

## A Study on Children Ever Born and its Associated Factors of Suddhodhan Rural Municipality of Rupandehi District, Nepal

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### ABSTRACT

**Background:** Despite the several efforts made in the development plans to reduce the population growth rate, the population of Nepal has rapidly been increasing from last few decades. This study aims to find the associated factors to have more than two children in Suddhodhan rural municipality of Rupandehi, Nepal.

**Material and Method:** A cross sectional descriptive study was conducted in a Suddhodhan rural municipality of Rupandehi district, Nepal among 440 ever married women selected by using disproportionate stratified random sampling. Chi Square test was used to find the associated factors to have more than two children.

**Results:** The study found that mean number of children ever born on Suddhodhan Rural Municipality of Rupandehi district, Nepal was 4.1. Among 440 women included in the study, 57.27% women had more than two children. There was statistically significant association between children ever born with religion, age of women and husband, age at marriage, literacy rate of respondents and her spouse, respondent occupation, knowledge of contraceptive methods, exposure to mass media.

**Conclusion:** The study concluded that religion, age of women and husbands, age at marriage, literacy rate of husband and wife, respondents occupation, knowledge of contraceptive methods, exposure to mass media were the main factors for determining the children ever born. Hence local level policy maker, planner and stakeholders of local municipal office should focused on providing informal education such as PraoudSikshya involving both the women and their husbands, should provide the intervention related to contraceptive methods through group discussion as well as through the use of mass media.

**Keyword:** Children ever born; fertility; population.



### BACKGROUND

Children Ever Born refers to the number of children born alive to the person up to a specified reference date. It includes children who have died since birth.<sup>1</sup> Child ever born is also called summary of birth histories which quantify all the live births a woman experienced in her life time. In the 2011 census, Nepal's population was approximately 26 million people with a population

growth rate of 1.35%. In 2011, the Birth rate is estimated to be 22.17 births per 1,000 people and the population of Nepal is steadily rising in these decades.<sup>2</sup> The average family size is 4.9 persons per household (CBS, 2012). Nepalese society has favored high fertility. Children are considered a symbol of both social and economic well-being. High fertility is desired because by producing

children, preferably sons, a woman raises her status in the family.<sup>3</sup> When children ever born (CEB) influences population growth, which has consequences towards force on resources, service situations, health facilities and saving investment, in turn, such penalty have great bearing on the socio-economic and demographic characteristics that affect fertility behavior. There are many socio-demographic, cultural and socioeconomic factors that affect the fertility trends in Nepal. There is a strong cultural faith that only after marriage man or women becomes a full fledged member of the society.<sup>4</sup> Marriage and fertility in a society have been differentiated by their social, cultural, economic, demographic and educational factors. Fertility is also related to physiological capacity to reproduce individual preferences, marriage law and customs, the cost of fertility regulation and social control.<sup>5</sup> Children ever born differ from different socio-demographic, socio-economic, cultural, religious belief and obstetric characteristics of women.<sup>6</sup> The census of 2011 of Nepal showed that Rupandehi is the third highest populated district of Nepal which consists of 3.33% of total population.<sup>7</sup> The present study aims to find the associated factors to have more than two children in Suddhodhan rural municipality of Nepal.

**METHODS**

A cross sectional descriptive study was conducted in Suddhodhan Rural Municipality of Rupandehi district of Nepal. A total of 440 married of reproductive age (15-49) years was selected by using disproportional stratified random sampling from 7 wards of Suddhodhan Rural Municipality. Sample size was calculated by using Slovin’s

$$\text{formula } n = \frac{N}{1+N(e)^2} = 400$$

Where, N= Total ever married women of Rural Municipality=5672  
 d= allowable error taken 5 %  
 Taking 10% non-respondent rate the total sample size becomes 440.

Pretesting of questionnaire was done in 10% of the required sample size in adjoining Siyari Rural Municipality of Rupandehi district Nepal and it is tested by using Cronbach alpha test. Cronbach alpha was found to be 81% which is sufficient to carry out the research. The questionnaire was initially prepared in English then translated to local language of the study area, i.e. Nepali and Bhojpuri. Data collection was carried out from January 2020-March 2020. Semi- structured questionnaire was used to interview to the participants.

The ethical approval was obtained from Institutional Review Committee (UCMS/IRC/125 /19), UCMS-TH. The verbal consent was taken before the interview. Women of

ever married reproductive age group (15-49) and women who had given verbal consent were included in the study. The verbal consent was taken before the interview. Women of ever married reproductive age group (15-49) and women who had given verbal consent were included in the study. The main outcome variable is having more than 2 children. How many children do you have? The number of children was categorized into two categories: women who have more than two children were coded as 1, and women who have less than or equal to two children were coded as 0. Different predictor variables were included in the study to find the association with more than 2 children. Different socio-demographic and obstetrics variables like age, ethnicity, religion, education of women and husband, occupation of women and husband, sex of first birth baby, knowledge of contraceptive method, exposure to family planning, Income of family per month, peer influence, sex preference.

Data checking, editing and coding were done by the researcher each day. Data entry and analysis was done in SPSS version 16. Descriptive as well as inferential statistics were used to analyze the data. Descriptive statistics like frequency, percentage, mean, standard deviation were used to analyze the data. Association between dependent and independent variables were examined by using Chi-Square test. P value <0.05 is considered as statistically significant.

**RESULT**

The sociodemographics as well as other characteristics of the study participants has been shown in Table 1 where the mean children ever born was 4.1. The study showed that 87.73% were Hindu and majority were from Brahmin and Chhetri ethnicity. The mean age of women was 37.1 years. Most of the respondents were of age group 30-39 years of about 38.42%. The mean age at marriage of women was (23.±4.2) years. Nearly two-third (65.23%) of the respondent had got married at the age of 18-24 years. Similarly, the mean age of husband was 41.7 years. About 70.45% respondents and 75.9% of their spouse were literate. Majority of respondents and their husband were engaged in agriculture. About 54.55% of the respondents’ first child was son. The results showed that 54.1% respondents don’t have knowledge regarding contraceptive method. The mean monthly income of family was Rs.25670. The results showed that about 45.45% had peer influence to have many children from family, friends and relatives. About 54.55% respondents were exposing to mass media. The results showed that 57.72% respondents had sex preference of children.

**Table 1: Frequency Distribution**

Variable		Frequency	Percentage	
Religion	Hindu	386	87.73	
	Muslim	54	12.27	
Ethnicity	Brahmin	101	22.95	
	Chhetri	101	22.95	
	Janjati	78	17.72	
	Dalit	41	9.32	
	Tharu	38	8.64	
	Madhesi	29	6.61	
	Others	52	11.81	
Age of respondents(years)	18-29	166	37.72	
	30-39	169	38.42	
	40-49	105	23.86	
Age at marriage(years)	18-24	287	65.23	
	25-32	153	34.77	
Age of Husband(years)	20-29	134	30.45	
	30-39	110	25.00	
	40-49	108	24.55	
	50-59	88	20.00	
Can you read or write	Yes	310	70.45	
	No	130	29.55	
Husband read or write	yes	334	75.90	
	No	106	24.01	
Respondent occupation	Agriculture	252	57.27	
	Industry	27	6.14	
	Service	61	13.86	
	Business	40	9.10	
	Others	60	13.63	
	Husband occupation	Agriculture	244	55.45
		Industry	60	13.63
		Service	60	13.63
		Business	49	11.14
		Others	27	6.15
Sex of first baby		Male	240	54.55
		Female	200	45.45
Knowledge of contraceptive Method	Yes	202	45.90	
	No	238	54.10	
Family income per month(Rs.)	0-15000	178	40.45	
	15000-35000	150	34.09	
	>35000	112	25.46	
Peer influence	Yes	200	45.45	
	No	240	54.55	
Exposure to mass media	yes	240	54.55	
	No	200	45.45	
Sex preference of children	yes	254	57.72	
	No	186	42.28	

Table no.2 showed that about 77.8% Muslim women had more than 2 children whereas Hindu women had 54.4%. Association between religion and children ever born was found to be statistically significant ( $p < 0.001$ ). Madhesi(65.6%), Dalit(63.4%) and others ethnicity(75%) women had more proportion to have more than two children and Brahmin(48.5%) and Chhetri(52.5%) women had more than two children. The association between ethnicity and children ever born was found to be statistically insignificant ( $p = 0.08$ ). The mean age of women was ( $37.1 \pm 5.3$ ) years. Women of age group (30-39) years had more than two children of about 68.6% whereas age group (40-49) years had less proportion to have more than 2 children. The mean age at marriage of women was ( $23.7 \pm 4.2$ ) years. The results showed that women who had married at the age of (18-29) years had more proportionate to have more than 2 children which was about 61%.

The mean age of husband was ( $41.7 \pm 7.6$ ) years. Women whose husband age group (50-59) years had more proportion about 63.6 % and age groups(40-49) years had less proportion about 41.7% to have more than two children. Illiterate women were found to have more than two children as compared to literate women. Women having illiterate husband about 80.6% were found to have more than two children as compared to literate husband. Women whose occupation was agriculture was found about 75.8% had more than two children whereas women whose occupation were business (32.5%) and others (11.7%) had less proportion to have more than two children. A woman whose husband main occupation was agriculture was about 61.9% found to have more than two children. Couple whose first child was son had about 58.8% was found to have more than two children and those who first child was daughter found to be about 55.5% to have more than 2 children. About 70.6% women who had no knowledge of contraceptive method were found to have more than 2 children. Women whose family income per month was NRs. (15000-35000) about 58.1% had more than 2 children. About 57.7% women who had peer influence of having more children from relatives, family members, friends had more than two children as compared who had no any peer influence. Women who had no any expose to mass media about 56.5% had more than two children as compared to those who had expose to mass media (42.1%).

The results showed that those who had sex preference had about 57.2% and those who had no any sex preference had about 57.4% had more than two children. The results showed that there was statistically significant association between children ever born with religion, age of women and husband, age at marriage, education level

**Table 2: Association between Socio demographic variables with Children Ever Born**

Variables	Children Ever Born		P-Value		
	1-2 N (%)	>2 N (%)			
Religion	Hindu	176(45.6)	210(54.4)	<0.001	
	Muslim	12(22.2)	42(77.8)		
Ethnicity	Brahmin	52(51.5)	49(48.5)	0.080	
	Chhetri	48(47.5)	53(52.5)		
	Janjati	34(43.6)	44(56.4)		
	Dalit	15(36.6)	26(63.4)		
	Tharu	16(42.1)	22(57.9)		
	Madhesi	10(34.4)	19(65.6)		
	Others	13(25)	39(75)		
Age of Respondents	18-29	82(49.4)	84(50.6)	<0.001	
	30-39	53(31.4)	116(68.6)		
	40-49	53(50.5)	52(49.5)		
Age at Marriage of Husband	18-24	112(39)	175(61)	<0.001	
	25-32	76(49.7)	77(50.3)		
	20-29	52(38.8)	82(61.2)		<0.001
	30-39	41(37.3)	69(62.7)		
	40-49	63(58.3)	45(41.7)		
	50-59	32(36.4)	56(63.6)		
Can you read or write	yes	169(52.8)	151(50.2)	<0.001	
	no	19(15.8)	101(84.2)		
Husband read or write	yes	168(49.8)	169(50.2)	<0.001	
	no	20(19.4)	83(80.6)		
Respondent occupation	Agriculture	61(24.2)	191(75.8)	<0.001	
	Industry	15(55.5)	12(44.5)		
	Service	32(52.4)	29(47.6)		
	Business	27(67.5)	13(32.5)		
	Others	53(88.3)	7(11.7)		
Husband occupation	Agriculture	93(38.1)	151(61.9)	0.077	
	Industry	31(51.7)	29(48.3)		
	Service	28(46.6)	32(53.4)		
	Business	19(38.7)	30(61.3)		
	Others	17(63)	10(37)		
Sex of first baby	Male	99(41.2)	141(58.8)	0.432	
	Female	89(44.5)	111(55.5)		
Knowledge of contraceptive Method	yes	118(58.4)	84(41.6)	<0.001	
	no	70(29.4)	168(70.6)		
Family income per month(Rs.)	0-15000	89(44.7)	110(55.3)	0.734	
	15000-35000	60(41.9)	83(58.1)		
	>35000	39(39.8)	59(60.2)		
Exposure to mass media	yes	139(57.9)	101(42.1)	<0.001	
	no	49(43.5)	151(56.5)		
Sex preference of children	yes	113(42.8)	151(57.2)	0.964	
	no	75(42.6)	101(57.4)		

of husband and wife, respondent occupation, knowledge of contraceptive methods, exposure to mass media. Similarly the results showed that there was no statistically significant association between children ever born with ethnicity, husband occupation, and sex of first child, family income, peer influence, and sex preference of children.

## DISCUSSION

The present study revealed that the mean number of children ever born on Suddhodhan Rural Municipality of Rupandehi district, Nepal was 4.1. More than half women had more than two children. Different socio-demographic variables such as religion, age of women and husband, age at marriage, similarly socio-economic variables such as literacy rate of respondents and her spouse, respondent occupation and knowledge related variables such as knowledge of contraceptive methods, exposure to mass media were found to be statistically significant with children ever born.

The present study showed that illiterate women and those whose husbands were illiterate had more than 2 children & association was found to be statistically significant. The study done on Somadi VDC of Palpa district also showed the similar result that 84.3% illiterate women and 83% women whose husbands were illiterate had more than 2 children.<sup>8</sup> Likewise, concurrent result was also found in the study done in Nepal by Aravinda Satyanda,2014.<sup>9</sup>,N Adhikari,2014.<sup>10</sup> The present study showed that majority of the Muslim women in comparison to other religions had more than 2 children which is also found to be statistically significant. Similar results were also found in the other studies where majority of the Muslim women had more than 2 children with compared to other religions.<sup>11,12</sup> In the present study women who had no knowledge regarding contraceptive method had more chance of having more than two children. Similar result was also found in another study done on Palpa district, Nepal where women who had no knowledge of contraceptive had more than 2 children.<sup>8,9</sup> The present study showed that women who had married at the age of (18-24) years were found more proportion to have more than 2 children. Similar results was also found on the study done in Nepal where women of younger age group had more children ever born.<sup>9</sup> However another study conducted in Palpa district, Nepal showed contradicted result as they have found that women having less than 18 years had more children ever born.<sup>8</sup> This might be due to the hilly geographical area in the previous study.

The present study showed that women and whose husband main occupation was agriculture had found to have

more than 2 children as compared to other occupation. The study done on Somadi VDC of Palpa district had found The study done on Somadi VDC of Palpa district had found that women and whose husbands main occupation were agriculture was found having more than 2 children.<sup>8</sup> Similar results were also found in several other studies such as the study done by Adhikari R using the data from Nepal Demographic and Health Survey (NDHS 2006) .<sup>6</sup> and Pokhara, Nepal.<sup>13</sup> The present study showed that couple whose first child was female had more proportion to had more than 2 children. Similar results can be found on the study done by P Sharma,2003.<sup>14</sup> that women and whose husbands main occupation were agriculture was found having more than 2 children.<sup>8</sup> Similar results were also found in several other studies such as the study done by Adhikari R using the data from Nepal Demographic and Health Survey (NDHS 2006) .<sup>6</sup> and Pokhara, Nepal.<sup>13</sup> The present study showed that couple whose first child was female had more proportion to had more than 2 children. Similar results can be found on the study done by P Sharma,2003.<sup>14</sup>

## CONCLUSION

More than fifty percent about 57.27% women had more than 2 children. The mean number of children ever born on Suddhodhan Rural Municipality of Rupandehi district was 4.1. Socio-demographic and socio-economic variables such as religion, age of women and husbands, age at marriage, literacy rate of husband and wife, respondents' occupation and knowledge regarding contraceptive methods such as exposure to mass media and knowledge regarding contraceptive methods are the main associated factor for CEB in Suddhodhan Rural Municipality of Nepal. Hence local level policy maker, planner and stakeholders of local municipal office should develop and implement the policy for reducing mean children ever born, the teenage marriage as well as teenage pregnancy, should focused on providing informal education such as PraoudSikshya involving both the women and their husbands, should provide the intervention related to contraceptive methods through group discussion as well as through the use of mass media in the Suddhodhan rural Municipality of Rupandehi district of Nepal.

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