

Research Article

Prevalence and Root Cause of Uterine Prolapse in Married Woman with Reproductive-Aged (MWRA) at VDC Level in Nepal

Raj Acharya S^{1*} and Kumar Ray A²

¹Department of Occupational Health and Safety, Inje University, Korea

²Department of MPPG, North South University, Bangladesh

*Corresponding author: Shiva Raj Acharya, Department of Occupational Health and Safety, Inje University, Korea

Received: September 01, 2017; Accepted: December 07, 2017; Published: December 14, 2017

Abstract

Uterus Prolapse (UP) is the prevalent chronic problem among married women with reproductive-aged in Nepal. Studies in Nepal had shown increasing trend of prevalence of uterine prolapse all over the country. The main objective of this study was to assess the prevalence and leading factors that causes uterine prolapse in the Barahathawa VDC of Sarlahi district of Nepal.

The analytical cross-sectional study was carried out among 225 women with a reproductive aged population (MWRA) of Sarlahi district of Nepal. Both quantitative and qualitative methods were used in this study.

The prevalence of self-reported cases of uterine prolapse found 32.2 percent of the total 255 respondents in Barahathawa VDC in Sarlahi. Major risk factors for uterine prolapse was unwanted pulling of baby and pushing of the uterus during child delivery, early marriage, early pregnancy, lack of nutrients, lack of institutional birth, irregular bleeding, injuries at birth, long labor pain, frequent childbirth, heavy workload and abortion.

It was concluded that the preventive measures of uterine prolapse were massage after delivery, institutional delivery, less number of child and maintenance of birth gap. The study revealed that uterine prolapse is alarming and showing prolonged public health problem in Nepal. It seems as widespread and more problematic for the management in the health system of Nepal.

Keywords: Uterine Prolapse (UP); Married Women with Reproductive Aged (MWRA); Self-reported prevalence; Root cause

Introduction

The health status of Nepalese people is one of the thought-provoking conditions in the South Asian region and this is high underlines the female population. About one fifth of women are married between the ages to 15-19. Some of the major issues are high birth rates, low life expectancy, high infant, and maternal mortality rates have revealed the low health status of women in Nepal [1].

Nepal demography health survey (2011) shows that still at least 17 percent of adolescent women are already involved in childbearing activities; fertility rates are highest among 20-24 years women and only 24 percent in this age group use modern family planning methods. Only one quarter female and one-third male 15-24 had comprehensive knowledge of AIDS; seven percent female and three percent male 15-24 had sexual intercourse before age 15, and 4 in 10 female and a quarter male 15-24 had sexual intercourse before age of 18 [2].

Uterine Prolapse (UP) is a prevalent chronic problem among women in all over Nepal. It is defined as falling of the womb when the muscles of the pelvis are stressed to a point where they can no longer support the positioning of the uterus. In most countries, it seems as progressive condition after menopausal in women. However, it can also occur in younger women and frequently does in all over Nepal.

Medically, it can be classified as in four stages of uterine prolapse:

1. Stage I is descent of the uterus to any point in the vagina above the hymen.
2. Stage II is descent to the hymen.
3. Stage III is descent beyond the hymen.
4. Stage IV is total aversion or precedential.

The problems of uterine prolapse exist throughout Nepal and drastically affect women's quality of life. For women living with this condition, life's basic activities are a challenge such as with urinating, defecating, walking, standing and sitting are difficult and painful, which in turn lead to various forms of psycho-social and physical disorders [3].

Maternal mortality in Nepal

Nepal shares many of the problems of other developing countries, including the absence of a vital register of births and deaths the issue of the Maternal Mortality Ratio (MMR) is a recasting huge problem for women health. In 2009, the Nepalese Government reported the MMR to be 247 per 100 000 live births; however, the true figure may be significantly higher than that. Even though adjusting for the well-documented problems of underreporting and misclassification, in 2010, the United Nations Children's Fund (UNICEF) and WHO

Table 1: Prevalence of Uterine Prolapse in Nepal.

Location	Prevalence	Type of Study	Sample size	Year	Source type
10 Hills and Terai districts	9%	Clinical based	4518	2005	SMNF-Nepal
8 high and mid- hills and Terai districts	10%	Population-based	2207	2006	IOM, UNFPA & WHO (IOM&UNFPA,2006)
Countrywide	7%	Clinical and population-based	14696	2006	Nepal Demography Health Survey
Siraha, Saptari district	37%	Population-based	2268	2007	WRRP-CAED
Saptari, Mahottari, Rautahat district	20%	Clinical based	7750	2008	Kathmandu Model Hospital
Kaski district	11.70%	Population-based	300	2012	JHAS (Tamaraka A, 2012)

Table 2: Knowledge about Reproductive Health.

Characteristics		Frequency	Percentage
Knowledge about Family Planning Total	Yes	174	68.2
	No	81	31.8
		255	100
Knowledge about process of menstruation cycle	Don't know	11	4.3
	Matured eggs	113	44.3
	Blood deposition in uterus regularly	22	8.6
	Dirty blood	109	42.7
		255	100
Perception about causes of Uterine prolapse	Normal to woman	5	2
	Lack of nutritious food	22	8.6
	Birth of child at early age	82	32.2
	Lower abdomen pressure during delivery	71	27.8
	Lack of care after child delivery	33	12.9
	Starting work immediately after child delivery	2	0.8
	Carrying load during pregnancy	1	0.4
	Giving multiple child births	11	4.3
	Don't know	28	11
		255	100
Perception about prevention of Uterine prolapse	No solution	26	10.2
	Having nutritious food	4	1.6
	Marrying at appropriate age	44	17.3
	Safe child delivery	165	64.7
	Care and nutritious food during postnatal	11	4.3
	Taking rest at least 1 month after delivery	1	0.4
	Not carrying load during pregnancy and postnatal period	4	1.6
		255	100
Role to conceive boy or girl	Don't know	31	12.2
	Husband	222	87.1
	Wife	2	0.8
		255	100.0

estimated the Nepal MMR to be 380 per 100 000 live births [4].

Prevalence of uterine prolapse

The global prevalence of prolapsed uterus has been found the ranges from 4 to 40 percent [5]. Studies in Nepal have shown increasing trend of prevalence of uterine prolapse. The Nepal Demographic and Health Survey (NDHS) 2006 found that up to 7 percent of women of reproductive age (15-49 years) were suffering from UP. A study of reproductive morbidities done by The Institute of Medicine and UNFPA (2006) among a representative sample of 2070 women from rural and urban, hilly and terai areas in 8 districts showed 10.4 percent prevalence of UP. This study estimated that 600,000 women in Nepal suffer from UP, the majority of these women are of reproductive age and about 200,000 women are eligible for curative surgery (Institute of Medicine and UNFPA, 2006). Women above 30 years were the most vulnerable, 45.1 percent among them having UP. The mean years of suffering from UP was 7.89 years. Among them, 4.3 percent had suffered for 21-30 years [6] (Table 1).

In Nepal, uterine prolapse is mostly prevalent in the hill areas - the far-western in particular. It is believed that hill women are more

prone to the condition because of the heavy work associated with farming in the hills and lack of any wheeled transport. This study focuses on areas in the central terai in Sarlahi districts in order to find out prevalence and risk factors in rural Nepal and makes a comparison with geographically, culturally and with different social groups. The results of this study will be used to promote awareness regarding uterine prolapse and by the policy makers for women empowerment and established reproductive health as a women's right.

Methodology

The design of this research was analytical cross-sectional descriptive and exploratory. The study was based on both qualitative and quantitative methods. The design took into account variations in educational status, occupation, and ethnic diversity. The total Married Woman Reproductive Age Population (MWRA) is 3614 in Barahathawa VDC of Sarlahi district of Nepal. Out of 3614 MWRA people of study areas, 255 sample sizes were selected by using purposive sampling method based on the study of reproductive morbidity of women in the eastern terai region of Nepal [7]. Multiple tools of research were used as a semi-structured questionnaire for an

Table 3: Status of uterine prolapse.

Characteristics		Frequency	Percentage %
Cases of Uterine Prolapse	Yes	82	32.2
	No	173	67.8
		255	100
Age at uterine prolapse	20-24 years old	5	6.1
	25-29 years old	15	18.3
	30-34 years old	13	15.9
	35-39 years old	16	19.5
	40-44 years old	11	13.4
	45-49 years old	17	20.7
	Above 49 years old	5	6.1
Stage of Uterine Prolapse		82	100
	Stage I	5	6.1
	Stage II	32	39
	Stage III	24	29.3
	Stage IV	21	25.6
Behavior after uterine prolapse when they know		82	100
	Said nothing	4	4.85
	Showed sympathy	13	15.85
	Took for treatment	42	51.3
	Suggested for treatment	23	28
Knowledge about prevention of UP of cases		82	100
	Don't know the solution	16	19.5
	surgery	63	76.8
	others	3	3.7
Treatment did of Uterine prolapse		82	100
	Surgery	81	98.8
	others	1	1.2
Place of Treatment		82	100
	Local health post	1	1.2
	Birgunj	17	20.7
	Kathmandu	6	7.4
	India	57	69.5
	Other places(campaign)	1	1.2
Heavy work after child delivery		82	100.0
	Less than 15 days	26	10.2
	15-20 days	39	15.3
	21-26 days	21	8.2
	Above 26 days	169	66.3

interview and focus group discussion.

Age of respondents, the age of marriage, childbirth, education level, workload, food sufficiency, occupation, a birthing place were considered as independent variables whereas the prevalence of uterine prolapse considered as a dependent variable.

Ethical approval was taken from an ethical review board of Inje university, Pokhara university and Barahathawa VDC of sarlahi district of Nepal. Verbal consent was taken from each respondent and the confidentiality of the received information was maintained. The questionnaire was pretested and modifications were done if needed. The questionnaire was back-translated English to the Nepali language. Face to face interview was used as a technique for data collection and analysis were done by SPSS 17 version. Chi-square test was applied to find out the association between the dependent and independent variables.

Results

The result of this study is categorized into two sections.

Quantitative analysis findings

Knowledge about reproductive health: More than two third (68.2%) of woman knows about the family planning. Only 44.3% women had exact knowledge of the process of the menstruation

cycle. About one-third of the respondents (32.2%) told that early marriage is the major cause of the uterine prolapse followed by lower abdomen pressure during child delivery (27.8%). The total 89.8% of the respondents were having any knowledge about the prevention of the uterine prolapse (Table 2).

Prevalence of uterine prolapse

The prevalence of uterine prolapse found more than one third i.e. 32.2 percent of the total 255 respondents in Barahathawa VDC in Sarlahi. The average age of uterine prolapse was found 37 years old. Among the total cases, more than one-fifth of them initiated uterine prolapse at the age of 45-49 year. Among the total cases, less than two fifth i.e. 39 percent of them had surgery with stage II, 29.3 percent of them had surgery with stage III, 25.6 percent of them had surgery with stage IV and few 6.1 percent of the cases had surgery of uterine prolapse with stage I as shown in (Table 3).

Status of reproductive health

More than 90 percent of the respondents hadn't get miscarriage or get no any still birth. Half of the respondents have used the permanent methods of the family planning. It was found that 35.7 percent of the total respondents were visited three times, 23.5 percent of them visited at two times, 16.1 percent of them had no any visits, 14.1 percent of them visited at once. Most of them visited in private hospitals or clinics rather than in the governmental hospital, PHC or

Table 4: Reproductive health status.

Characteristics		Frequency	Percentage %
Number of miscarriages and Still births Total	0	232	91
	1	19	7.5
	3	4	1.6
	Total	255	100
Menstruation cycle Total	Regular	186	72.9
	Heavy bleeding	43	16.9
	Irregular	26	10.2
	Total	255	100
ANC visits during last birth Total	No visits	41	16.1
	once	27	10.6
	two times	60	23.5
	three times	91	35.7
	four times	36	14.1
	Total	255	100.0
Childbirth place Total	Home	82	32.2
	parent house	48	18.8
	Hospital	125	49
	Total	255	100
Delivery assistant Total	Nobody (self)	64	25.1
	Women members of family	14	5.5
	Woman neighbor	7	2.7
	SBA	43	16.9
	Doctor, Nurse	127	49.8
	Total	255	100
Long labor pain Total	1-3 hours	141	55.3
	4-6 hours	38	14.9
	7-10 hours	24	9.4
	A day	49	19.2
	More than a day	3	1.2
	Total	255	100

HP. Less than half of respondents had a delivery at a hospital as in (Table 2). Near about three-quarters of the respondents were assisted by someone during last child delivery i.e.74.9 percent but one-fourth of them didn't assist by anyone (Table 4).

Factors associated with uterine prolapsed: The respondent's age was categorized into 3 groups. It was found that age was highly significant with the status of the uterine prolapse (p-value 0.00). Most of the uterine prolapse cases were found in the woman of above 29 years.

Age of marriage was highly significant different with the status of the uterine prolapse (p-value 0.00). The respondents who get their marriage less than 19 years old were more affected with uterine prolapse than others i.e. 52.1 percent, followed by above 19 years old was few (7.1%).

Frequent childbirth was highly statically associated with uterine prolapse (p-value 0.00). It is found that the more than three quarter respondents had uterine prolapse who had more than 3 number of children with 75.5 percent, followed by 50 percent of them had uterine prolapse who had 3 number of children, 9.6 percent of them had uterine prolapse who had up to 2 number of children. It was found that level of education had also a high statistical significant different association with the status of uterine prolapse (p-value 0.00). Illiterate was found more affected from uterine prolapse.

Status of the uterine prolapse was found not significantly different with an occupation of the respondents (p-value 0.07). It was found that 34.8 percent of a woman were suffered who works were as housewife and farmer, who worked as labor, service, and business developed 21.6 percent of the cases (Table 5).

It was found that status of food sufficiency was significantly different with the status of uterine prolapse (p-value 0.00).The status of uterine prolapse was highly significantly different between knowledge about family planning (p-value 0.00). Who had knowledge of family planning were less affected 16.7 percent of uterine prolapse than having no knowledge of family planning i.e. 65.4 percent.

Menstruation cycle was highly significantly different with the uterine prolapse (p-value 0.00). The respondents having heavy bleeding and irregular bleeding were highly affected. It was found that birthing place was significantly different with the uterine prolapse (p-value 0.00). The respondents who had delivery in the home get more suffered from uterine prolapse i.e. 81.7 percent, followed by who had delivery at parent house was 27.1 percent and only 1.6 percent had uterus prolapse who had child delivery at hospital respectively.

It was found that long labor pain and the onset of uterine prolapse was highly significant. It was found that who had their long labor pain more than 6 hours had 76.3 percent of cases of uterine prolapse followed by 4-6 hours found 21.3 percent cases also who had their long labor pain than 1- 3 hours had 11.3 percent of cases of uterine prolapse. Heavy work after child delivery was highly significant different with the status of uterine prolapse with p-value 0.00. The maximum cases found who had started heavy work after child delivery within 15-20 days (69.2%).

Qualitative analysis findings

Focus Group Discussion (FGD): Focus group discussion was carried out in two wards off the VDC of the sampled area. Twelve participants were recruited for each of the discussion and participants were divided into 4 groups in both wards.

The respondents had a fair knowledge as to what is the uterine

Table 5: Factors associated with Uterine Prolapse.

Characteristics/Uterine prolapse		Yes (%)	No (%)	P value
Age	20-29 years old	7(9.3)	68 (90.7)	0.000
	30-39 years old	38(31.4)	83 (68.6)	
	40-49 years old	37(62.71)	22 (37.29)	
	Total	82 (32.2)	173(67.8)	
Age of Marriage of the Respondents	Less than 19 years old	74(52.1)	68(47.9)	0.000
	19 and Above	8 (7.1)	105(92.9)	
Total		82 (32.2)	173 (67.8)	
Frequent childbirth	Up to 2 child	14(9.6)	132(90.4)	0.000
	3 child	28(50)	28(50)	
	More than 3 child	40(75.5)	13(24.5)	
	Total	82 (32.2)	173(67.8)	
Level of education	Illiterate	55(68.8)	25(31.3)	0.000
	Nonformal education	21(23.6)	68(76.4)	
	Formal education	6 (7.0)	80(93.0)	
	Total	82 (32.2)	173(67.8)	
Occupation of respondents	Farmer + Housewife	71 (34.63)	134(65.4)	0.070
	Labor + others	11(21.6)	40 (78.4)	
Total		82 (32.2)	173(67.8)	
Food sufficiency	Surplus	9 (32.1)	19 (67.9)	0.000
	Sufficient for while	39 (95.1)	2 (4.9)	
	Sufficient for 6 and < 6 month	26 (17.0)	128 (83.0)	
	No land, wage labor	8 (24.2)	25 (75.8)	
	Total	82 (32.2)	173(67.8)	
Frequency of food per day	2 times	6 (50.0)	6 (50.0)	0.000
	3 times	65 (35.1)	120(64.9)	
	4 times	11 (19.0)	47 (81.0)	
	Total	82 (32.2)	173(67.8)	
Knowledge about Family Planning	Yes	29 (16.7)	145 (83.3)	0.000
	No	53 (65.4)	28 (34.6)	
Total		82 (32.2)	173(67.8)	
Menstruation cycle	Regular	19 (10.2)	167(89.0)	0.000
	Irregular + Heavy bleeding	63 (91.3)	6 (8.7)	
Total		82 (32.2)	173(67.8)	
Childbirth place	Home	67 (81.7)	15 (18.3)	0.000
	Parent house	13 (27.1)	35 (72.9)	
	Hospital	2 (1.6)	123 (98.4)	
	Total	82 (32.2)	173(67.8)	
Delivery Assistant	Nobody (self)	56 (87.5)	8 (12.5)	0.000
	Women family + neighbor	18 (85.7)	3(14.3)	
	SBA, Doctor, Nurse	8(4.7)	162 (95.3)	
	Total	82 (32.2)	173(67.8)	
Long labor pain	1-3 hours	16 (11.3)	125(88.7)	0.000
	4-6 hours	8 (21.3)	30 (78.9)	
	More than 6 hours	58 (76.3)	18 (23.7)	
	Total	82 (32.2)	173(67.8)	
Heavy work after child delivery	Less than 15 days	17 (65.4)	9 (34.6)	0.000
	15-20 days	27(69.2)	12(30.8)	
	21-26 days	13 (33.3)	26 (66.67)	
	Above 26 days	25(16.6)	126(83.4)	
	Total	82 (32.2)	173(67.8)	

Sample size (n) = 255, Significant at p value<0.05.

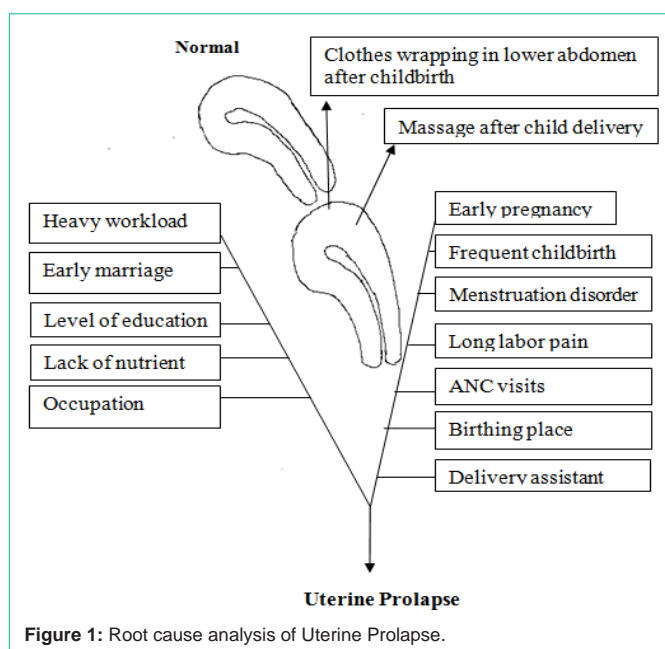
prolapse. All of the respondents mentioned that uterine prolapse was “falling of the uterus or slips down of the uterus from a body to out”. The risk factors were suggested by the respondents are giving pressure or unwanted pulling of baby and pushing of the uterus during child delivery, hardworking after childbirth so the uterus dragged down, lack of nutritious food, lack of institutional birth, irregular bleeding, and injuries at birth.

Early marriage suffered early pregnancy: One of woman said that “we all know previously we were get marriage in early age after that there were mostly chance of getting a baby that suffered the weakness due to immaturity of body that facilitates the dragging of uterus. If I talk about myself than it is due to frequent childbirth, even I get were married at early age” (L2, ward 9).

Long labor pain: One of the respondents from FGD replied that

“I confirmed that this prolapse problem is due to long labor and first pregnancy injury. When the labor pain started from the morning, my husband was taken to the local hospital even injection couldn’t work at that time. We just returned at home in the mid-day. Again labor pain was started in the evening and we went to a hospital again it’s not working anymore after that we decided to go Birgunj. I delivered my child in the morning. At the same time, my uterus displaced downward slightly.

Frequent childbirth: One of the participants said “It’s about sons! I have 4 daughters and one son now, during 4th delivery I was noticed about something coming out. My mother-in-law suggested that it’s nothing you hadn’t worried about it. I was suggested to massage and take treatment from the local hospital. After last delivery, it is continuously coming out and I said to my husband and get surgery at Birgunj.”



Heavy workload: One of the uterine prolapses suffered woman said that “I had to work and completed all household activities by own after child delivery even also. There were no any others helping hands found in my time. But I don’t want to my daughter-in-law suffered the same. I had to do all the cooking, washing clothes, collecting cow dung, collecting food for an animal due to the absence of my husband. He was used to working in Punjab at that time”.

Abortion: One of the respondents from the study said that “I was married at an early age and get early pregnancy. We were decided to take a tablet for abortion. I get more and more bleeding that developed ulceration in the uterus and get bound to cut out my uterus to get rid of this problem.”

Practice of preventive measures: A preventive measure of uterine prolapse found was massage after delivery, late marriage institutional delivery, less number of children and maintenance of birth gap. Unawareness was found for being ignoring of preventive practice.

Experience of having uterine prolapse: Participants expressed that the condition is painful for them. Many of the women said that they experienced lower abdominal pain, and burning and pricking sensation.

Lower abdominal pain is continuous and sometimes it gets so severe that I cannot even walk, it made me all day and night sleeping on the bed with the dead” - 34-year-old woman who had III stage prolapse and had undergone surgery before six months.

Heavy menstrual bleeding and irregular bleeding were also experienced by some women. “It used to bleed and smell bad; sometimes it used heavy vaginal bleeding during defecation” - a 45-year-old woman with II stage prolapse.

Many participants had thought that they will die because of prolapse. Some of them were scared of developing cancer. Fear of surgery and removal of the uterus was also another matter of stress

for women.

I am worried that I will die early due to prolapse. The doctor said that I shouldn’t get surgery even I get it this weakens me” - a 50-year-old woman with IV stage prolapse get surgery.

“I lose were my hope by suffering pain with heavy bleeding, there is no chance of survive but when I get surgery it works and I am cured nowadays” - 38 years old women.

Discussion

The prevalence of self-reported cases of uterine prolapse found 32.2% among the total respondents of 255 in Barahathawa VDC, Sarlahi. A population-based study carried out in Siraha and Saptari showed 37% prevalence of uterine prolapse. A clinic-based study carried out in the districts of Doti, Achham which share borders with Surkhet district found the prevalence to be 20% [8,15]. The Achham and Doti study found that the total women who self-reported uterine prolapse, 95.1% and 98.1% of them were found to be suffering from prolapse on clinical examination [9].

Similar findings were also presented in studies carried out in Asia, Africa and some parts of Europe. For example in Iran amongst women 18-68 years of age, the overall rate of prolapse was found to be 53% and in Sweden amongst women aged 20-59 years, the prevalence was 30% [10,17].

National Demographic Health Survey of Nepal carried out a country-wide population-based study and the prevalence was found to be 7% (NDHS 2006). The number seems to be small as the study was conducted in larger sample size [2]. However, this study cannot be generalized to the whole population, also may not be able to pin point the exact figures for cases of uterine prolapse due to self-reported cases. But on the other hand, actual cases could have been hidden due to taboo issues by the women resulting in the figures being underreported.

It was found that age was highly significant with the status of the uterine. Women with uterine prolapse were found to highest in the age group of 45-49 years old. The age of onset of prolapse in our study was found to be 25 years old. The previous study had shown that the minimum age to be 15 years old [11,18]. The result of this study is consistence with the western countries where prolapse has been found to be prevalent among the older women [3].

Age of marriage was highly significant different with the status of the uterine prolapse. Another study also suggested that due to early marriage resulted in early pregnancy and increases risks of uterine prolapse [3]. Frequent childbirth was highly statically associated with uterine prolapse. As increases in child number, the prolapse cases were found increased. This result is consistent with the different study such as a community-based study of A. Tamrakar in Pokhara [12], a study conducted in Kalikot [6] that frequent childbirth is associated factors of uterine prolapse.

Status of food sufficiency was significantly different with the status of uterine prolapse. It is all known who have sufficient food education strenuous manual work may be in a state of good general health. Similar findings reported in Paneru and Tamarakar that the prevalence of uterine prolapse was higher those who have low socioeconomic status and illiteracy [12,13].

Status of the uterine prolapse was found not significantly different with the occupation of the respondents.

It was found that 34.8 percent of the woman were suffered who works were as housewife and farmer, who worked as labor, service, and business developed 21.6 percent of the cases. A study in Bhaktapur showed that the prevalence of prolapse was higher in the farmer. Another study showed that women who work as a farmer and housewife affected more with prolapse [14]. Our study shows the birthing place and uterine prolapse are correlated. About 81.7% respondents who had delivery in the home get more suffered from uterine prolapse. The finding coincides with other studies that have been carried out in Nepal. Messerschmidt (2009) who conducted a study in 8 districts found that more than 80 percent of the respondents had their babies delivered at home had a uterine prolapse [15].

Heavy work after child delivery was highly significant different with the status of uterine prolapse. The maximum cases (69.2%) found who had started heavy work after child delivery within 15-20 days. Similar findings were reciprocated in the study carried out in Achham and Doti where 22.3 and 21 percent of the women started work within 7 days respectively [9]. Another study found only 21 percent of the women had rest for 7 days or less after delivery [16]. A study by Darshan (2009) showed that only 45.5 percent of the women had rested for 7-14 day post-delivery [17]. A study conducted in Siraha and Saptari by WRRP- CAED found 26 percent started heavy work after 15 days of delivery [3].

Our study shows the prevalence of 76.3% cases of uterine prolapse among respondents who had long labor pain more than 6hr. Only 11.3% uterine prolapse cases had labor pain for 1-3 hr. A study conducted in Siraha and Sapatari found 24% cases of uterine prolapse had labor pain for 1-3hr before giving birth [3].

Statistically, a number of miscarriage and stillbirth were also found that highly significantly different with a status of uterine prolapse. Even having no miscarriage was found more affected than having a miscarriage. This result is not consistent with others studies due to most of them had a surgery even having a problem of ulceration followed by heavy bleeding to get rid of this problem.

Focus group discussion revealed that uterine prolapse is dragging of the uterus from its original place to downward. Most of the participants suggested that majors risk factors were giving pressure or unwanted pulling of baby and pushing of uterus during child delivery, hardworking after childbirth so the uterus dragged down, early marriage suffered early pregnancy, lack of nutritious food, lack of institutional birth, irregular bleeding, injuries at birth, long labor pain, frequent childbirth, heavy workload and abortion. Based on both analysis, root cause analysis is shown in (Figure 1) where the arrow pointing downward are the root causes of Uterine prolapse, however, the arrow dragging upward are the local preventive measures.

Conclusion

The study revealed that uterine prolapse is alarming and measure public health problem in Barahathawa VDC of Sarlahi Nepal. One-third of the self-reported cases of uterine prolapse suggested that it was widespread and high prevalence. Early marriage with early pregnancy, the number of miscarriage, poverty, menstruation

disorder, birthing place, delivery assistant, long labor pain and heavy work are the associated factors of the uterine prolapse in the women of Sarlahi. It is recommended to implement a health campaign to screen cases along with a treatment and prevention program. More in-depth research is highly needed for the effectiveness of preventive measures for uterine prolapse.

Acknowledgement

We would like to extend sincere graduate to Mr. Hari Kafle, Mr. Chiranjivi Adhikari, Mr. Ishor Sharma, Mr. Sudarshan Subedi and FCHVs of Barahathawa VDC for their supervision, valuable suggestion, guidance, and support during this research work. We especially thanks to faculty of Occupational health and safety, Inje university, Faculty of Science and technology, Pokhara university and peoples of Barahathawa VDC for their support during this work.

References

1. Everest foundation in Nepal. Empowering woman. 2013.
2. Nepal Demographic and Health Survey. Ministry of Health and Population (MOHP) Kathmandu, Nepal. 2011.
3. Pradhan S. Unheeded Agonies- A study on Uterine Prolapse Prevalence and its Causes in Sirha and Saptari Districts. Women's Reproductive Rights Program. (WRRP), Center for Agro-Ecology and Development (CAED). Kathmandu, Nepal. 2007.
4. UNICEF. New York, NY: United Nations Children's Fund. Info by Country: Nepal Statistics. 2010.
5. Sveriges Kommuner och Lansting. Slutrapport från arbetsgruppen för nationala indikationer för Gynekologi (Electronic). 2006.
6. Subedi Madhusudan. Uterine Prolapse, Mobile Camp Approach and Body Politics in Nepal. Dhaulagiri Journal of Sociology and Anthropology 2010; 4.
7. Dangal G. A study of reproductive morbidity of women in the eastern Terai region of Nepal. N J Obstet Gynaecol. 2008; 3: 29- 34.
8. UNFPA. Between the mountains and the sea. 2006.
9. Shah P. Uterine prolapse and maternal morbidity in Nepal: a human rights imperative.
10. Pakbaz M, Persson M, Lofgren M, Mogren I. A hidden disorder until the pieces fall into place: a qualitative study of vaginal prolapse. BMC Women Health. 2010; 24: 10-18.
11. UNFPA, GTZ and HMG. A Reproductive Morbidity, Nepal. Kathmandu: UNFPA. 2002.
12. Tamarakar A. Prevalence of Uterine Prolapse and its associated factors in Kaski District of Nepal. JHAS 2012; 2: 38-41.
13. Paneru D. Research report –Uterine prolapse in Doti District of Nepal. Nepal Health Research Council. 2010.
14. Ander-Bonder B, Srivastavan C, Bonder K. Risk factors for uterine prolapse in Nepal. International Urogynecology Journal. 2009; 18: 1343-1344.
15. Messerschmidt Liesl. Uterine Prolapse in Nepal. The Rural Health Development Project's Response. Journal of Nepal Public Health Association. 2009; 4: 33-42.
16. Deval B, Rafii A, Poilpot S, Aflack N, Levardon M. Prolapse in the young woman: study of risk factors. Gynecol Obstet Fertil. 2002; 30: 673-676.
17. Darshan A. Prevalence of Uterine Prolapse amongst Gynecology OPD Patients in Tribhuvan University Teaching Hospital in Nepal and its Socio-Cultural Determinants. Kuala Lumpur, Malaysia: The Asian-Pacific Resource & Research Centre for Women (ARROW).