



(A DESCRIPTIVE STUDY TO ASSESS THE RISK FACTORS OF CERVICAL CANCER AMONG MARRIED WOMEN IN SELECTED HOSPITAL, BHOPAL)

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Abstract: To assess the risk factors of cervical cancer among married women in selected hospitals at Bhopal. A non experimental descriptive research design was used, using 100 married women who satisfy the inclusion criteria were selected as samples from coastal region using non probability purposive sampling technique and the risk factors of cervical cancer among married women were assessed through structured interview schedule. The risk factors for cervical cancer found to be associated are early age at first coitus, extra marital relationship, number of birth given and using cloth as sanitary napkin. These findings showed that the fisher women are at risk of developing cervical cancer as they had many factors contributing to it. The researcher identified various risk factors of cervical cancer among married women in coastal region and also the study revealed that there were selected risk factors which had statistical significant association with their demographic data. Mass awareness and screening programme can be initiated to reduce the magnitude of the problem.

Index Terms : Associated factors, coastal region, cervical cancer, fisher women

I. INTRODUCTION

Cancer is a generic term for a large group of diseases that can affect any part of the body. Cancer is an unregulated growth of immature cells. These cells divide and grow in uncontrollable manner which invades the distal organs through direct invasion, lymphatic or blood stream. Cancer can have severe health consequences, and it is a leading cause of death. Breast, lung, uterine, cervix, and stomach cancer are most common among women. (National Cancer Institute, 2012). Cervical cancer is the second most cancer among woman and is the

primary cause of cancer related deaths in developing countries. Cervical cancer starts in cells lining the cervix. The cervix is the lower part of the uterus (womb). The upper part of the body of the uterus is where a fetus grows. The cervix connects the body of the uterus to the vagina (birth canal). The part of the cervix closest to the body of the uterus is called the endocervix. The part next to the vagina is the exocervix or ectocervix. The 2 main types of cells covering the cervix are squamous cells on the exocervix and glandular cells on the endocervix. The place where these cell types meet is called the transformation zone. The exact location of the transformation zone changes as the age advances and with childbirth. Most cervical cancers start in the cells of the transformation zone. In India more women die from cervical cancer than any other country, it kills around 72,000 women every year (**National Cancer Control Programme, 2012**). Some of the most common cancer such as breast cancer, cervical cancer, oral cancer and colorectal cancer have high cure rates when detected early and treated according to best practices. (**World Cancer Report, 2014**)

A risk factor is anything that increases the chance of getting a disease such as cancer. Having a risk factor, or even several, does not mean that will get the disease. Several risk factors increase the chance of getting cervical cancer like personal habits, dietary pattern, perineal hygiene, sexual behavior gynecological factors. Tobacco by-products have been found in the cervical mucus of women who smoke. Researchers believe that these substances damage the deoxyribonucleic acid (DNA) of cervical cells, and may contribute to the development of cervical cancer. Smoking also makes the immune system less effective in fighting against human papilloma virus (HPV) infections.

3.1 POPULATION AND SAMPLE

➤ Target Population

The target population for the study included all married women who were at selected hospitals at Bhopal.

➤ Accessible Population

Accessible population for the study included married women who were residing at selected hospitals at Bhopal.

➤ Sample

The study sample comprised of the married women who fulfilled the inclusion criteria.

➤ Sample Size

The sample size consisted of 100 married women in the age group of 20 to 50 years.

➤ Sampling Technique

Non probability purposive sampling technique was used for the selection of 100 married women as samples for the study.

3.2 DATA AND SOURCES OF DATA

Section A: Demographic data

Consisted of demographic variables which included age, religion, educational status of women, educational status of husband, monthly family income, occupation of wife, husband occupation and marital status.

Section B-Structured Interview Schedule

A structured interview schedule was developed to assess the risk factors of cervical cancer among married women . It comprised of 26 questions about personal factors such as Tobacco usage and alcohol, menstrual and perineal hygiene factors such as type of sanitary napkin, change of sanitary napkin, drying of used cloth napkin and washing of perineum, sexual factors such as vaginal douching after coitus ,frequency of sexual intercourse, extra marital relationship , pre marital sex and age of first sexual debut, family welfare and gynaecological factors such as use of temporary family planning methods , intra uterine device usage (copper T),problem in uterus , vaginal discharge , post coital bleeding and husband having problem.

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3.3 RESEARCH METHODOLOGY

RESEARCH APPROACH- A qualitative research approach

RESEARCH DESIGN- A non experimental descriptive research design.

Key:

CIN	-	Cervical Intraepithelial Neoplasia
DNA	-	Deoxy ribo Nucleic Acid
HPV	-	Human Papilloma Virus
HR HPV	-	High Risk Human Papilloma Virus
HSIL	-	Highgrade Squamous Intraepithelial Lesion
ICCR	-	International Centre for Collaborative Research
IERB	-	Institutional Ethics Review Board
NCD	-	Non Communicable Disease
OPD	-	Out Patient Department
US	-	United States
VIA	-	Visual Inspection with Acetic Acid
WHO	-	World Health Organization

4Statistical tools and econometric models

This section elaborates the proper statistical/econometric/financial models which are being used to forward the study from data towards inferences. The detail of methodology is given as follows.

SECTION 4.1: DESCRIPTION OF DEMOGRAPHIC VARIABLES OF THE MARRIED WOMEN**Table 4.1.1: Frequency and percentage distribution of the demographic variables married women with respect to age, religion and education**

N= 100

S.No.	Demographic variables	No.	%
1.	Age in years		
	20-25	9	9.0
	26-30	12	12.0
	31-35	12	12.0
	36-40	29	29.0
	41-45	24	24.0
	46-50	14	14.0
2.	Religion		
	Hindu	96	96.0
	Muslim	3	3.0
	Christian	1	1.0
3.	Educational status of women		
	Graduate or post graduate	12	12.0
	Intermediate or post high school	49	49.0
	High school certificate	23	23.0
	Middle school certificate	12	12.0

	Primary school certificate	4	4.0

The above table 4.1.1 depicts the frequency and percentage distribution of demographic variables of the married women with respect to age, religion and educational status of women. With regard to age in years, 29(29%) were between the age of 36-40 years, 96(96%) of them were Hindu, 49(49%) of them were intermediate education.

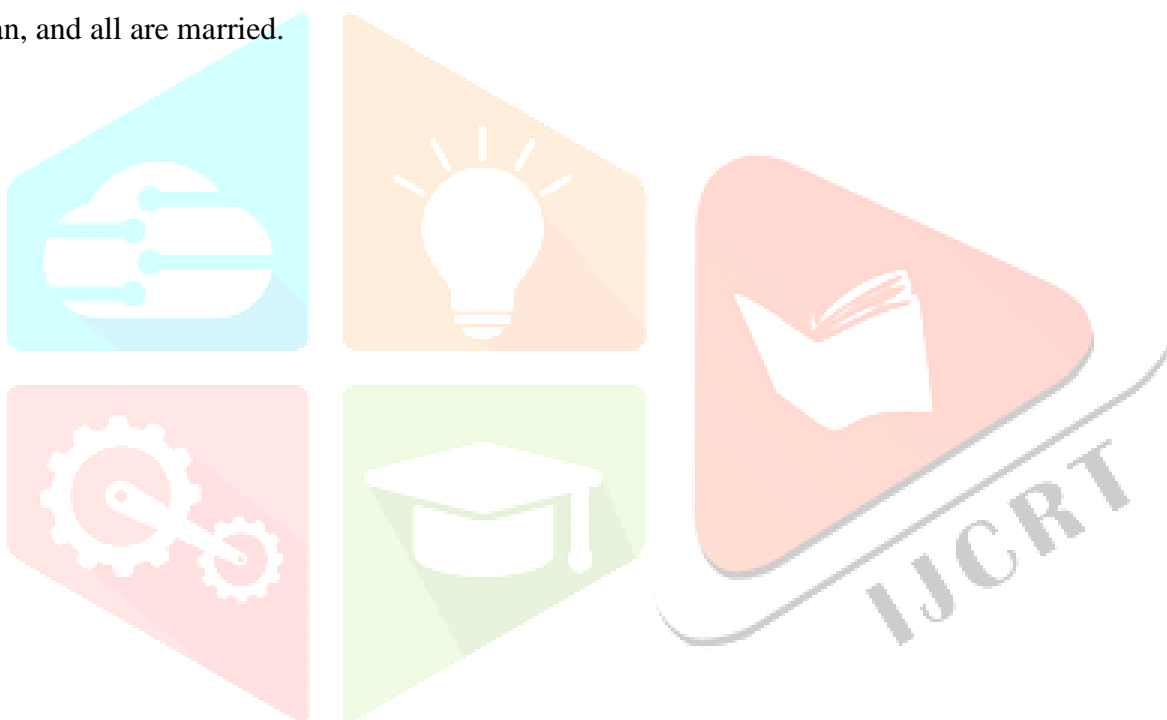
4.1.3: Frequency and percentage distribution of the demographic variables of married women with occupation of wife, occupation of husband and marital status

N=100

S.No.	Demographic variables	No.	%
1.	Occupation of wife		
	Working	55	55.0
	Not working	45	45.0
1.1	If Working, type of work?		
	Fish exporting factory	-	-
	Garments exporting factory	-	-
	Vendors	-	-
	Knitting ropes	55	55.0
1.2	If Not working, What is the House ±Chores?		
	Preserving Fish	-	-
	Selling fish	-	-
	House-hold work	45	45.0
2.	Occupation of Husband		
	Catching fish	83	83.0
	Selling fish	4	4.0
	Fish export	1	1.0
	Not working	2	2.0

	Others (Bakery)	10	10.0
3.	Marital status		
	Married	100	100.0
	Widowed	-	-
	Separated	-	-
	Divorced	-	-

The above table 4.1.3 depicts the frequency and percentage distribution of demographic variables of the married women, 55 (55%) of them were working in the field of knitting ropes, 83(83%) of their husband were fisherman, and all are married.



**SECTION 4.2: ASSESSMENT OF RISK FACTORS FOR CERVICAL CANCER
AMONG MARRIED WOMEN**

**Table 4.2.1: Frequency and percentage distribution of personal risk factors of the
married women**

N=100

S.No.	Personal factors	No.	%
1.	Tobacco usage		
	Yes	-	-
	No	100	100.0
2.	Alcohol usage		
	Yes	-	-
	No	100	100.0
3	Dietary pattern		
	Vegetarian	1	1
	Ova vegetarian	-	-
	Non vegetarian	99	99.0
4.	Shellfish eating		
	Yes	71	71.0
	No	29	29.0
4.1	If yes, frequency of eating		
	Once in a month	3	3.0
	Once in 2 months	2	2.0
	Once in 3 months	13	13.0
	Once in 4 months	1	1.0

	Once in 6 months	41	41.0
	Once in a year	11	11.0

The above table 4.2.1 depicts the frequency and percentage distribution of personal factors of married women with tobacco usage, alcohol usage, dietary pattern and shellfish eating.

With regard to tobacco usage, alcohol usage, none of them had the habit, 99(99%) of them were non vegetarian,71(71%)of them were eating shellfish,41(41%) of them were consuming shellfish once in 6 months



Table 4.2.2: Frequency and percentage distribution of the menstrual and perineal hygiene factors of married women

N=100

S.No.	Menstrual and Perineal Hygiene Factor	No.	%
1.	Age at menarche		
	10-12	10	10.0
	13-15	87	87.0
	16-18	3	3.0
2.	Regularity of Menstrual cycle		
	Regular	88	88.0
	Irregular	12	12.0
3.	Type of Sanitary Napkin		
	Commercial pad	67	67.0
	Cloth	33	33.0
4.	Change of Sanitary Napkin		
	Once in a day	-	-
	Twice a day	20	20.0
	Thrice a day	71	71.0
	More than three times	9	9.0
5.	Drying of Napkin		
	Under the Sun	33	33.0
	Inside the Bathroom	-	-
	Throw in Dust Bin	-	-
6	Washing of Perineum		

After urination	-	-
After defecation	-	-
Both one & two	100	100.0

The above table 4.2.2 depicts the frequency and percentage distribution of the menstrual and perineal hygiene factors with respect to age at menarche, regularity of menstrual cycle, type of sanitary napkin, change of sanitary napkin, drying of napkin, washing of perineum.



With regard to age at menarche, 10(10%) of them attained menarche between 10-12 years, 88(88%) of them had regular menstrual cycle, 67(67%) of them were using commercial pad, 33(33%) of them were using cloth as sanitary napkin during menstrual cycle, 20(20%) of them change the sanitary napkin twice in a day, 33(33%) of them dry the napkin under the sun, all of them wash the perineum both after urination and defecation.



Table 4.2.3: Frequency and percentage distribution of the sexual factors of the married women

N=100

S.No.	Sexual Factors	No.	%
1	Age of first Sexual Debut		
	"\UV	-	-
	16-20yrs	32	32.0
	21-25 yrs	64	64.0
	26-30 yrs	4	4.0
2	Frequency of Coitus		
	Daily	-	-
	Weekly thrice	17	17.0
	Weekly twice	56	56.0
	Weekly once	14	14.0
	Once in while	13	13.0
3	Vaginal Douching after Coitus		
	Yes	99	99.0
	No	1	1.0
4	Extra Marital Relationship		
	Yes	3	3.0
	No	97	97.0
4.1	If yes, No. of Partners (N=3)		
	One person	3	3.0

	Two person	-	-
	Here person	-	-
	More than three	-	-

The above table 4.2.3 depicts the frequency and percentage distribution of sexual factors among married women 32(32%) of them had first sexual debut between 16-20 years of age, 17(17%) of them had coitus thrice in a week, 1(1%) of them do not douche the vagina after coitus, 3% had extra marital relationship.



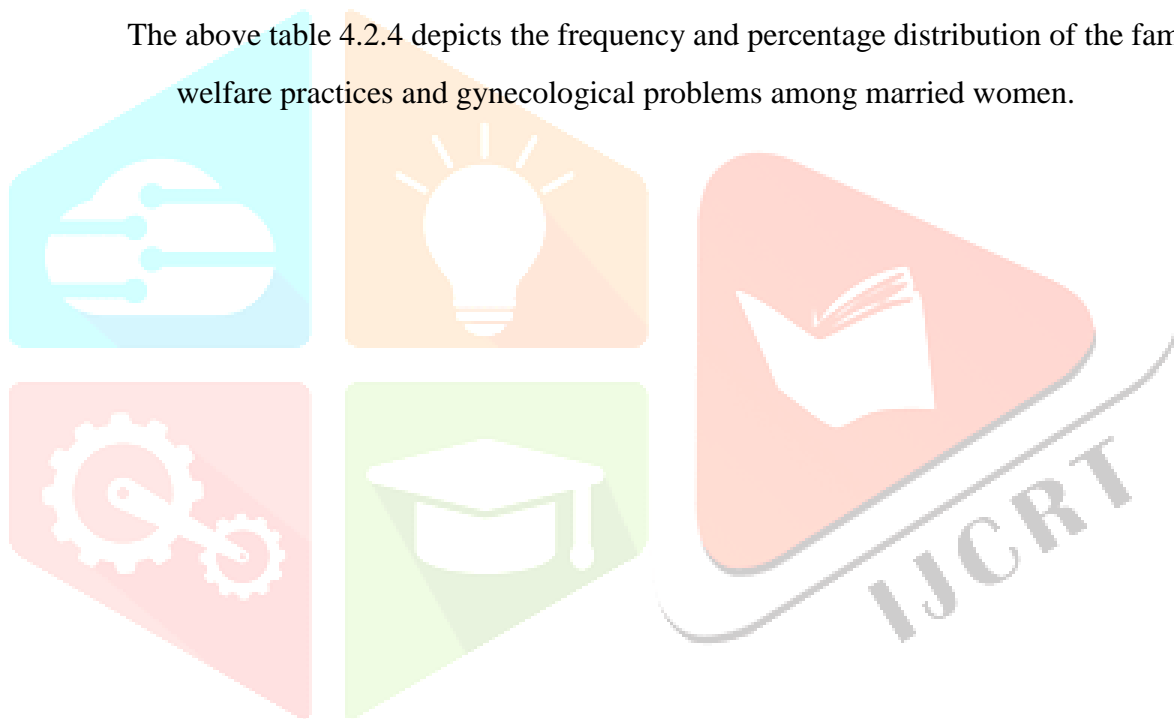
Table 4.2.4: Frequency and percentage of the family welfare practices and Gynecological problems among married women

N=100

S.No.	Family welfare practices and Gynecological factors	N	%
1	Age at Marriage		
	17-21	57	57.0
	22-24	39	39.0
	25-28	4	4.0
2.	Duration of Marital life in years		
	1-10	25	25.0
	11-20	50	50.0
	21-30	25	25.0
3.	Number of Birth given	1	1.0
	Nil		
	1	17	17.0
	2	72	72.0
	3 and above	9	9.0
4.	Use any family planning methods		
	Yes	63	63.0
	No	37	37.0
4.1	If Yes, Type of Method		
	Birth pills	-	-

	Copper T	52	52.0
	Calendar Method	4	4.0
	Condom	7	7.0
4.2	If copper T duration of usage		
	5 years	1	1.0
	10 years	51	51.0

The above table 4.2.4 depicts the frequency and percentage distribution of the family welfare practices and gynecological problems among married women.



With regard to 57(57%) of them got married between 17-21 years of age, 50(50%) of them were between 11-20 years of marital life, 9(9%) of them had given birth 3 and above children, 63(63%) of them were using family planning methods, 52(52%) of them were using copper T, in which 51% of them were using past 10 years.



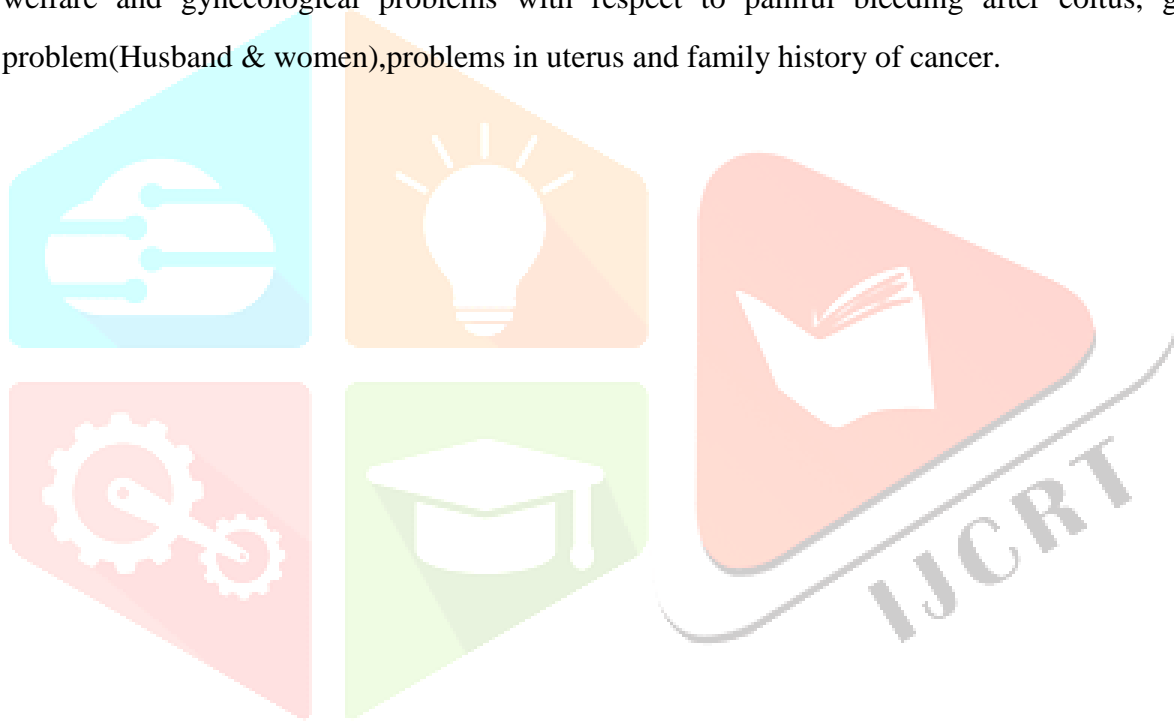
Table 4.2.5: Frequency and Percentage of the family welfare practices and Gynaecological problems among married women

N=100

	Family welfare S.No. problems	practices and gynecological N	%
1.	Painful bleeding after coitus		
	Yes	1	1.0
	No	99	99.0
2.	Genital problems(Husband)		
	Yes	1	1.0
	No	99	99.0
2.1	If yes, Specify		
	Ulcer in penis	-	-
	Discharge in penis	-	-
	Rashes or ulcer in penis	-	-
	Others(Itching penis)	1	1.0
3	Genital Problems (Women)		
	Yes	16	16.0
	No	84	84.0
3.1	If yes, Specify,		
	Vaginal discharge	15	15.0
	Utero vaginal prolapsed	1	1.0
4.	Family history of cancer		
	Yes	25	25.0

	No	75	75.0
4.1	If yes		
	Maternal	10	10.0
	Paternal	15	15.0

The above table 4.2.5 depicts the frequency and percentage distribution of the family welfare and gynecological problems with respect to painful bleeding after coitus, genital problem(Husband & women),problems in uterus and family history of cancer.



With regard to painful bleeding after coitus, 1(1%) of them had complaints of post coital bleeding, 1(1%) of husband had genital problem, 16(16%) of women had genital problem, 25(25%) of them had family history of cancer, in that 15(15%) of them were paternal 10(10%) were maternal.



SECTION 4.3: ASSOCIATION OF DEMOGRAPHIC VARIABLES WITH THE RISK FACTORS AMONG MARRIED WOMEN

Table 4.3.1: Association of demographic variables with Dietary pattern

N=100

S.No.	Demographic Variable	Dietary pattern		Φ ² / F	Sig.
		Vegetarian	Non Vegetarian		
1	Educational status of Women				
	Graduate or Post graduate	0	12	8.769	.010**
	Intermediate or Post high school	0	49		
	High school certificate	0	23		
	Middle school certificate	0	12		
	Primary school certificate	1	3		
2	Educational status of husband				
	Graduate or Post graduate	0	6	10.167	.030*
	Intermediate or Post high school	0	24		
	High school certificate	0	55		

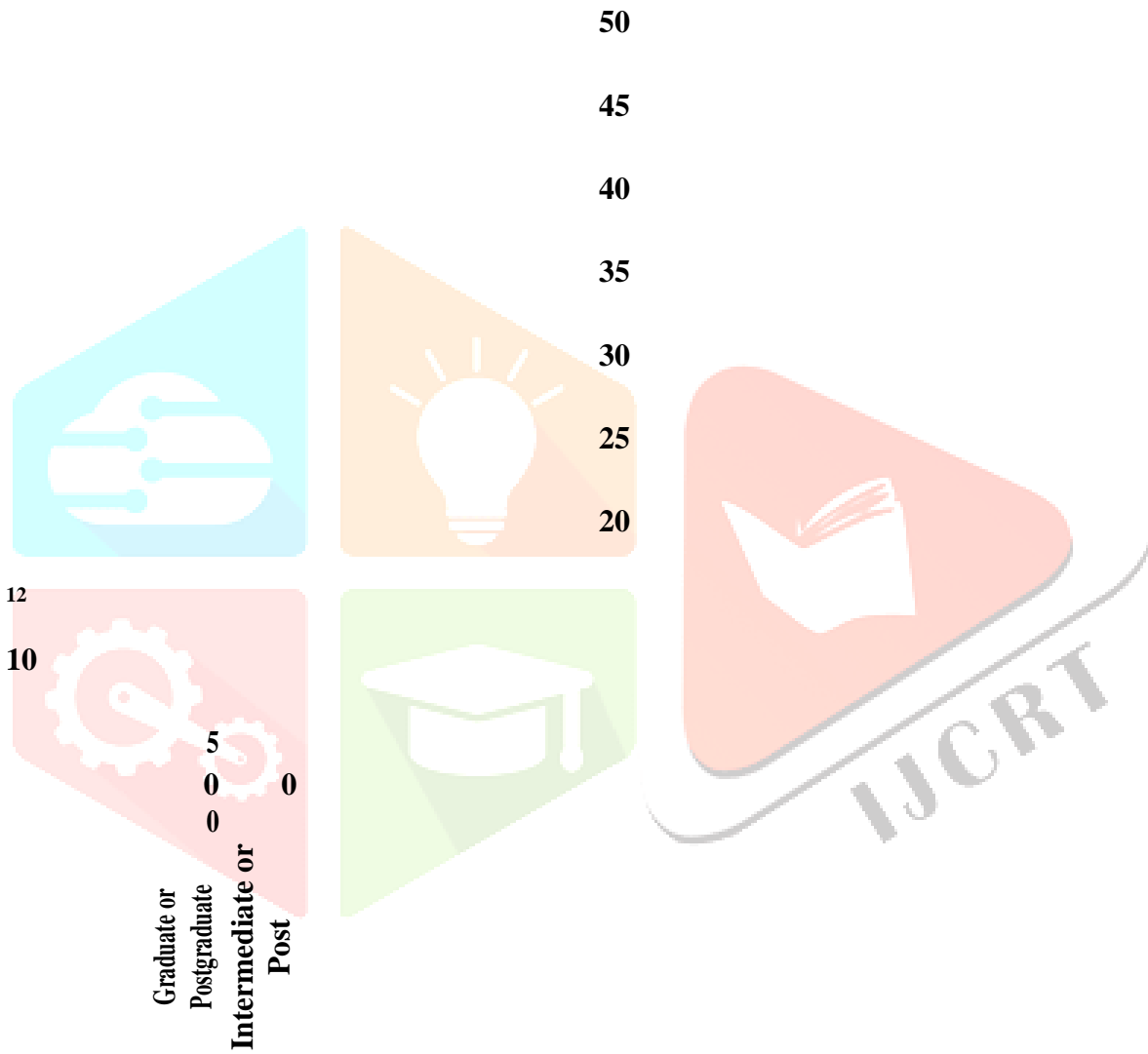
	Middle school certificate	0		
	Primary school certificate	1	2	

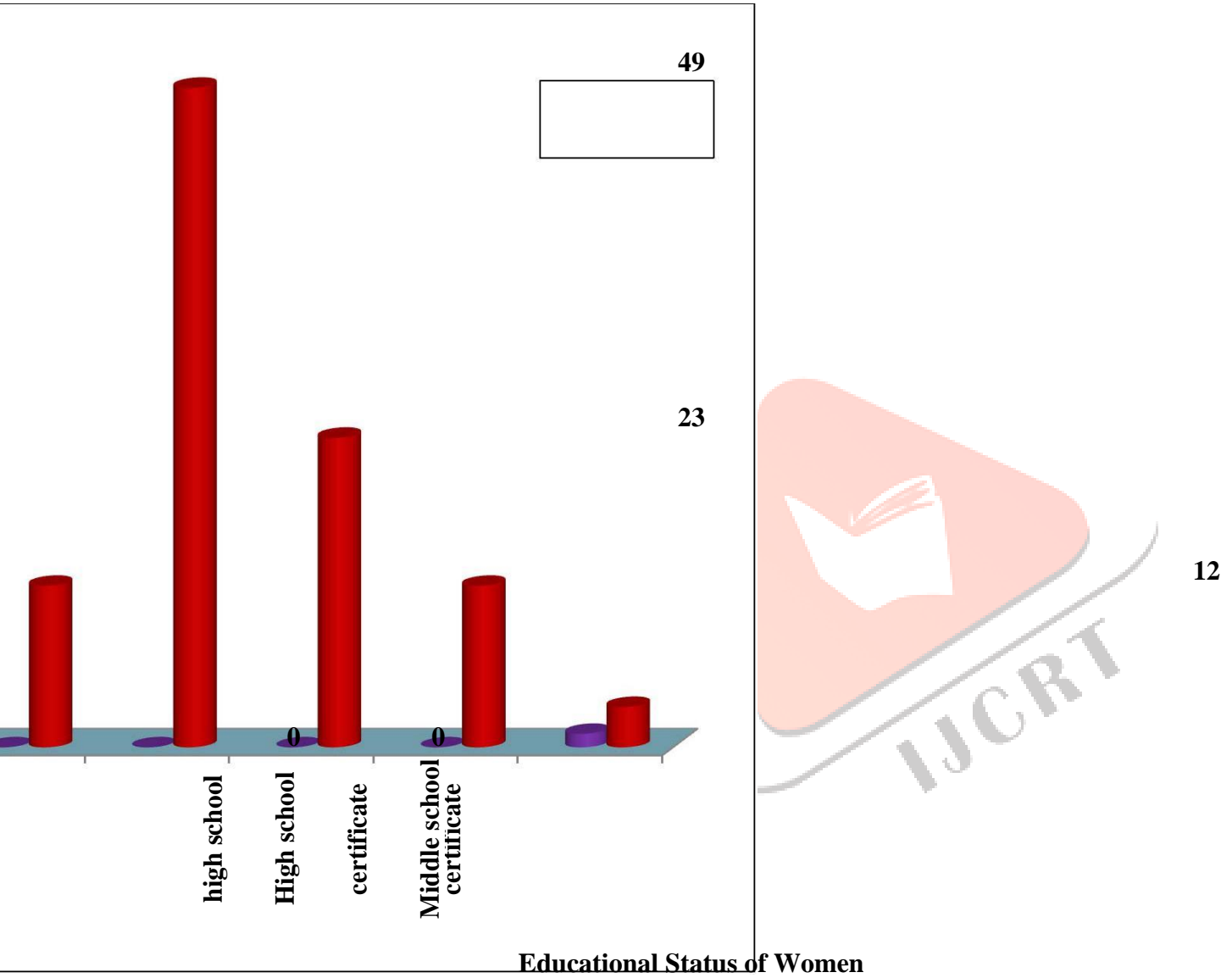
**** - High Statistical significance at $p < 0.01$ level, * - Statistical Significance at $p < 0.05$ level.**

The table 4.3.1 shows that the demographic variable educational status of the women was found to be high statistically significant, educational status of husband was found to be statistical significant association with dietary pattern at the level of $p < 0.01$, $p < 0.05$ respectively.









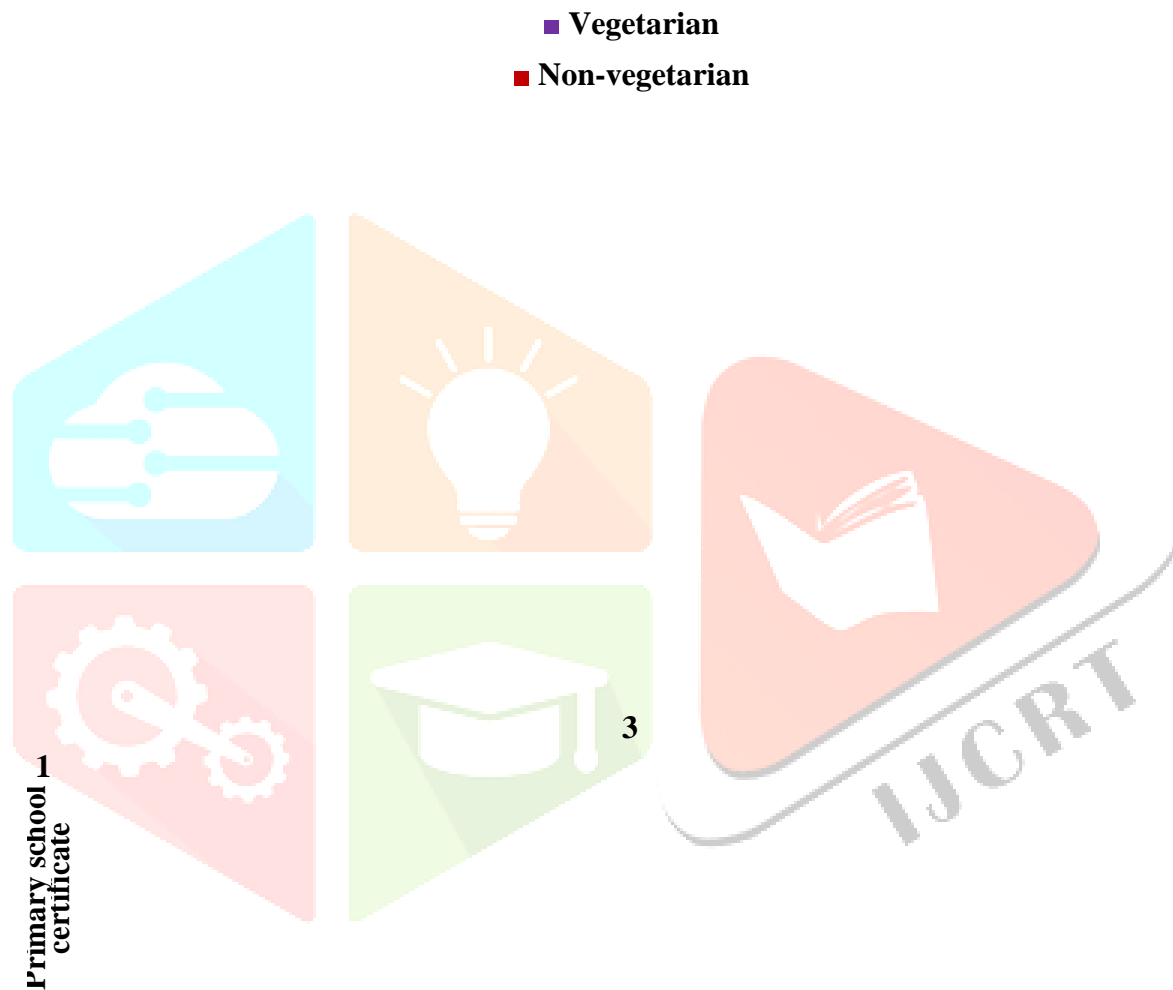
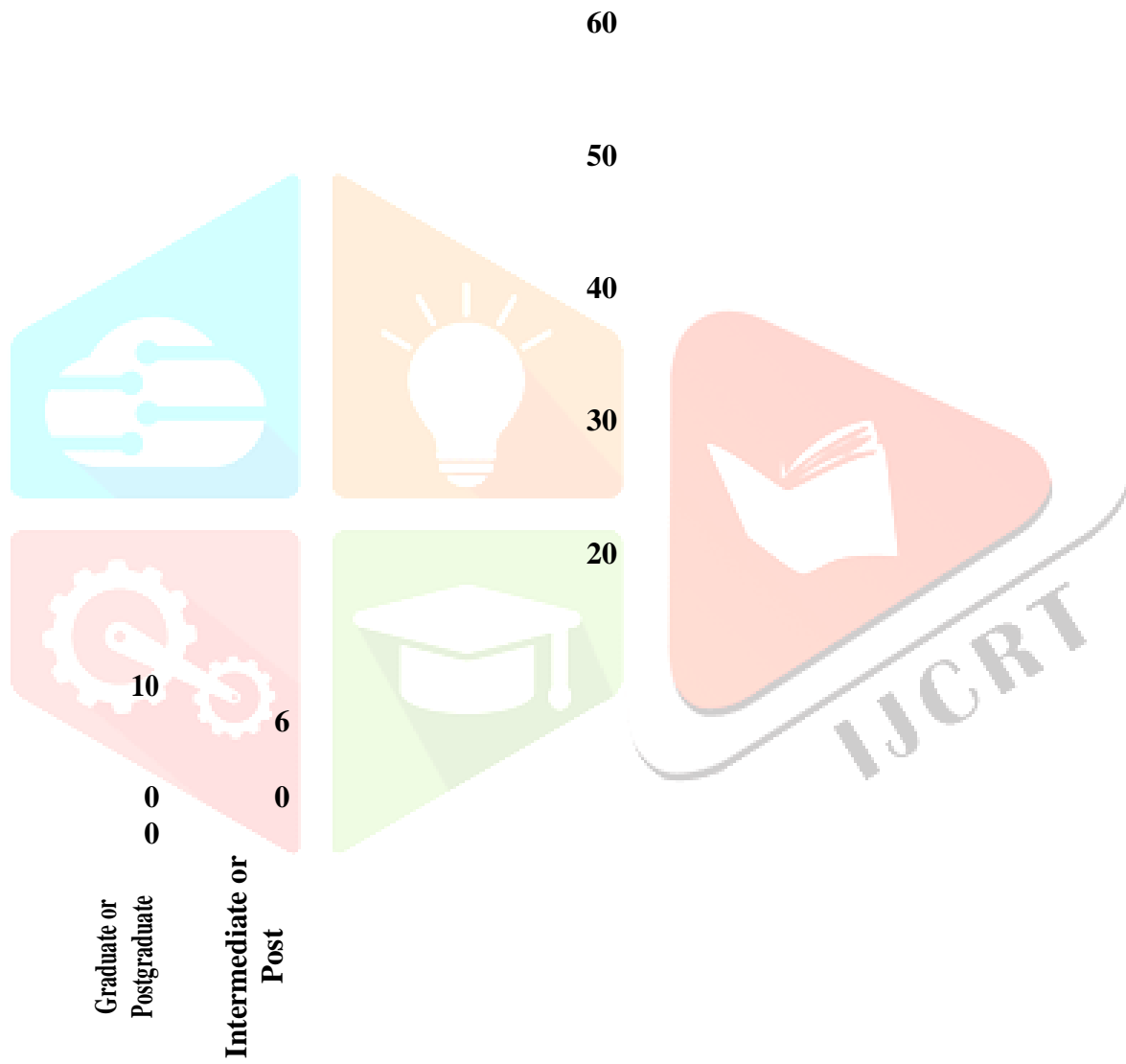
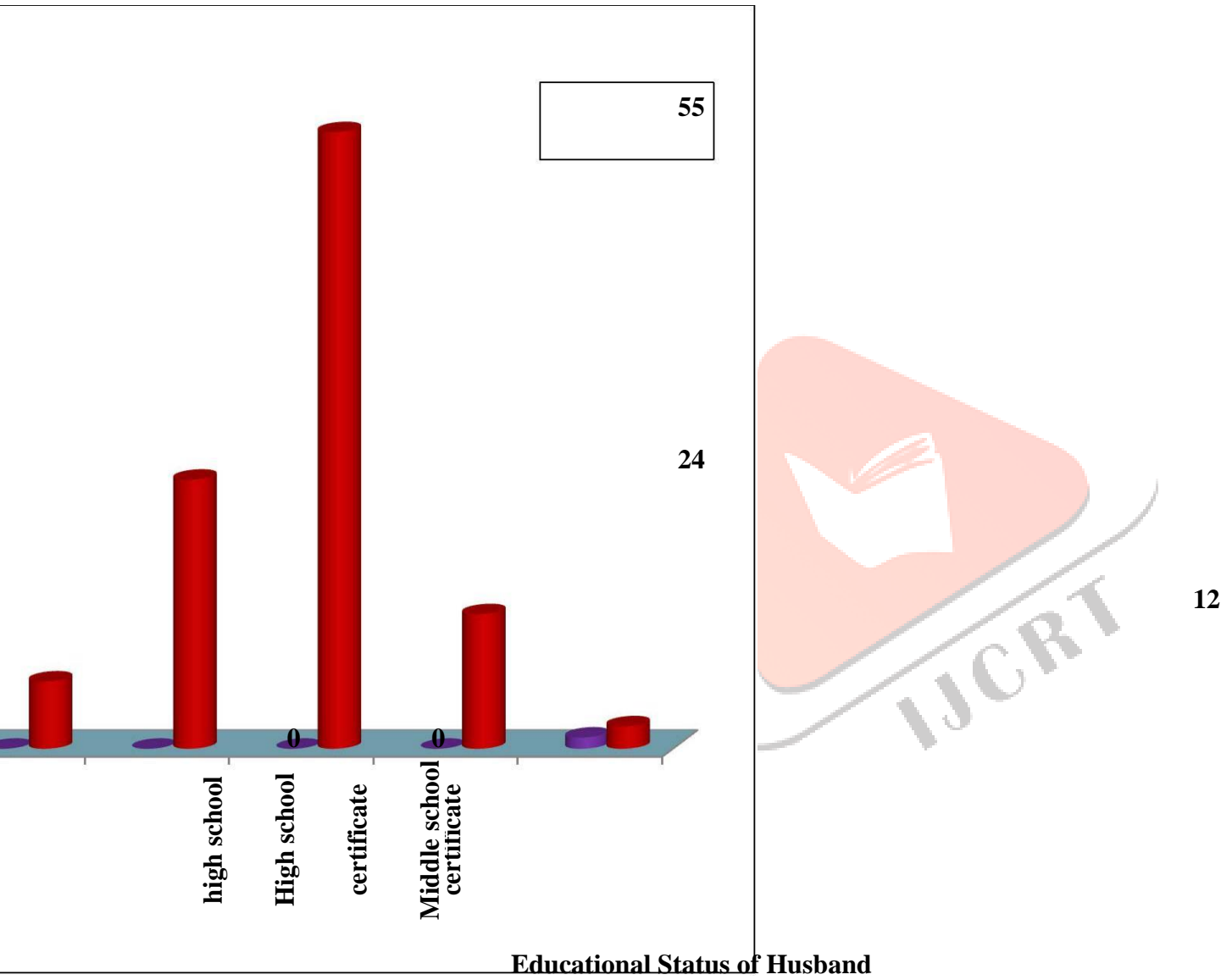


Fig.4.3.1: Association of educational status of women with Dietary pattern

The fig.4.3.1 shows that the demographic variable educational status of the women was found to be high statistically significant association with dietary pattern at the level of $p < 0.01$.







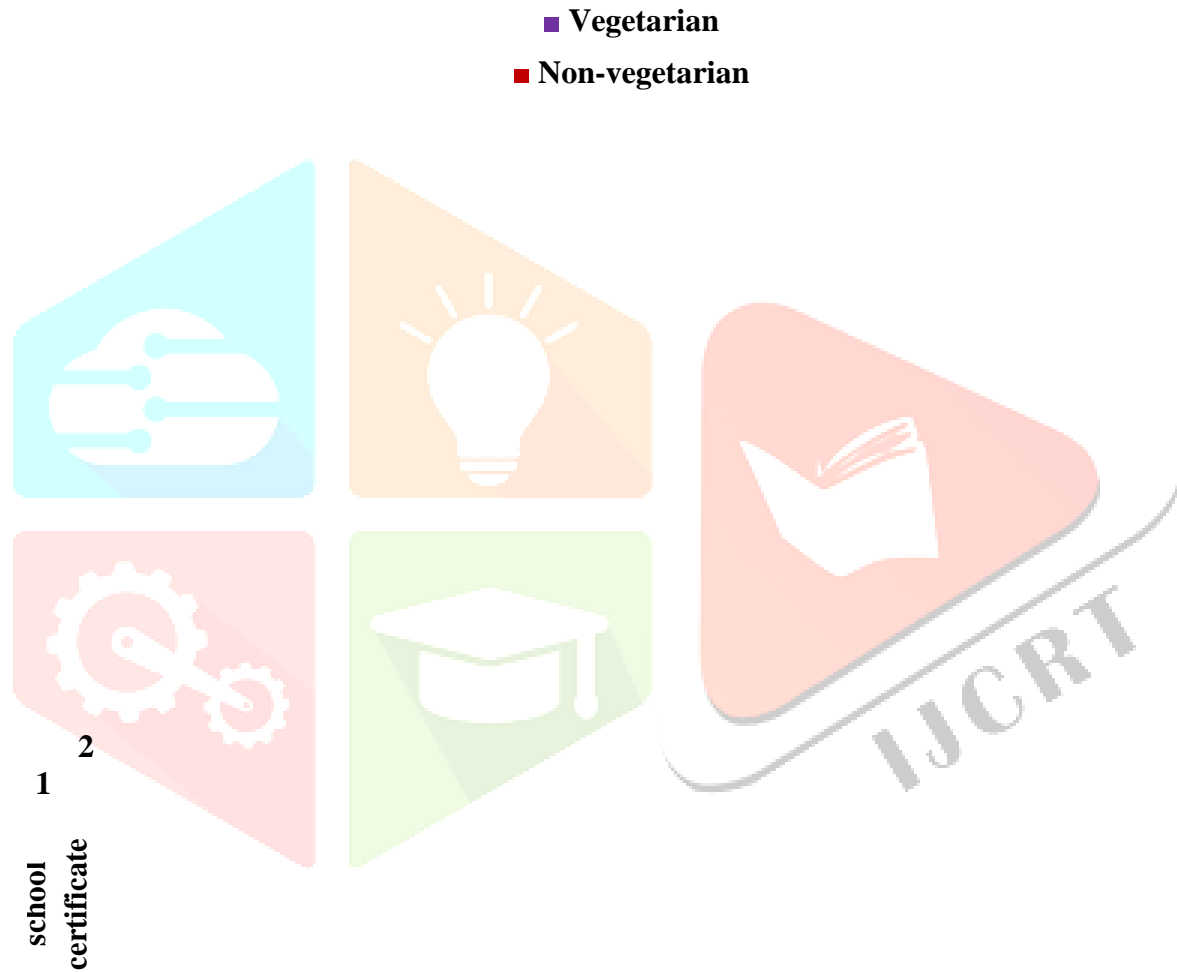


Fig.4.3.2: Association of educational status of husband with Dietary pattern

The fig.4.3.1 shows that the demographic variable educational status of husband was found to be statistical significant association with dietary pattern at the level of $p < 0.05$.

Table 4.3.2: Association of demographic variables with Age at Menarche

N=100

S.No.	Demographic Variable	Age at Menarche (years)			Φ ² /F	Sig.
		10-12	13-15	16-18		
1	Age of Women					
	20-25 years	4	5	0	17.652	.005**
	26-30 years	1	11	0		
	31-35 years	0	12	0		
	36-40 years	5	24	0		
	41-45 years	0	22	2		
	46 ± 50 years	0	13	1		
2	Educational status of husband					
	Graduate or Post graduate	1	5	0	13.165	.05*
	Intermediate or Post high school	1	23	0		
	High school certificate	4	49	2		
	Middle school certificate	4	8	0		
	Primary school certificate	0	2	1		

*** - Statistical Significance at p<0.05 level, **-High Statistical significance at p<0.01 level**

The table 4.3.2 shows that the demographic variable age of women in years were found to be high statistically significant, educational status of husband were found to be statistical significant association with age at menarche at the level of p<0.01, p<0.05 respectively.

Use of Sanitary Napkin N=100

S.No.	Demographic Variable	Type of Sanitary Napkin		Φ^2 / F	Sig.
		Commercial Pad	Cloth		
1	Age of Women				
	20-25 years	7	2	11.708	.034*
	26-30 years	12	0		
	31-35 years	6	6		
	36-40 years	18	11		
	41-45 years	13	11		
	46 ± 50 years	11	3		
2	Educational status of Women				
	Graduate or Post graduate	12	0	15.898	.001***
	Intermediate or Post high school	33	16		
	High school certificate	17	6		
	Middle school certificate	4	8		
	Primary school certificate	1	3		
3	Educational status of husband				
	Graduate or Post graduate	6	0		
	Intermediate or Post high school	19	5		

		37	18	12.759	.007**
	Middle school certificate	5	7		
	Primary school certificate	0	3		

***-High Statistical significance at $p < 0.001$ level, **-High Statistical significance at $p < 0.01$ level, *- Statistical Significance at $p < 0.05$ level.

The table 4.3.3 shows that the demographic variables age of women were found to have statistically significant, educational status of women and educational status of husband were found to have high statistically significant association with the type of sanitary napkin at the level of $p < 0.05$, $p < 0.001$ and $p < 0.01$ respectively.

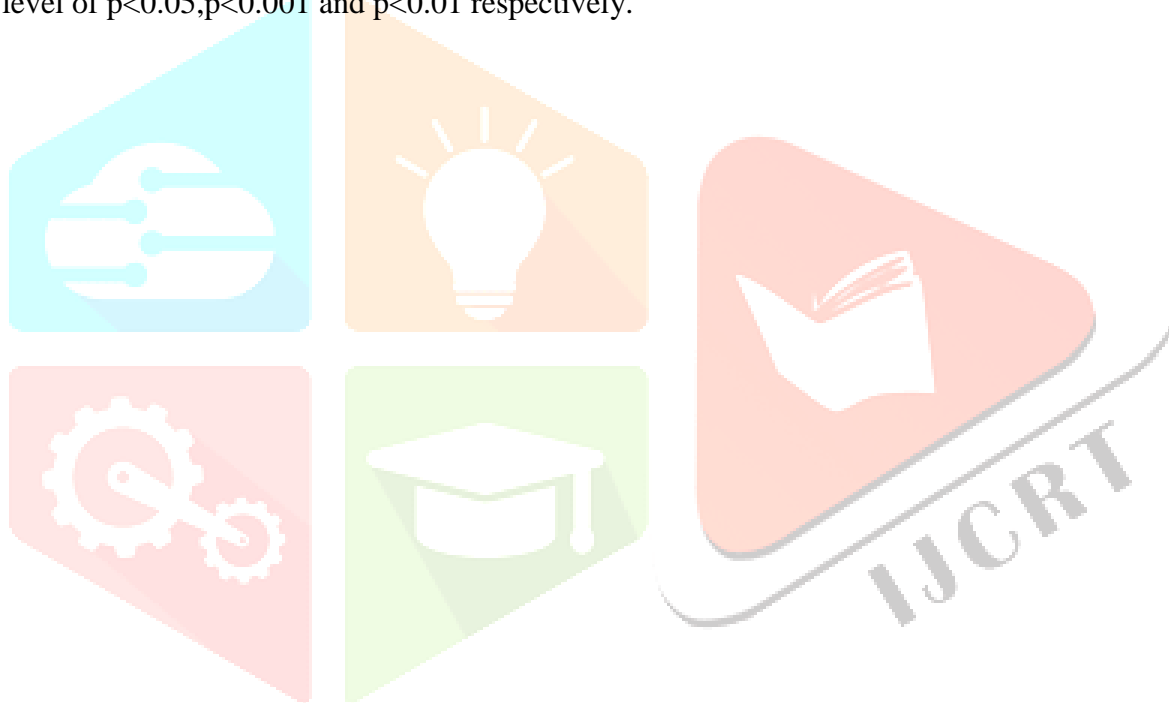


Table 4.3.4: Association of demographic variables with change of sanitary napkin

N=100

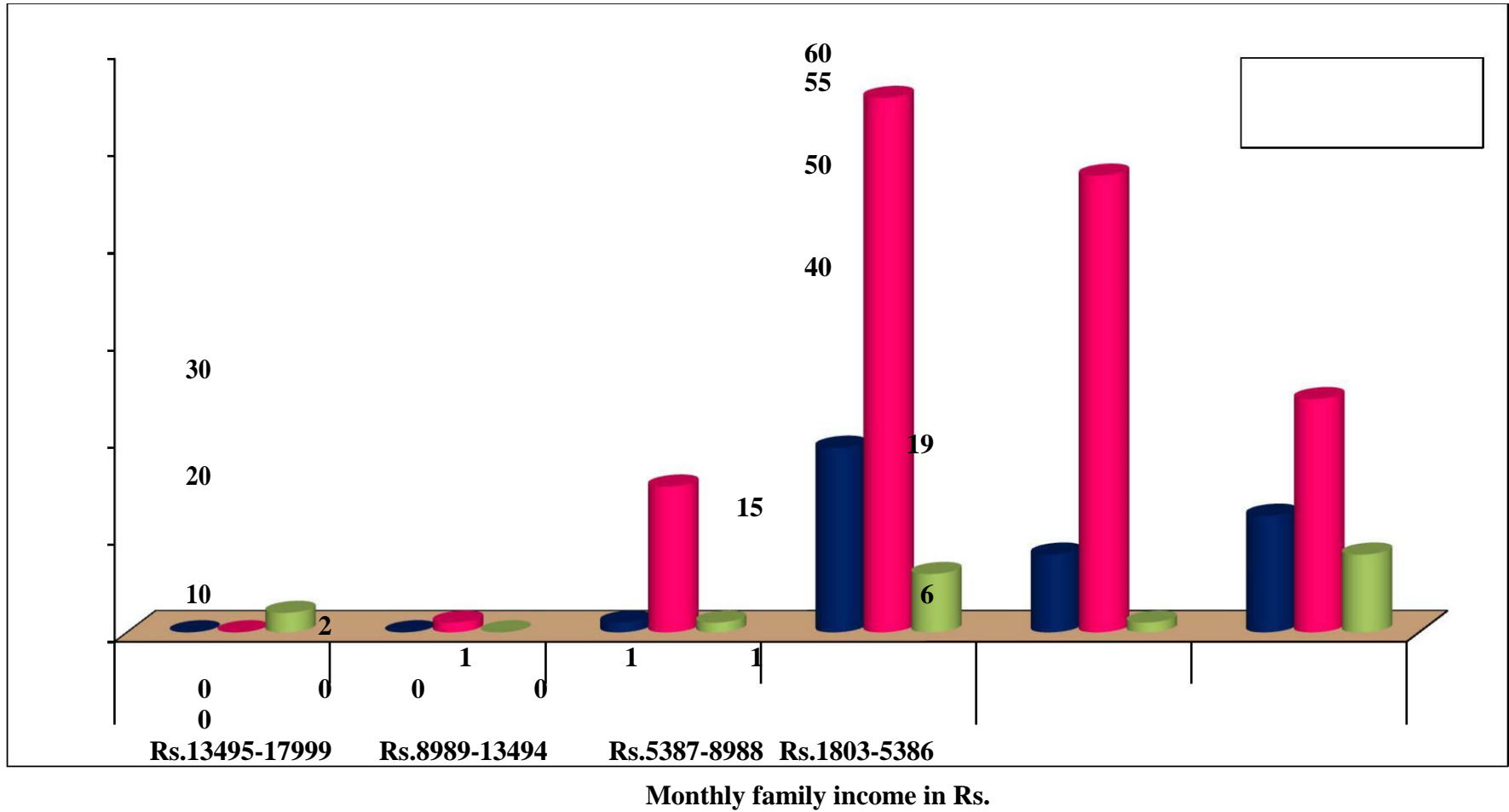
S.No	Demographic Variable	Change of sanitary napkin			Φ ² / F	Sig.
		Twice a day	Thrice a day	More than three times		
1	Monthly family income in Rs					
	Rs.13495-17999	0	0	2	13.182	.01**
	Rs.8989-13494	0	1	0		
	Rs.5387-8988	1	15	1		
	Rs.1803-5386	19	55	6		
2	Occupation of wife					
	Working	8	47	1	12.303	.002**
	Not working	12	24	8		

*- Statistical Significance at p<0.05 level, **-High Statistical significance at p<0.01 level

The table 4.3.4 shows that the demographic variables family monthly income and occupation of wife were found to be high statistically significant association with change of sanitary napkin at the level of p<0.01 respectively

age





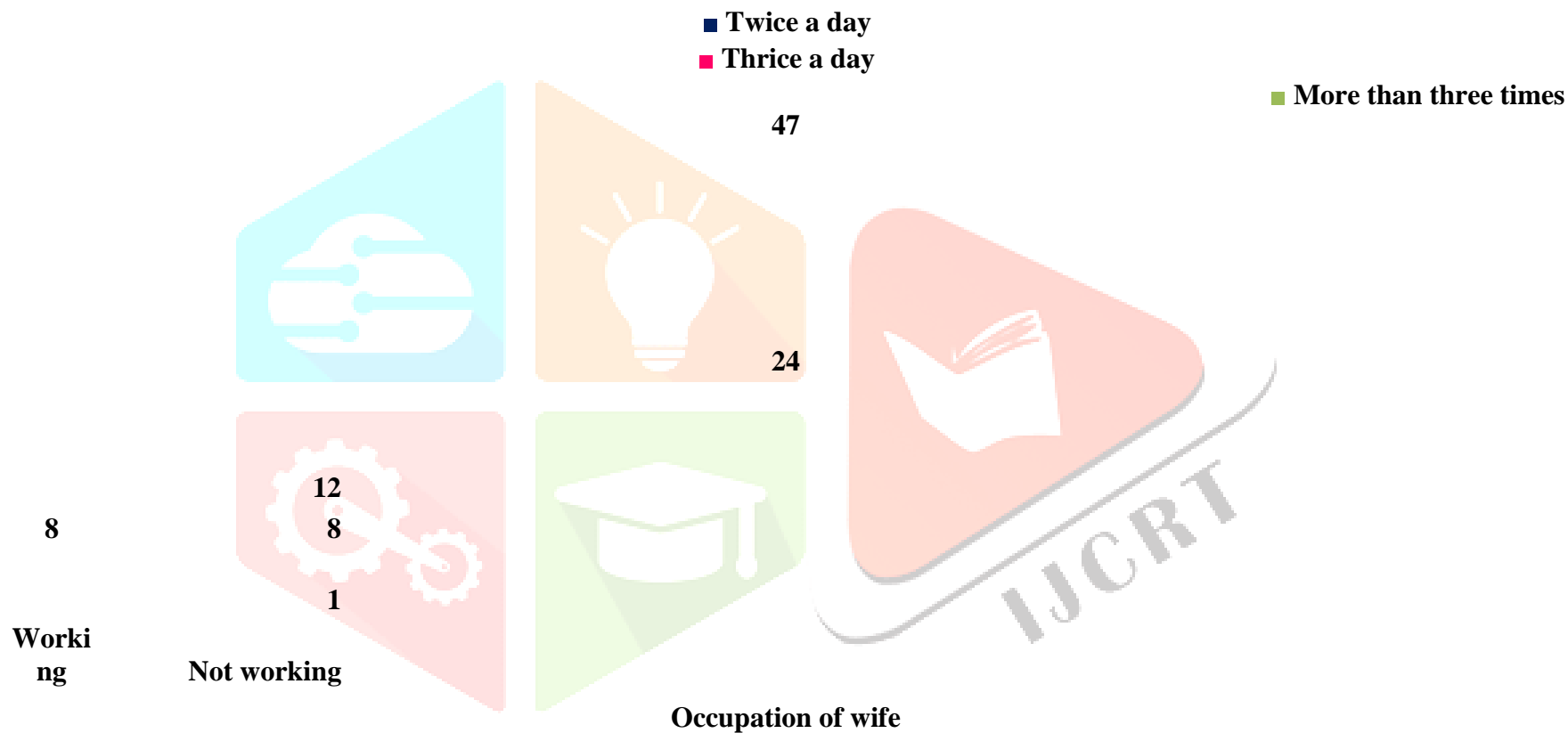


Fig.4.3.4: Association of monthly family income and occupation of wife with change of sanitary napkin among married women

The fig.4.3.4 shows that the demographic variables family monthly income and occupation of wife were found to be highly statistically significant association with change of sanitary napkin at the level of $p < 0.01$ respectively

Table 4.3.5: Association of demographic variables with frequency of coitus

N=100

S.No	Demographic Variable	Frequency of Coitus				Φ^2 / F	Sig.
		weekly thrice	Weekly twice	Weekly once	Once in while		
1	Age of Women						
	20-25 years	8	0	0	1	69.231	.000**
	26-30 years	7	5	0	0		
	31-35 years	0	7	3	2		
	36-40 years	1	22	5	1		
	41-45 years	0	15	3	6		
	46 ± 50 years	1	7	3	3		
2	Religion						
	Hindu	15	56	14	11	11.727	.019*
	Muslim	2	0	0	1		
	Christian	0	0	0	1		
3	Educational status of husband						
	Graduate or Post graduate	2	3	0	1	17.458	.05*
	Intermediate or Post high school	7	14	3	0		
	High school certificate	5	33	8	9		

	Middle school certificate	3	5	3	1		
	Primary school certificate	0	1	0	2		
4	Monthly family income in Rs						
	Rs.13495-17999	2	0	0	0	13.440	.035*
	Rs.8989-13494	1	0	0	0		
	Rs.5387-8988	4	11	1	1		
	Rs.1803-5386	10	45	13	12		
5	Husband occupation						
	Catching Fish	7	51	14	11	30.568	.000***
	Selling Fish	1	2	0	1		
	Fish Export	1	0	0	0		
	Not working	0	2	0	0		
	Others	8	1	8	1		

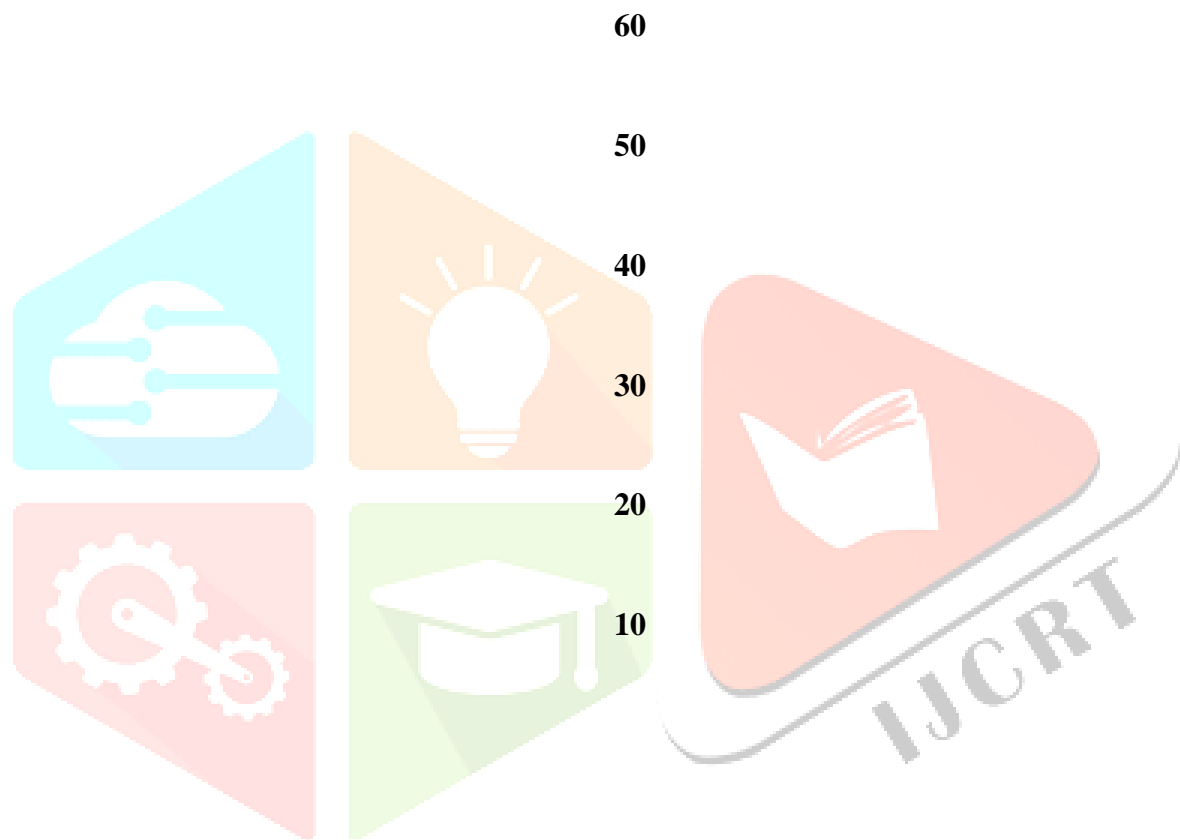
*** - High statistical Significance at $p < 0.001$, ** - High Statistical significance at $p < 0.01$ level,
* - Statistical Significance at $p < 0.05$ level

The table 4.3.5 shows that demographic variables age of women in years and husband occupation were found to be high statistically significant religion ,educational status of husband, monthly family income were found to be statistically significant association with frequency of coitus at the level of $p < 0.001$, $p < 0.05$ respectively.



age





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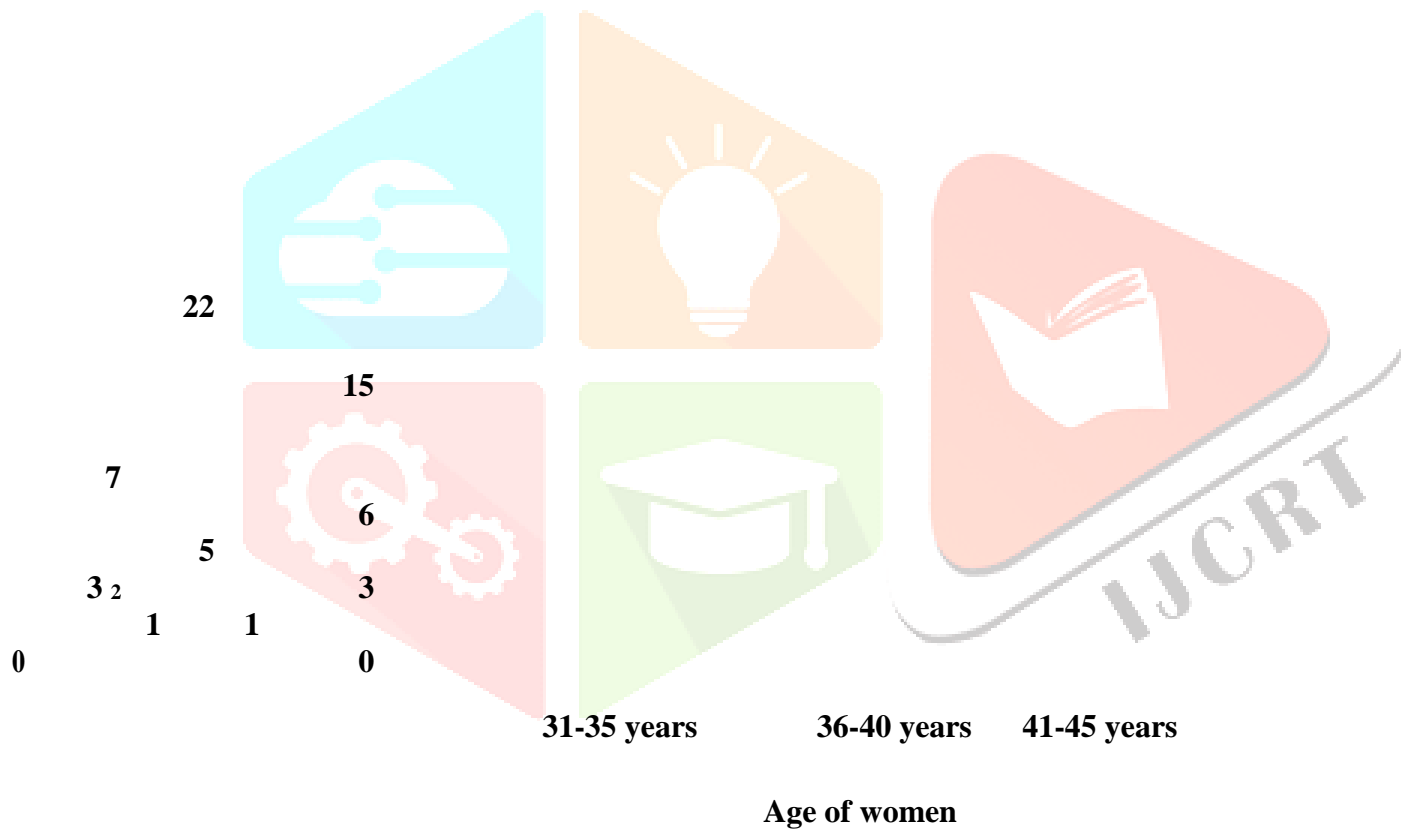
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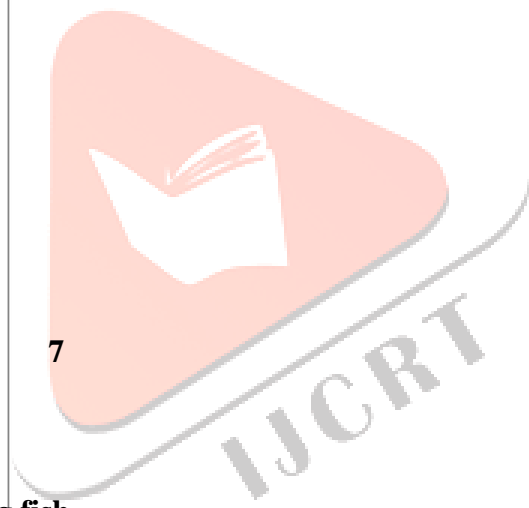
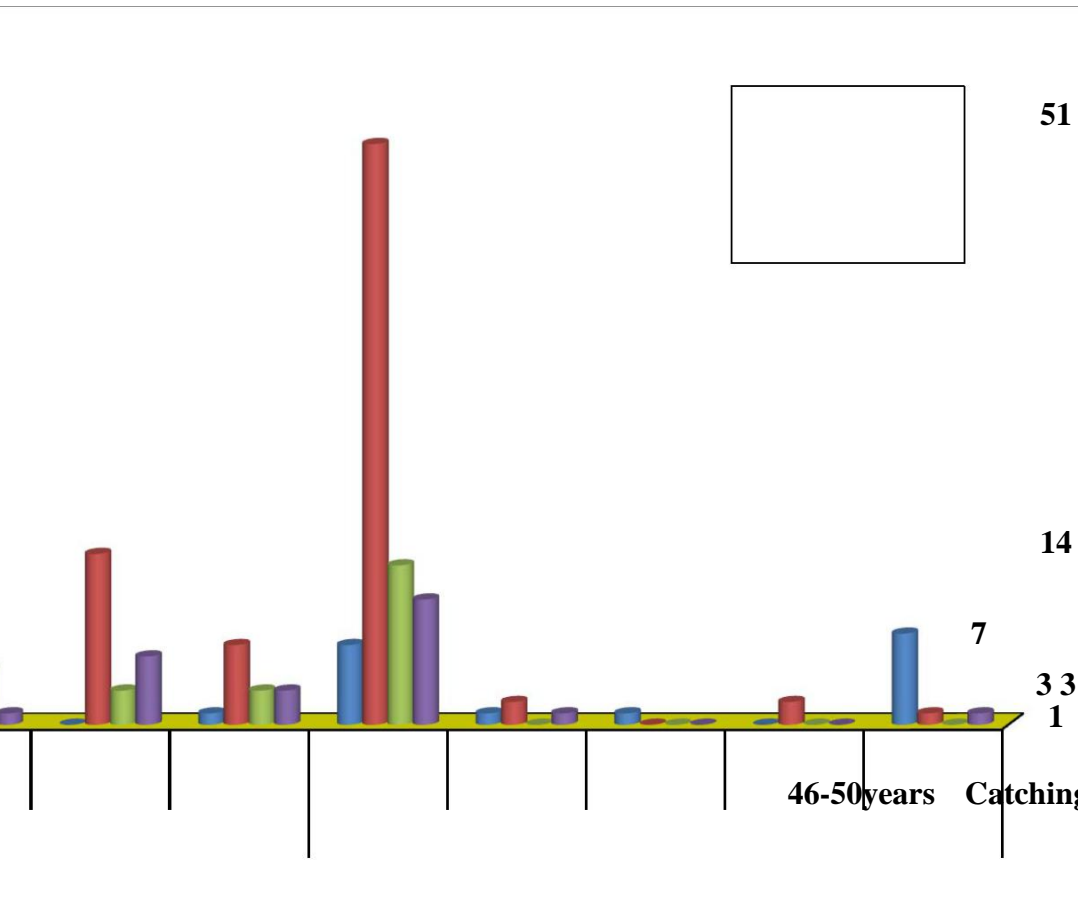
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00¹
20-25
years

5
00
26-30
years







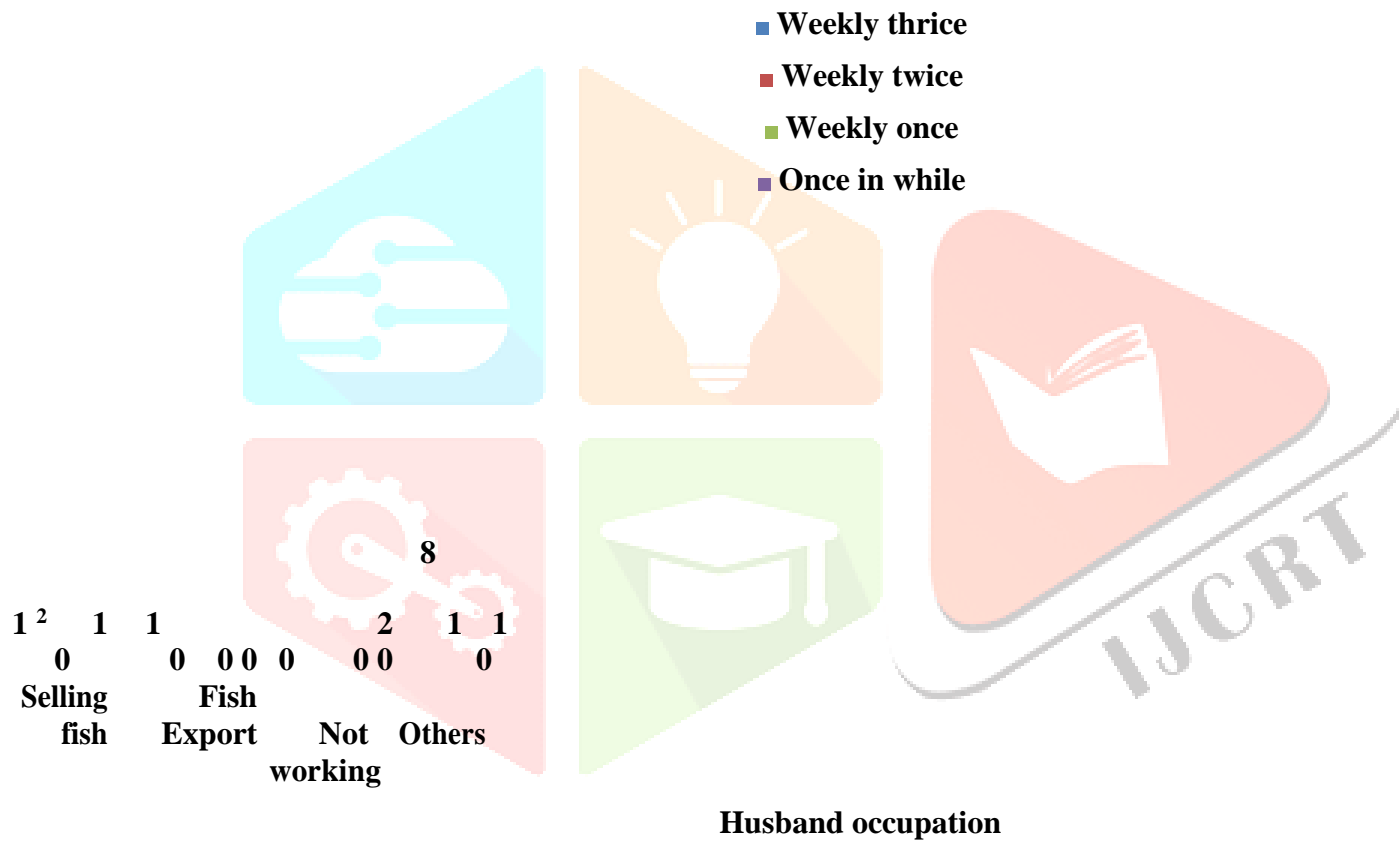


Fig.4.3.5: Association of age of women and husband occupation with frequency of coitus among married women

The fig.4.3.5 shows that demographic variables age of women in years and husband occupation were found to be high statistically significant association with frequency of coitus at the level of $p < 0.001$.



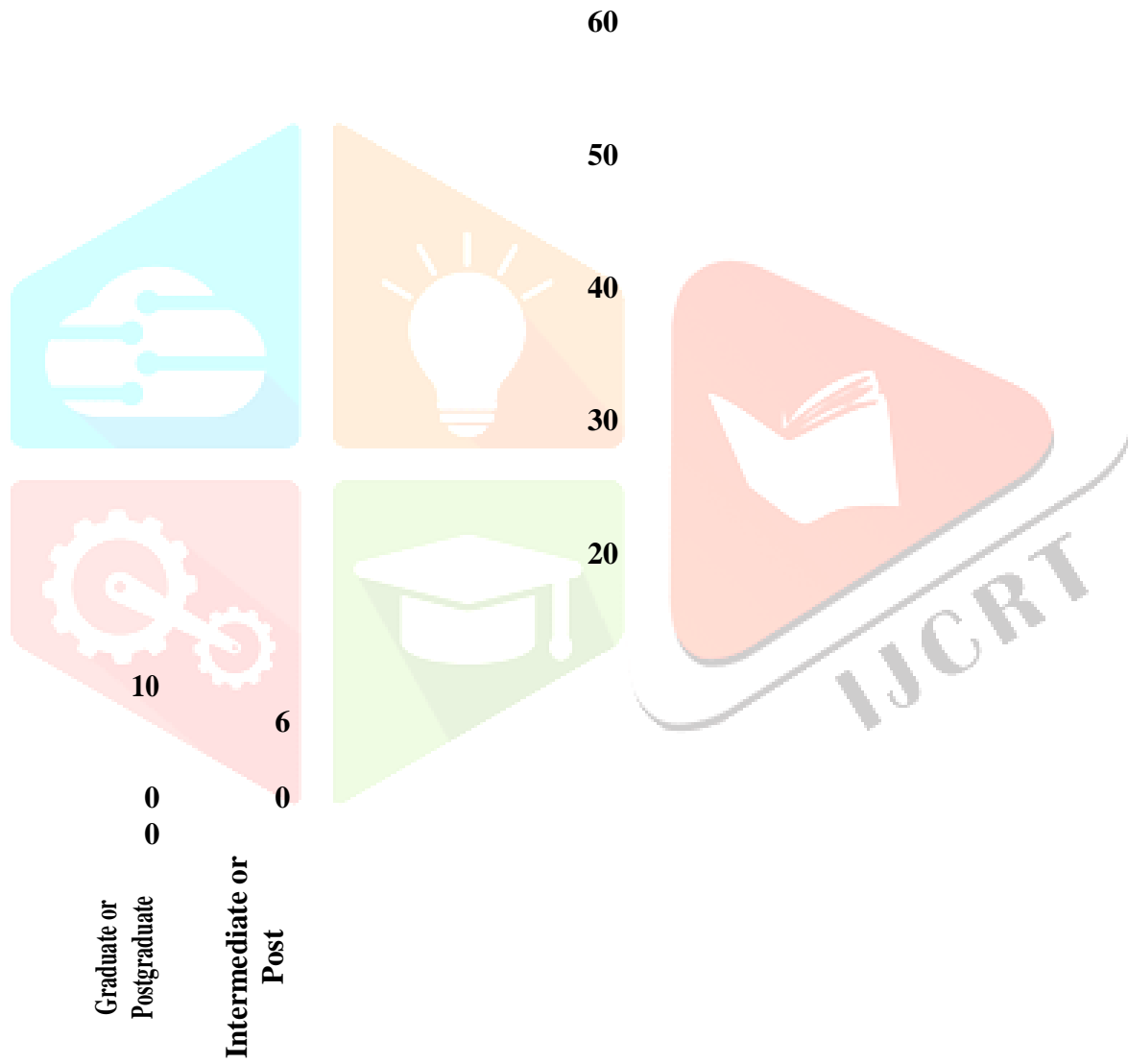
ra marital relationship N=100

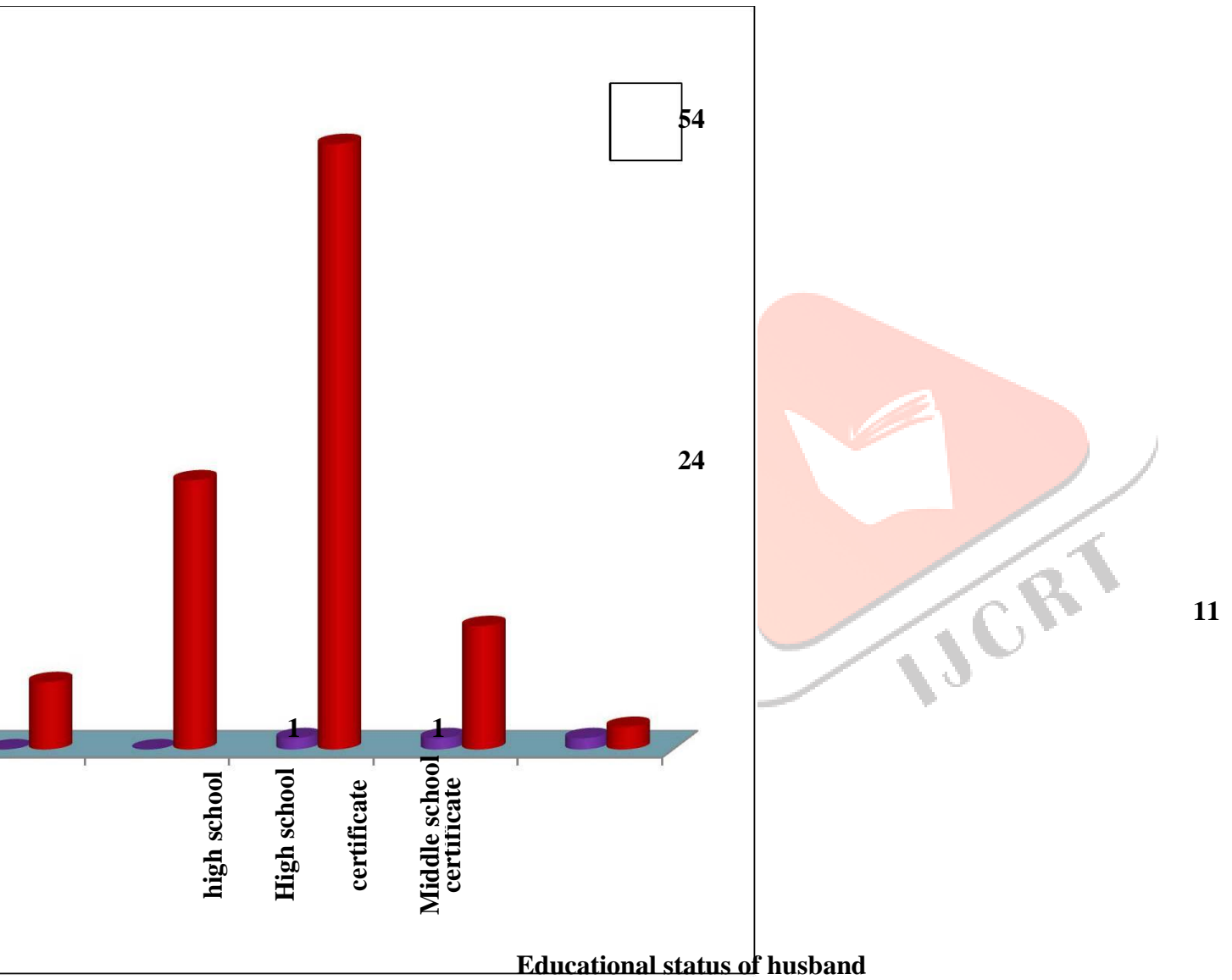
S.No.	Demographic Variable	Extra Marital Relationship		Φ^2 / F	Sig.
		Yes	No		
1	Educational status of husband				
	Graduate or Post graduate	0	6	11.708	.034*
	Intermediate or Post high school	0	24		
	High school certificate	1	54		
	Middle school certificate	1	11		
	Primary school certificate	1	2		

*** - Statistical Significance at $p < 0.05$ level**

The table 4.3.6 shows that demographic variable educational status of husband were found to have statistically significant association with extra marital relationship at the level of $p < 0.05$.







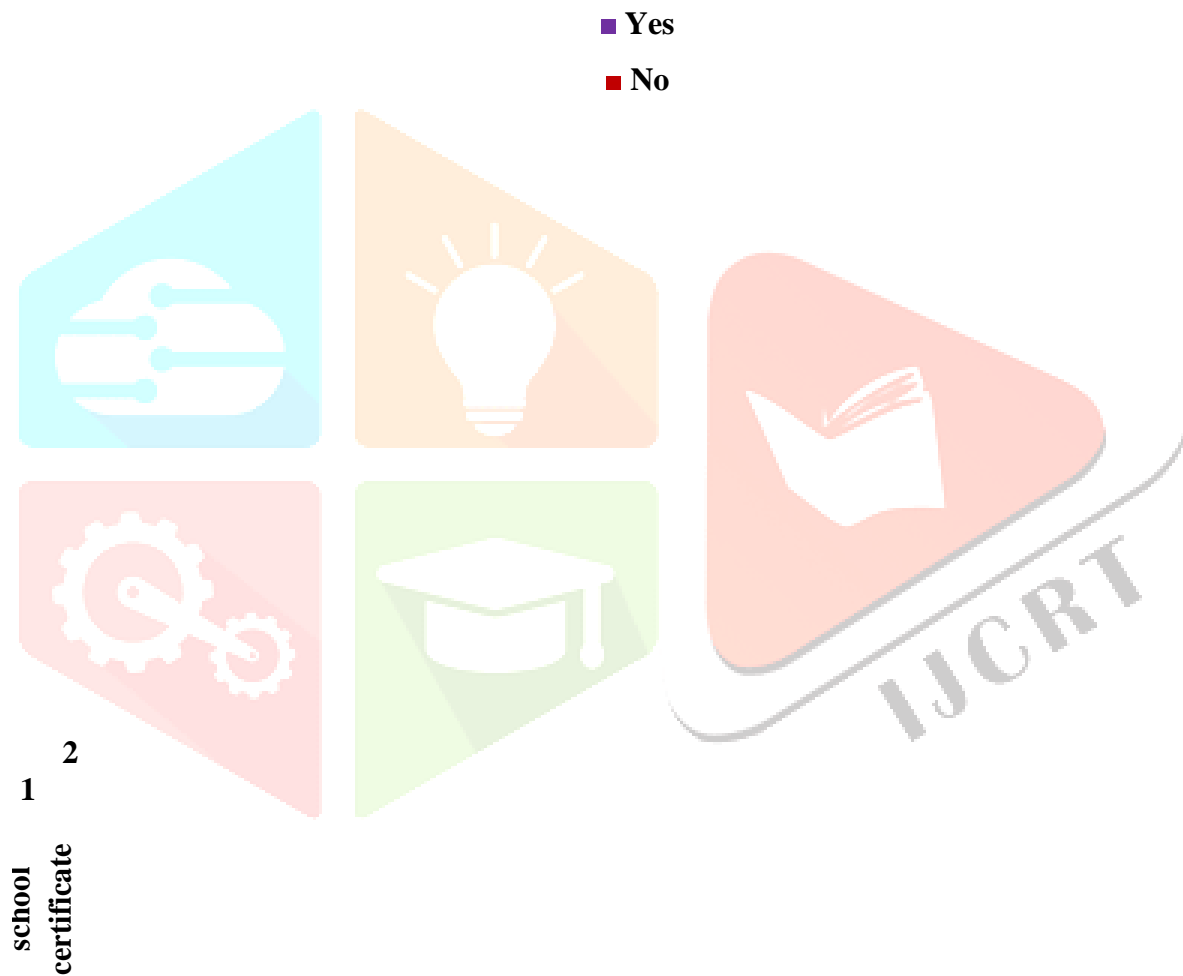


Fig.4.3.6: Association of educational status of husband with extra marital relationship among married women

Table 4.3.7: Association of demographic variables with number of birth given

N=100

S.No	Demographic Variable	Number of Birth Given				Φ^2 / F	Sig.
		Nil	1	2	3 & above		
1	Age of Women						
	20-25 years	0	5	4	0	27.57	.002**
	26-30 years	1	5	6	0		
	31-35 years	0	3	8	1		
	36-40 years	0	1	26	2		
	41-45 years	0	1	19	4		
	46 ± 50 years	1	2	9	2		
2	Educational status of Women						
	Graduate or Post graduate	0	6	6	0	17.60	.05*
	Intermediate or Post high school	1	8	37	3		
	High school certificate	0	2	19	2		
	Middle school certificate	1	1	7	3		
	Primary school certificate	0	0	3	1		
						5	
3	Educational status of husband						
	Graduate or Post graduate	0	2	4	0	16.65	.018*
	Intermediate or Post high school	1	4	18	1		
	High school certificate	0	10	41	4		
	Middle school certificate	0	1	7	4		
	Primary school certificate	1	0	2	0		
						7	
4	Monthly family income in Rs						
	Rs.13495-17999	0	2	0	0	21.11	.008**
	Rs.8989-13494	1	0	0	0		
	Rs.5387-8988	0	4	13	0		
	Rs.1803-5386	1	11	59	9		
						3	
5	Husband occupation						
	Catching Fish			65			

		2	10		6		
	Selling Fish	0	0	3	1	26.58 9	.005**
	Fish Export	0	1	0	0		
	Not working	0	0	1	1		
	Others	0	6	3	1		

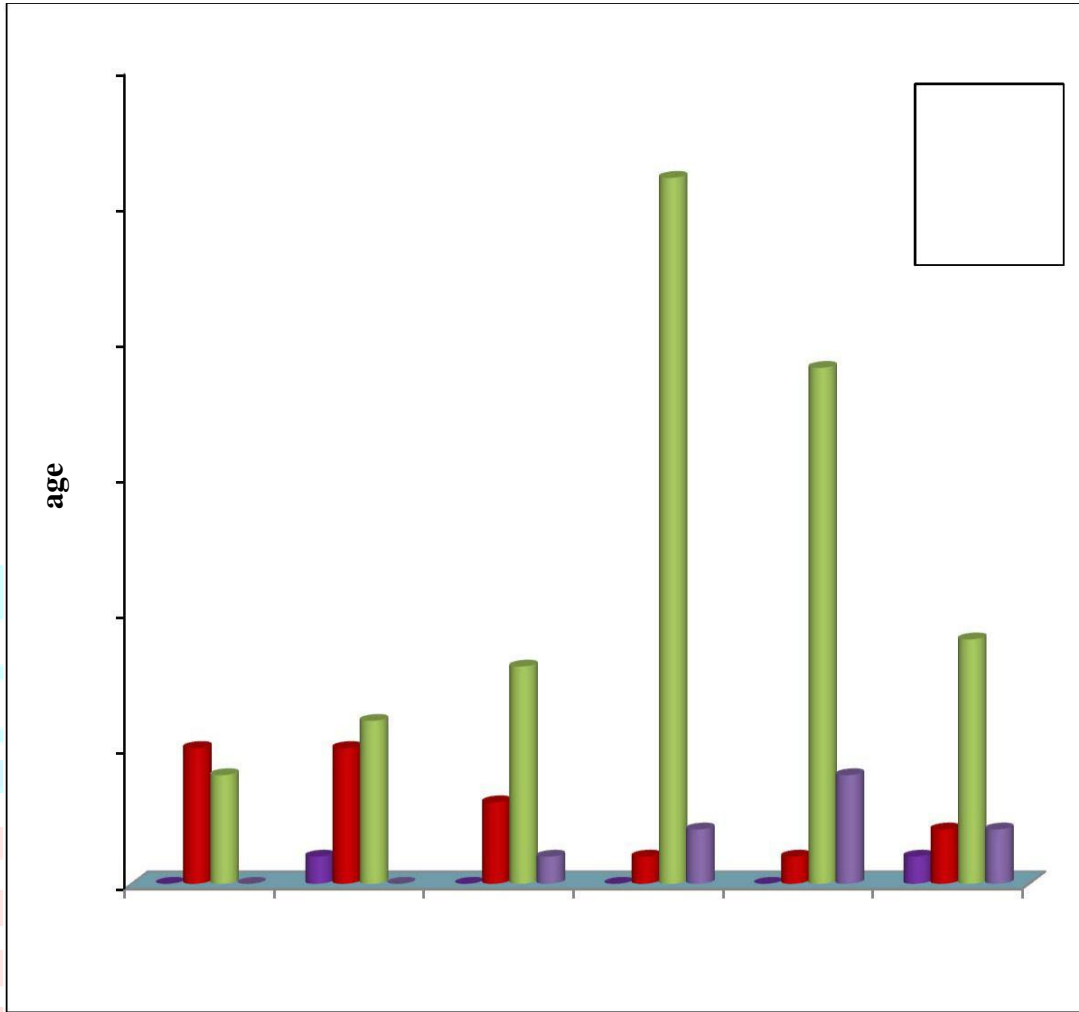
***-High Statistical significance at $p < 0.001$ level, **-High Statistical significance at $p < 0.01$ level, *- Statistical Significance at $p < 0.05$ level.



The table 4.3.7 shows that demographic variable age of women in years, family monthly income and occupation of husband were found to have high statistically significant educational status of women educational status of husband , were found to have statistically significant association with the number of birth given at the level of $p < 0.01$, $p < 0.05$ respectively.



N=100



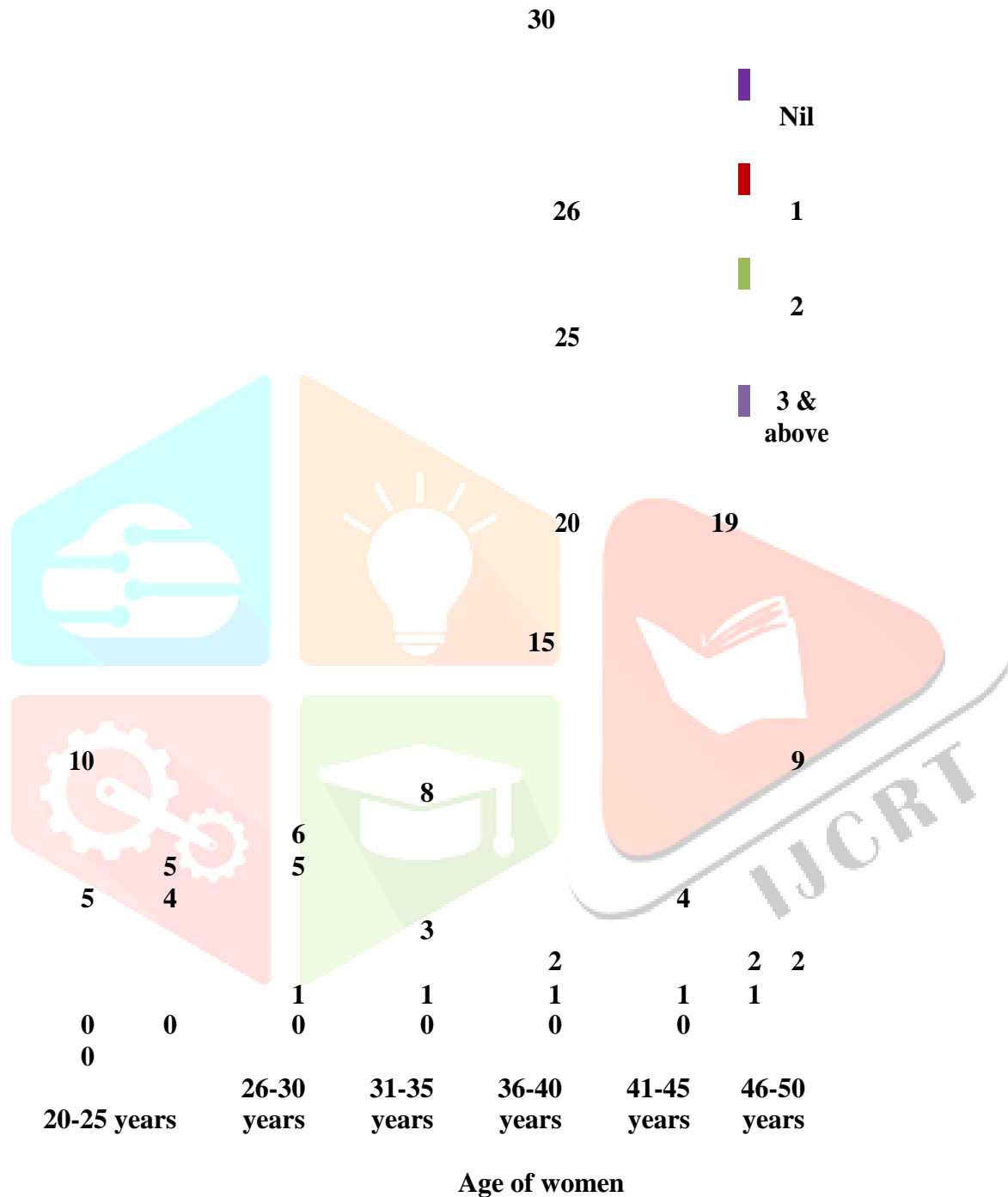


Fig.4.3.7: Association of age of women with number of birth given among married women

The fig.4.3.7 shows that demographic variable age of women in year were found to have high statistically significant association with the number of birth given at the level o of $p < 0.01$

Table 4.3.8: Association of demographic variables with use of any temporary /spacing methods of family planning (since marriage)

N=100

S.No.	Demographic Variable	Use of any Temporary /spacing methods of family planning (since marriage)		Φ ² / F	Sig.
		Yes	No		
1	Age of Women				
	20-25 years	4	5	11.491	.038*
	26-30 years	5	7		
	31-35 years	7	5		
	36-40 years	21	8		
	41-45 years	13	11		
	46 ± 50 years	13	1		
2	Monthly family income in Rs				
	Rs.13495-17999	0	2	9.643	.006**
	Rs.8989-13494	0	1		
	Rs.5387-8988	15	2		
	Rs.1803-5386	48	32		

*- Statistical Significance at p<0.05 level, **-High Statistical significance at p<0.01

The table 4.3.8 shows that demographic variable age of women were found to have statistically significant family monthly income were found to have high statistically significant association with use of any family planning methods at the level of $p < 0.05$, $p < 0.01$.



Table 4.3.9: Association of demographic variables with type of family planning Method

N=100

S.No.	Demographic Variable	Type of family planning method			Φ ² /F	Sig.
		Copper T	Calendar Method	Condom		
1	Husband occupation					
	Catching Fish	45	3	3	14.536 .013*	
	Selling Fish	3	0	0		
	Fish Export	-	-	-		
	Not working	2	0	0		
	Others	2	1	4		

***-High Statistical significance at p<0.001 level, **-High Statistical significance at p<0.01 level, *- Statistical Significance at p<0.05 level.

The table 4.3.9 shows that demographic variable occupation of husband were found to be statistically significant association with type of family planning method at the level of p<0.05.

Table 4.3.10: Association of demographic variables with having problems in uterus

N=100

S.No.	Demographic Variable	Having problems in uterus				χ^2 / F	Sig.
		Erosion of cervix	Vaginal discharge	Utero vaginal prolapsed, Erosion of cervix and Vaginal discharge	Normal		
1	Educational status of Women						
	Graduate or Post graduate	0	2	1	9	23.890	.005**
	Intermediate or Post high school	0	4	0	45		
	High school certificate	0	3	0	20		
	Middle school certificate	0	5	0	7		
	Primary school certificate	1	1	0	2		
2	Educational status of husband						
	Graduate or Post graduate	0	0	1	5	26.070	.004**
	Intermediate or Post high school	0	1	0	23		

	High school certificate	0	9	0	46		
	Middle school certificate	0	4	0	8		
	Primary school certificate	1	1	0	1		

**** -High Statistical significance at p<0.01**

The table 4.3.10 shows that demographic variable educational status of women and educational status of husband were found to be high statistically significant association with genital problem of Women at the level of p<0.01.

IV. RESULTS AND DISCUSSION

The first objective was to assess the risk factors of cervical cancer among married women in the coastal region.

The table 4.2.1 depicts the frequency and percentage distribution of personal factors of married women with tobacco usage, alcohol usage, dietary pattern and shellfish eating. With regard none of them had habit of tobacco and alcohol usage, 99(99%) of them were non vegetarian, 71(71%) of them were eating shellfish, 41(41%) of them had taking shellfish once in 6 months. The table 4.2.2 depicts the frequency and percentage distribution of the menstrual and perineal hygiene factors with respect to age at menarche, regularity of menstrual cycle, type of sanitary napkin, change of sanitary napkin, drying of napkin, washing of perineum. With regard 10 (10%) of them attained menarche between 10-12 years, 88(88%) of them had regular menstrual cycle, 67(67%) of them were using commercial pad, 33(33%) of them were using cloth as sanitary napkin during menstrual cycle, 71(71%) of them change the sanitary napkin thrice in a day, 33(33%) of them dry the napkin under the sun, all of them wash the perineum after urination and defecation.

The table 4.2.3 depicts the frequency and percentage distribution of sexual factors among married women 32(32%) of them had first sexual debut between 16 -20 years of age, 56(56%) of them had coitus with twice in a week, 1(1%) of them has not douched the vagina after coitus, 3% had extra marital relationship with another one person.

The table 4.2.4 depicts the frequency and percentage distribution of the family welfare practices and gynecological problems among married women. With regard to 57(57%) of them had got married between 17-21 years of age, 50(50%) of them were between 11-20 years of marital life, 9(9%) of them had given birth three and above children, 63(63%) of them were using family planning methods, 52(52%) of them were using copper T, in which 51% of them were using past 10 years.

The table 4.2.5 depicts the frequency and percentage distribution of the family welfare and gynecological problems with respect to painful bleeding after coitus, genital problem (Husband & women), problems in uterus and family history of cancer. With regard to 1(1%) of them had complaints of painful bleeding after coitus, 1(1%) of husband had genital problem, 16(16%) of women had genital problem 25(25%) of them had family history of cancer, in that 15(15%) of them were paternal 10(10%) were maternal

The above findings were consistent with a cross sectional study conducted by Suma R.K (2011) among 357 married women in the reproductive age group of 15 ± 49 years at Kavour to assess the risk factors. More than two third (87.2%) of the study population belonged to the age group of 30-49 years, 52.7% of the respondents belonged to class 1V socio economic status and 22.1% of the respondents were married before the age of 18 years. In this study 14% had their first child before the age of 18 years and 43.2% respondents had 3 or more than 3 children. Cervical erosion was found in 38.4% of the respondents. Various risk factors like early age at marriage, low socio economic status, and multi parity are present in the study population.

The above findings were consistent with the study conducted a cross sectional study by P.Swarnam, Vasantha, Gowri (2015) among 250 married fisher women at Tamilnadu to assess the vulnerability of the married fisher women for acquiring premalignant lesion by using convenient sampling technique. Data was collected by structured questionnaire method. The findings of the study showed that significant association of risk factors such as advanced age, low socio economic status, pre marital sex and extra marital relationship. Model, which supported

the study and was helpful for the investigator to accomplish the study in an integrated manner. It helps the investigator to identify the modifiable and non modifiable risk factors, perceptual factors and finally likelihood of action to achieve the optimal health status.

The second objective was to associate the selected demographic variables with risk factors of cervical cancer among married women in the coastal region

The table 4.3.1 shows that the demographic variable educational status of the women was found to be high statistically significant, educational status of husband was found to be statistical significant association with dietary pattern at the level of $p < 0.01$ and $p < 0.05$ respectively.

The table 4.3.2 shows that the demographic variable age of women in years were found to be high statistically significant, educational status of husband were found to be statistical significant association with age at menarche at the level of $p < 0.01$ and $p < 0.05$ respectively.

The table 4.3.3 shows that the demographic variables age of women were found to have statistically significant, educational status of women and husband were found to have high statistically significant association with the type of sanitary napkin at the level of $p < 0.05$, $p < 0.001$ and $p < 0.01$ respectively.

The table 4.3.4 shows that the demographic variables family monthly income and occupation of husband were found to be high statistically significant association with change of sanitary napkin at the level of $p < 0.01$ respectively

The table 4.3.5 shows that demographic variables age of women in years and husband occupation were found to be high statistically significant religion ,educational

status of husband, monthly family income were found to be statistically significant association with frequency of coitus at the level of $p < 0.001$, $p < 0.05$ respectively.

The table 4.3.6 shows that demographic variable educational status of husband were found to have statistically significant association with the level of type of sanitary napkin at the level of $p < 0.05$.

The table 4.3.7 shows that demographic variable age of women in years, family monthly income and occupation of husband were found to have high statistically significant educational status of women and husband, were found to have statistically significant association with the number of birth given at the level of $p < 0.01$ and $p < 0.05$ respectively.

The table 4.3.8 shows that demographic variable age of women were found to have statistically significant family monthly income were found to have high statistically significant association with use of any family planning methods at the level of $p < 0.05$ and $p < 0.01$.

The table 4.3.9 shows that demographic variable occupation of husband were found to be statistically significant association with type of family planning method at the level of $p < 0.05$.

The table 4.3.10 shows that demographic variable educational status of women and educational status of husband were found to be high statistically significant association with genital problem among Women at the level of $p < 0.01$.

The study concluded that age in years were found to be high statistically significant association with frequency of coitus, educational status of husband were found to be statistically significant with extra marital relationship and educational status of women and husband were found to be high statistical significant with gynecological factors.

Discuss possible practical guidelines for women with a family history of cervical cancer. Daughters and sisters of women with cervical cancer have been reported to have a relative risk of 1.5-2.3 to develop this type of cancer.

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