethics* 2015;2015:1-6.
- [6] Koirala BP. Memorial Cancer Hospital. Annual Report. Bharatpur, Chitwan.2014
- [7] National Cancer Institute. (2014). Cervical cancer. <<http://www.cancer.gov/cancer-topics/types/cervical>> Read 25.8.2014.

- [8] Tebeu PM, Major AL, Rapiti E, Petignat P, Bouchardy C, Sando Z, et al. The attitude and Knowledge of cervical cancer by Cameroonian women; a clinical survey conducted in Maroua, the capital of Far North Province of Cameroon. *int J Gynecol Cancer*. 2008;18:761-5.
- [9] Tebeu PM, Major AL, Rapiti E, Petignat P, Bouchardy C, Sando Z, et al. The attitude and Knowledge of cervical cancer by Cameroonian women; a clinical survey conducted in Maroua, the capital of Far North Province of Cameroon. *int J Gynecol Cancer*. 2008;18:761
- [10] Tran NT, Choe SI, Taylor R, Ko WS, Pyo HS, So HC. Knowledge, attitude and practice (KAP) concerning cervical cancer and screening among rural and urban women in six provinces of the Democratic People's Republic of Korea. *Asian Pac J Cancer Prev*. 2011;12:3029-.
- [11] Yifru T, Asheber G. Knowledge, attitude and practice of screening for carcinoma of the cervix among reproductive health clients at three teaching hospitals, Addis Abba, Ethiopia. *Ethiop J Reprod Health*. 2008;2: 15
- [12] Yu CK, Rymer J. Women's attitudes to and awareness of smear testing and cervical cancer. *Br J Fam Plann*. 1998;23:127-33. 17
- [13] Family Health Division. National guideline for cervical cancer screening and prevention in Nepal, Teku, Kathmandu. 2010.
- [14] Shreshta J, Saha R, Tripathi N. Knowledge, attitude and practice regarding cervical cancer screening amongst women visiting tertiary centre in Kathmandu, Nepal. *Nepal J Med Sci*. 2013

