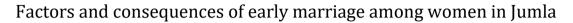


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(RESEARCH ARTICLE)



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### Abstract

**Background:** In Nepal, child marriage is seen as a significant obstacle to the country's social and economic growth as well as a significant threat to the health of women. Despite a steady decline in this harmful practice over the past decade, child marriage remains widespread, with approximately one in five girls married in childhood across the globe. The objective of the study was to find out the factors and consequences of early marriage among women in Jumla.

**Methods:** The cross-sectional study was conducted among the residents of Jumla District where 280 married reproductive age group women were taken as subjects. Simple random sampling technique was used. Data was collected by using semi-structured interview schedule. Analysis was done by using descriptive and inferential statistics.

**Results:** Study findings showed that majority (77.9%) of the respondents got early marriage. Early marriage was statistically association with educational status at the time of marriage (p=0.000), occupational status (p=0.000), type of marriage ((p=0.014), educational status of father (p=0.009), occupational status of father (p=0.016), parental income (p=0.000), decision making (p=0.003), husband's education and occupation (p=0.000). Inadequate education (70.7%) and economic resources (83.9%), customs (66.8%) and unemployment (63.2%) are the main reasons of early marriage. Likewise, increasing responsibility (80.7%), lower abdominal pain (67.5%), uterine prolapse (65.4%), early pregnancy (71.1%), unplanned pregnancy (58.9%) and prolonged labor (51.8%) are the main consequences of early marriage. Therefore, it is concluded that more than three fourth of the respondents were married early which lead to many consequences.

**Conclusion:** The study concluded that more than three fourth of the respondents got early marriage. Early marriage had significant association with educational status at the time of marriage, occupational status, type of marriage, occupational status of father, parental income, decision making at time of marriage, husband's education and occupation. Inadequate education and economic resources, customs and unemployment are the main reasons of early marriage. Likewise, **e**arly pregnancy, unplanned pregnancy, prolonged labor, lower abdominal pain, uterine prolapse, and increasing responsibility are the main consequences of early marriage. Hence, the efforts have to be made to prevent the early marriage through awareness and various educational programs.

Keywords: Consequences; Early Marriage; Factors; Reasons; Women

## 1. Introduction

Child marriage, which is defined as a marriage before the age of 18, affects more than 60 million women worldwide, according to UNICEF [1]. In Nepal, a marriage that occurs before the age of 18 is referred to as a child marriage. The

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legal age of marriage in Nepal is set at 18 for both boys and girls with parental approval and 20 years without parental consent under the Civil Code of 1963 (11th Amendment) [2].

Among countries, Nepal has the third-highest rate of child marriage, with 41% of women in the 20–24 age range getting married before turning 18. Nepal also ranks in the top 10 countries for the prevalence of child marriage among boys [3]. Between the ages of 15 and 19, 17% of Nepali girls and young women are estimated to be mothers. Additionally, the percentage of adolescents who are pregnant increases quickly with age, from 2% at age 15 to 36% at age 19. Rural teenagers tend to start childbearing earlier than urban teenagers. In Nepal's rural areas, the fertility rate for young women aged 15 to 19 is 125 per thousand (12.5%), while it is 209 per thousand (20.9%) for those aged 20 to 24 [4].

Teenage pregnancy is highest in Karnali Province (21%) [5]. The causes of child marriage in Nepal are multifaceted. Poverty, the low value attached to daughters, and a lack of access to education are contributory factors, while the caste system and patriarchal culture similarly play a role. It increasingly appears that teenagers are choosing their own partners and may even elope. In some cases, parents encourage adolescents to initiate their own marriage to avoid the high costs associated with dowry or a wedding [6]. Lack of awareness, self-elopement, misuse of social media, and parents' perception of daughters as burdens were some contributing factors to early child marriage (ECM) [7].

Early pregnancy (64.0%), unexpected pregnancy (73.1%), increased responsibility (85.5%), and economic dependence (85.5%) were all effects of early marriage [8]. ECM has a number of effects including unsafe sexual behaviour, unintended pregnancy and the chance of an unsafe abortion, maternal and infant mortality, lack of access to education, dependence on others, and violence.<sup>7</sup> Unwanted pregnancies were higher in early age marriage [9]. Due to their lack of physical or mental readiness for motherhood, ECM victims are also more likely to have postpartum psychiatric issues like despair and suicide. In developing nations like Bangladesh, India, and Nepal, ECM is a significant issue [7].

High rates of unintended pregnancy, abortion, preterm labor, delivery of low birth weight babies, and fetal and maternal mortality are observed among teenage girls and are strongly correlated with early marriage [10] WHO reports that 29 percent of all ever-partnered teenage girls experience intimate partner violence. The survey found that while 35.32 percent of respondents had adequate knowledge regarding factors contributing to early marriage and its consequences, the majority of respondents (64.68 percent) had inadequate knowledge [11].

According to Nepal demographic and health survey, the percentage of women age 15–19 who have ever been pregnant rises with age, from 1% at age 15 to 32% by age 19. Teenage pregnancy is highest in Karnali Province (21%) and women age 15–19 with no education (33%) are more likely to start childbearing earlier than those with at least some secondary education (8%) [5]. Study findings revealed that 79.7% of the respondents got early marriage [8]. Education of wife and husband, and economic status was found to be the important variables in explaining early age marriage [1]. Many studies showed that various factors are involved in influencing for early marriage. Hence, the researcher wants to identify the factors and consequence of early marriage in Jumla.

# 2. Methods

Descriptive cross-sectional research design was used among the reproductive age group women of Jumla, Nepal. For this study, population were married women of reproductive age (15-49) residing in Jumla. There are 7 Rural Municipalities and 1 Urban Municipality in Jumla. Among 7 Rural Municipalities, 5 Rural Municipalities (Tatopani, Patarasi, Guthichaur, Hima & Tila) were randomly selected by using lottery method. According to the voter list 2079/080, there were total 14232 married reproductive age women were reside in that setting. Simple random sampling technique was used. A sample size of 280 was determined in order to represent the women for the prevalence of 79.7% [8]. 280 married women of reproductive age were selected by random selection of sample from sampling frame of each Rural Municipalities. From each Rural Municipalities, 56 samples were selected by choosing odd number of serial number of women who are visiting at health post of selected Rural Municipality until the required sample size of each Rural Municipality was reached.

Ethical clearance was taken from Institutional Review Committee of Karnali Academy of Health Sciences (IRC-KAHS) with the reference no.: 080/081/22 and written formal permission was taken from concerned authority. Verbal and written consent was obtained from each respondent by introducing and clarifying the purpose of the study prior to the data collection. Respondent's dignity was maintained by giving right to reject from the study at any time. Confidentiality was maintained by using code number for all the questionnaires. Voluntary participation was insured and information was used only for study purpose.

Content validity will be established by extensive literature review. While reliability of the instrument, it was tested by pre-testing. Data was collected from each respondent by using pretested semi-structured interview schedule and face to face interview was conducted which takes about 25-30 minutes. The collected data was entered in MS Excel 2000. The analysis was done by using statistical software SPSS (Statistical Package for Social Science) 16.0 version. Chi square test was applied to find out the association between factors and age of marriages. The probability of occurrence by chance is significant if P< 0.05 with 95% Confidence Interval. Odds ratio with 95% Confidence Interval was calculated during bivariate and multivariate analysis. Multivariate analysis was carried out for those variables which were significant at 95% confidence level through binary logistic regression and were adjusted for possible confounders.

# 3. Results

 Table 1 Socio-demographic Characteristics of the Respondents (n=280)

Variables	Frequency	Percent	
Completed Age (in years)			
Below 20	42	15.0	
20-24	90	32.1	
25-29	54	19.3	
30-34	42	15.0	
35 and more	52	18.6	
Mean ± SD	26.95±7.80	5	
Caste			
Dalit	92	32.9	
Disadvantaged Janajaties	1	0.4	
Religious Minorities: Muslim	1	0.4	
Brahaman and Chhetri	127	45.4	
Others	59	21.1	
Religious			
Hindu	260	92.9	
Muslim	1	0.4	
Christian	17	6.1	
Others	2	0.7	
Education			
Illiterate	57	20.4	
Can read and write	43	15.4	
Primary	60	21.4	
Secondary	84	30.0	
Higher secondary and above	36	12.9	
Occupation			
Service	43	15.4	
Business	24	8.6	
Student	17	6.1	

Agriculture	163	58.2	
Home maker	33	11.8	
Type of family			
Nuclear	99	35.4	
Joint	25	8.9	
Extended	156	55.7	
Income of family per month			
Below 10 thousands	53	18.9	
10-20 thousands	136	48.6	
20-30 thousands	35	12.5	
30-40 thousands	56	20.0	

Table 1 depicts the socio-demographic characteristics of respondents. Among 280 married women, nearly one third (32.1%) belongs to the age below 20. Nearly half (45.4%) were Brahaman and Chhetri. Likewise, most (92.9%) belongs to Hindu. Among 280 married reproductive age women, less than one third (30%) were educated up to secondary level. Whereas, more than half (58.2%) of respondents were involved in agriculture. More than half (55.7%) belongs to extended family. Nearly half (48.6%) of respondents had earn from 10 to 20 thousands per month.

Table 2 Personal Factors of Early Marriage of Respondents at the Time of Marriage (n=280)

Variables	Frequency	Percent	
Educational status			
Illiterate	69	24.6	
Can read and write	20	7.1	
Primary	89	31.8	
Secondary	78	27.9	
Higher secondary and above	24	8.6	
Occupation status			
Service	11	3.9	
Student	156	55.7	
Agriculture	113	40.4	
Aware about legal age of marriage			
Yes	268	95.7	
No	12	4.3	
If yes, appropriate age of marriage (n=268)			
18 years for boys and 16 years for girls	45	16.1	
20 years for boys and 18 years for girls	31	11.1	
20 years for boys and 20 years for girls	152	54.3	
21 years for boys and 18 years for girls	40	14.3	
Types of marriage			
Arrange marriage	69	24.6	

	1		
Love marriage	78	27.9	
Love and elopement marriage	127	45.4	
Cross cousin marriage	6	2.1	
Having siblings			
Yes	242	86.4	
No	38	13.6	
Number of siblings (n=242)			
Up to 3	70	29.0	
4 to 6	147	60.7	
7 and above	25	10.3	
Aware about consequences of early marriage			
Yes	275	98.2	
No	5	1.8	

Table 2 reveals that nearly one third (31.8%) of respondents were educated up to primary level at the time of marriage. Among them, more than half (55.7%) were students. Similarly, most (95.7%) of respondents were aware about legal age of marriage and among them, more than half (54.3%) of respondents responded that legal age of marriage is 20 years for boys and girls. Regarding to type of marriage, nearly half (45.4%) got love and elopement marriage. Most (86.4%) of respondents had sibling and among them, three fifth (60.7%) have 4 to 6 siblings. Majority (98.2%) were aware about consequences of early marriage.

Table 3 Parental and Husband Factors of Early Marriage at Time of Marriage. (n=280)

Variables	Frequency	Percent	
Educational status of father			
Illiterate	153	54.6	
Can read and write	48	17.1	
Primary	54	19.3	
Secondary	23	8.2	
Higher secondary and above	2	0.7	
Occupational status of father			
Service	34	12.1	
Business	22	7.9	
Agriculture	224	80.0	
Educational status of mother			
Illiterate	220	78.6	
Can read and write	45	16.1	
Primary	15	5.4	
Occupational status of mother			
Service	3	1.1	
Business	4	1.4	

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Relationship of parents         Good       21         Good       21         Bad       11         Bad       11         Bad       11         Bad       11         Bad       12         Bad       12         Bad       11         Bad       12		16.1	
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Iistory of early marriage       Yes     1       No     1       Decision taking about marriage       Grand father     5		91.1	
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lo 1 Decision taking about marriage Grand father 5			
Decision taking about marriage	70	60.7	
arand father 5	.10	39.3	
ather 89		1.8	
	9	31.8	
fother 2'	7	9.6	
ather and mother 12	28	45.7	
elf 3	1	11.1	
ducational status of husband			
lliterate 4	-1	14.6	
an read and write 1	.5	5.4	
Primary 8	1	28.9	
econdary 98	8	35.0	
Iigher secondary and above4	:5	16.1	
Occupational status of husband			
ervice 4	·0	14.3	
Business 20	6	9.3	
tudent 1	18	42.1	
griculture 9	6	34.3	
Relationship between husband and wife after marriage			
as a friend 2	15	76.8	
Quarrying 3		110	
Conflict of ideas 32	3	11.8	

Table 3 demonstrates respondents' parental and husband factors of early marriage at time of marriage. In regards to educational status of father, nearly half (54.6%) were illiterate. Likewise, majority (80%) of fathers were involved in agriculture. Regarding to educational status of mother, majority (78.6%) of mothers was illiterate and 82.9% were involved in agriculture. Likewise, more than one fourth (29.6%) had earn from 10 to 20 thousands. Similarly, majority

(91.1%) of respondents said that their parent relationship was good at the time of marriage. About three fifth (60.7%) of respondents had history of early marriage in their parental home. More than two fifth (45.7%) of respondents answered that their father and mother took decision about marriage. And more than one third (35%) of the husbands had received secondary education and more than two fifth (42.1%) of them were students at the time of marriage. Majority (76.8%) of respondents were replied that their relationship after marriage was as a friend.

Table 4 Status of Marriage of Respondents (n=280)

Variables	Frequency	Percent	
Below 20 years	218	77.9	
20 & more	62	22.1	
Mean ±SD=17.63± 2.60, min=10, max =34			

Table 4 illustrates status of marriage of respondents. Among 280 reproductive age married women, majority (77.9%) were married before the age of 20 whereas more than one fifth (22.1%) were married at the age of 20 and above years.

 Table 5 Reasons for early marriage (n=280)

Variables	Frequency	Percent	
Social reasons			
Biological factor	48	17.1	
Inadequate education	198	70.7	
Parent conflict	70	25.0	
Frustration	41	14.6	
Peer pressure	124	44.3	
Traditional norms and values	122	43.6	
Cultural reasons			
Peer pressure	134	47.9	
Negative attitude on contraceptive	37	13.2	
Shame/shyness	99	35.4	
Inadequate Socialization in the family and Community	128	45.7	
Customs	187	66.8	
Economic reasons			
Inadequate economic resources	235	83.9	
Unemployment	177	63.2	
Financial problems facing teenagers	57	20.4	
Family conflict	80	28.6	
Globalization	17	6.1	

\*Multiple Responses

Table 5 shows reasons for early marriage. More than two fifth (44.3%) and (43.6%) were answered that frustration and traditional norms and values are the social reasons for early marriage. Likewise, two third (66.8%) of respondents replied that customs are the cultural reason for early marriage. And majority (83.9%) of respondents said that inadequate economic resources are the economical reason for early marriage.

### Table 6 Consequences of Early Marriage (n=275)

Variables	Frequency	Percent	
Psychological and social consequences			
Increased responsibility	226	80.7	
Poor decision making power	162	57.9	
Drop out from school	117	41.8	
Faced adjustment problem	81	28.9	
Feeling of loneliness	43	15.4	
Feeling of sadness	134	47.9	
Gynecological consequences			
Stress incontinence of urine	95	33.9	
Lower abdominal pain	189	67.5	
Offensive vaginal discharge	134	47.9	
Genital itching	91	32.5	
Uterine prolapse	183	65.4	
Loss of sexual desire	50	17.9	
Painful intercourse	71	25.4	
Irregular menstruation	98	35.0	
Obstetrical consequences			
Early pregnancy	199	71.1	
Unplanned pregnancy	165	58.9	
Abortion	134	47.9	
Caesarean delivery	102	36.4	
Prolonged labor	145	51.8	

\*Multiple Response

Table 6 displays that consequence of early marriage. Regarding to psychological and social consequences, majority (80.7%) of respondents answered that increased responsibility are the one of consequence of early marriage. Likewise, more than two third (67.5%) and nearly one third (65.4%) of respondents replied that lower abdominal pain and uterine prolapse as a gynecological consequences of early marriage respectively. Similarly, majority (71.1%) of respondents said that early pregnancy is one of obstetrical consequence of early marriage, more than half (58.9%) and (51.8%) of respondents replied that unplanned pregnancy and prolonged labor are another obstetric obstetrical consequence of early marriage respectively.

Variables	Early Marriage		<b>X</b> <sup>2</sup>	<i>p</i> -value
	Yes (%)	No (%)		
Educational status				
Illiterate	63 (91.3%)	6 (8.7%)	60.479	0.000*
Can read and write	17 (85.0%)	3 (15.0%)		
Primary	78 (87.6%)	11 (12.4%)		
Secondary	55 (70.5%)	23 (29.5%)		
Higher secondary and above	5 (20.8%)	19 (79.2%)		
Occupational status				
Service	2 (18.2%)	9 (81.8%)	29.696	0.000*
Student	117 (75.0%)	39 (25.0%)		
Agriculture	99 (87.6%)	14 (12.4%)		
Aware about legal age of mar	riage			
Yes	209 (78.0%)	59 (22.0%)	0.732	0.519
No	9 (75.0%)	3 (25.0%)		
Aware about consequences of	early marriage	1		
Yes	213 (77.5%)	62 (22.5%)	0.590	0.283**
No	5 (100%)	0 (0.00%)		
Type of marriage				
Arrange marriage	66 (88.0%)	9 (12.0%)	6.113	0.014*
Love marriage	152 (74.1%)	53 (25.9%)		
Number of siblings				
None	31 (81.6%)	7 (18.4%)	1.577	0.665
Up to 3	52 (74.3%)	18 (25.7%)		
4-6	117 (79.6%)	30 (20.4%)		
7 and above	18 (72.0%)	7 (28.0%)		
	**Fisher Exact Te	est	•	•

The table 7 illustrates the association between early marriage and personal factors. Early marriage had significant association with educational status at the time of marriage (p=0.000), occupational status (p=0.000) and type of marriage ((p=0.014).

**Table 8** Association between Early Marriage and Parents/Husband related Factors at Age of Marriage (n=280)

Variables	Early marria	<b>X</b> <sup>2</sup>	<i>p</i> -value	
	Yes	No		
Educational status of father		I		
Illiterate	130 (85.0%)	23 (15.0%)	11.479	0.009*
Can read and write	34 (70.8%)	14 (29.2%)		
Primary	39 (72.2%)	15 (27.8%)		
Secondary	15 (60.0%)	10 (40.0%)		
Higher secondary and above				
Occupational status of father				
Service	20 (58.8%)	14 (41.2%)	8.277	0.016*
Business	17 (77.3%)	5 (22.7%)		
Agriculture	181 (80.8%)	43 (19.2%)		
Educational status of mother				
Illiterate	175 (79.5%)	45 (20.5%)	1.730	0.421
Can read and write	32 (71.1%)	13 (28.9%)		
Primary	11 (73.3%)	4 (26.7%)		
Occupational status of mothe	er			
Agriculture	178 (76.7%)	54 (23.3%)	1.008	0.315
Others	40 (83.3%)	8 (16.7%)		
Income of father's family				
Below 10 thousands	63 (92.6%)	5 (7.4%)	22.430	0.000*
10-20 thousands	68 (81.9%)	15 (18.1%)		
20-30 thousands	44 (75.9%)	14 (24.1%)		
30-40 thousand	17 (65.4%)	9 (34.6%)		
More than 40 thousands	26 (57.8%)	19 (42.2%)		
Relationship of parents				
Good	197 (77.3%)	58 (22.7%)	0.601	0.438
Bad	21 (84.0%)	4 (16.0%)		
History of early marriage in f	amily			
Yes	138 (81.2%)	32 (18.8%)	2.766	0.096
No	80 (72.7%)	30 (27.3%)		
Decision taking in parental fa	mily			
Grand father	2 (40.0%)	3 (60.0%)	16.041	0.003*
Father	74 (83.1%)	15 (16.9%)		
Mother	16 (59.3%)	11 (40.7%)		
Father and mother	106 (82.8%)	22 (17.2%)		

Self	20 (64.5%)	11 (35.5%)							
Educational status of husband									
Illiterate	39 (95.1%	2 (4.9%)	17.796	0.000*					
Can read and write	10 (66.7%)	5 (33.3%)							
Primary	70 (86.4%)	11 (13.6%)							
Secondary and above	99 (69.2%)	44 (30.8%)							
Occupational status of husband									
Service	22 (55.0%)	18 (45.0%)	21.167	0.000*					
Business	16 (61.5%)	10 (38.5%)							
Students	98 (83.1%)	20 (16.9%)							
Agriculture	82 (85.4%)	14 (14.6%)							

Table 8 shows that there is significant association between early marriage and educational status (p=0.009) & occupational status of father (p=0.016), parental income (p=0.000), decision making in parental family (p=0.003). Early marriage was significantly associated with husband's education and occupation (p=0.000).

Variables	Category	ategory Unadjusted Odds Ratio				Adjusted Odds Ratio			
		<i>p-</i> value	OR	95% C.I for EXP (B)		р-	OR	95% C.I for EXP (B)	
				Lower	Upper	value		Lower	Upper
Education status at time of marriage	Illiterate	0.002	3.794	1.556	9.251	0.685	1.312	0.354	4.867
	Literate		Ref				Ref		
Occupation status at time of marriage	Student/Service	0.001	0.351	0.183	0.673	0.311	0.619	0.245	1.566
	Agriculture		Ref				Ref		
Type of marriage	Arrange	0.013	2.557	1.192	5.486	0.507	1.365	0.545	3.421
	Others		Ref				Ref		
Educational status of father at time of marriage	Illiterate	0.002	2.505	1.400	4.483	0.470	1.299	0.639	2.641
	Literate		Ref				Ref		
Occupational status of father at time of marriage		0.018	2.162	1.134	4.122	0.268	1.544	0.716	3.330
	Others		Ref				Ref		
Income of father's family per month	<20000	0.000	3.162	1.40	5.747	0.007*	2.684	1.314	5.484
	≥20000		Ref				Ref		
Decision taking in parental family	Parent	0.043	2.263	1.010	5.066	0.055	2.433	0.983	6.027
	Self		Ref				Ref		
Educational status of husband at time of marriage	Illiterate	0.004	6.536	1.532	27.886	0.411	1.975	0.390	9.999
	Literate		Ref				Ref		
	Agriculture	0.028	2.067	1.073	3.981	0.801	1.113	0.483	2.565

**Table 9** Multivariate Analysis of Significant Factors Associated with Early Marriage

Occupational status of	Others	Ref		Ref	
husband at time of					
marriage					

Cox & Snell R Square: 0.104; Nagelkerke R Square: 0.160; -2 log Likelihood: 265.213<sup>a</sup>; Hosmer and Lemeshow Test: χ2 = 7.021; p- value= 0.534; Reference group: Ref. Significance at 95% CI, OR: Odd Ratio, CI: Confidence Interval.

Table 9 illustrates that multivariate logistic regression analysis of factors associated with early marriage where income of father's family was significantly associated factor. This analysis of all significant factors was carried out at 95% Confidence Interval.

## 4. Discussion

In this study, majority (95.7%) of respondents were aware about legal age of marriage. Among them, more than half (54.3%) of respondents answer that appropriate age of marriage i.e. 20 years for boys and girls. This finding is similar with the finding done in Chitwan show that majority (74.5%) were aware about legal age of marriage i.e. 20 and above 20 years [8]. In this study, majority (77.9%) of respondents were married before the age of 20 years. This finding is line with the finding of study conducted in Chitwan found that majority (79.7%) of women got marriage before the age of 20 years [8]. The finding is contrast with the finding of study conducted in Dhankuta Nepal showed that 53.3% of women were married before 18 years of age [9] and 59% of adolescent girls in Bangladesh were married before the age of 18 years [12]. This shows that prevalence of early marriage is high in our Nepal.

In present study, majority (98.2%) of respondents were aware about consequences of early marriage. This finding is opposite with the finding of the study carried out in Chitwan found that more than half (55.8%) of respondents were aware about consequences of early marriage [8]. In present study, majority (80.7%) of respondents said that increased responsibilities are the psychological and social consequences of early marriage. This finding is similar with the finding of study conducted in Chitwan show that majority (94.2%) of respondents answered same statement [8]. In present study, more than two third (67.5%) and nearly two third (65.4%) revealed that lower abdominal pain and uterine prolapse are gynecological consequences of early marriage. This finding is contradict with the finding found in Chitwan that more than one fifth (23.8%) and only few (3.5%) said that similar gynecological consequences may occur due to early marriage [8]. In this study, more than half (58.9%) answered that unplanned pregnancy may be the obstetric consequence of early marriage. However, contrast finding is reported (70.6%) unplanned pregnancy as consequence of early marriage found in the study conducted in Dhankuta, Nepal [9].

In this study, early marriage was statistically association with education at the time of marriage (p=0.000). Similarly, the finding is line with the study finding conducted in Dhankuta, Nepal revealed that there is associated between education and early marriage with p-vale= 0.001 [9]. The respondents who were illiterate at the time of marriage were 1.3 times (OR=1.3, 95% CI; 0.354-4.867) more likely to have early marriage as compared to literate.

In present study, early marriage was statistically association with occupation at the time of marriage (p=0.000). Similar finding found in Chitwan that there was association between early marriage and occupation at the time of marriage (p-value=0.011) [8]. The respondents who involved in service and student at the time of marriage were 0.6 times (OR=0.6, 95% CI; 0.245-1.566) more likely to have early marriage as compared to who involved in agriculture. The finding is contrast with the finding of study that respondents who involved in farming at the time of marriage were 2.6 times (OR=2.6, 95% CI; 0.767-9.407) more likely to have early marriage as compared to non-farmer [8].

In current study, there is significantly associated between type of marriage and early marriage with *p*-value of 0.014. The respondents who had an arrange marriage at the time of marriage were 1.3 times (OR=1.3, 95% CI; 0.545-3.421) more likely to have early marriage as compared to other type of marriage.

In this study, early marriage was statistically association with education of father at the time of marriage (*p*-vale=0.009). Similar study reported in Chitwan show that there was association between early marriage and education of father with *p*-value=0.045 [8]. The respondent's father who were illiterate at the time of marriage were 1.2 times (OR=1.2, 95% CI; 0.639-2.641) more likely to have early marriage as compared to respondent's father were literate. Similar finding was reported in the study conducted in Chitwan that father of the respondents who were illiterate at the time of marriage were 1.0 times (OR=1.0, 95% CI; 0.384-2.800) more likely to have early marriage as compared to respondent's father were literate [8]. Likewise, another finding was reported in the study conducted in Bangladesh where fathers with secondary education and higher education had 35% more practice late marriage of their daughters. This finding indicates that respondents' fathers' education is one of the factors of early marriage [12].

In this study, early marriage was statistically association with occupation of father at the time of marriage (p=0.016). The respondent's father who were involved in agriculture at the time of marriage were 1.5 times (OR=1.5, 95% CI; 0.716-3.330) more likely to have early marriage as compared to respondent's father who were not in agriculture. However, none of the study reported the association between early marriage and occupation of father.

In present study, early marriage was statistically association with income of father's family at the time of marriage (p=0.000). The finding of the study revealed that the respondents whose parental income was less than 20000 at the time of marriage were 2.6 times (OR=2.6, 95% CI: 1.314-5.484) more likely to have early marriage as compared to those respondents whose parental income was more than and equal to 20000. The finding of the study is supported by the study show that the respondents whose parent annual income were not sufficient to support their family at the time of marriage were 4.2 times (OR=4.2, 95% CI: 1.019 16.331) more likely to have early marriage as compared to those respondents' whose parental income was sufficient to support their family [8]. This finding is consistent with the study conducted in Ethiopia which shows that Families with monthly income of ranging 451 -650 were 2.5 times more likely to practice early marriage compared to those having monthly income of more than eight hundred (95% CI: 1.2, 4.97) [13].

In present study, early marriage was statistically association with decision making about marriage (p=0.003). This finding is line with the finding of study conducted in Morang revealed that there is an association between decisions making about marriage an age of marriage [1]. The respondents who took their decision by parents at the time of marriage were 2.4 times (OR=2.4, 95% CI: 0.983-6.027) more likely to have early marriage than the respondents who took decision by one self.

In current study, there is an association between early marriage and husband's education at time of marriage with *p*-value= 0.000. Likewise, study conducted in Bangladesh [12] and Morang [1] showed the significant association between husbands' education and practice of early marriage with *p*-value= 0.001 & < 0.001 respectively. The respondent's husband who were illiterate at the time of marriage were 1.9 times (OR=1.9, 95% CI; 0.390-9.999) more likely to have early marriage as compared to respondent's husband were literate.

In present study, early marriage was statistically association with occupation of husband at the time of marriage (p=0.000). This finding is parallel with the finding of study in Chitwan demonstrated that early marriage was significantly associated with husband's occupation (p=0.027) [8]. The respondents whose husband involved in agriculture at the time of marriage were 1.1 times (OR=1.1, 95% CI: 0.483-2.565) more likely to have early marriage than the respondents whose husband involved in another occupation. This finding is supported by the study done in Chitwan demonstrated that respondents whose husband involved in farmer at the time of marriage were 2.2 times (OR=2.2, 95% CI: 0.675-7.747) more likely to have early marriage than the respondents whose husband involved in another occupation [8]

# 5. Conclusion

The study concluded that more than three fourth of the respondents got early marriage. Early marriage had significant association with educational status at the time of marriage, occupational status, type of marriage, educational status and occupational status of father, parental income, decision making at time of marriage, husband's education and occupation. Inadequate education and economic resources, customs and unemployment are the main reasons of early marriage. **Likewise, e**arly pregnancy, unplanned pregnancy, prolonged labor, lower abdominal pain, uterine prolapse, and increasing responsibility are the main consequences of early marriage.

# Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

#### Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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