KNOWLEDGE ON UTERINE PROLAPSE AND ITS RISK FACTORS AMONG MARRIED WOMEN IN SUKLAGANDAKI MUNICIPALITY, TANAHUN NEPAL: A CROSS SECTIONAL STUDY

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BACKGROUND

Uterine Prolapse is a condition when the uterus protrudes or drops from its normal position in the pelvic cavity, descending into and eventually out of the vagina or the birth canal due to weak muscles and ligaments in the pelvis[1,2]. Uterine prolapse (UP) is the most frequently reported cause of poor health among women of reproductive age and postmenopausal women[3].

Women who've had more than one vaginal birth and postmenopausal women are at the highest risk. Prolapse surgery is the 2nd in the operation list and 45% of cases appear after first delivery[4].

In Nepal, women engage in hard work, including heavy lifting, with little or no rest during pregnancy or the postpartum period, lack of skilled care during birth, including harmful practices to expedite deliveries, in which traditional birth attendants use push and pull methods, restrictions on women's decision making, early and young age at delivery. Such activity contributes to high rates of uterine prolapse[5,6].

There are many risk factors of uterine prolapse such as Parity, Gravida, Age of last birth, Work after delivery, Vaginal delivery and surgery (c-section), Aging, Menopause and hormonal deprivation, Progressive and acquired myopathy, Debilitation, Constipation, Obesity, Occupational stresses, Smoking and chronic cough that leads the women to have the miserable life[7,8,9].

Approximately 200,000 women undergo inpatient procedures for pelvic organ prolapse in the United States each year[10]. The global prevalence of uterine prolapse is 2 to 20%. Internationally according to Oxford Family Planning Association UK, the hospital admission for uterine

prolapse is 20.4%, surgery for prolapse is 16.2%.The incidence of uterine prolapse in USA is 11.4%, Egypt 56%, Italy 5.5%, Iran 53.6%, California 1.9%, and Pakistan 19.1%[11].

In 2006, a study conducted in Bangalore showed that the respondent lacked sufficient knowledge about uterine prolapse, only 37.33% had knowledge about uterine prolapse[12].

According to UNFPA 2016, among the 13.6 million women in Nepal, proportion of women with uterine prolapse was 6.4%. Total number of women with this condition was 870,000 but women who got free surgery was 20%[13].

Study on uterine prolapse among married women has been done in other different parts of the country but not been done yet in Suklagandaki municipality. This research study will help local people and local and high authority to understand the current situation of the uterine prolapse and its causes for uterine prolapse[14].

Objective

The overall objective of this study is to assess and analyze the knowledge on uterine prolapse and its risk factors among married women on the basis of socio-demographic variables.

METHODOLOGY

The quantitative research method with descriptive cross-sectional study was adopted for the study regarding knowledge on uterine prolapse and its risk factors among married women of Suklagandaki municipality, Tanahun. The study population was married women above 18 years.The study unit was Household unit (individual).The sample size considering the non-response rate to be 10%, was 331.Proportionate Probability Random Sampling was chosen as the sample technique. The wards were randomly selected from the sampling frame and Proportionate Probability Sampling (PPS) was adopted for the purpose of number of sample selection in selected areas (wards). The thirty percent of total wards had been selected randomly.

Self-administered general information questionnaires were utilized for the research purpose. The tested tools were modified and used in this study.

Local government office of municipality was visited and permission was obtained from the local authorities prior to data collection. Research team visited each household and identified the sample based on eligibility criteria. Information was collected from self-developed questionnaire.

The information was collected by face to face interview based on designed structure questionnaire.

The 10% of the total sample size was taken for the purpose of the pre-testing. i.e. 33. The pre-testing was done in Kapan, Budhanilkantha municipality. The revision on general characteristics of the questionnaire were done through the response received from the similar population.

The collected data was organized, entered, coded, analyzed & interpreted in the computer according to the objective of the study using IBM SPSSv20.0 program & Ms.Excel along with the editing and clearing of the collected data. Frequency distribution and cross tabulations of the variables were done.

Ethical considerations

First of all, the ethical clearance was obtained from Institutional Review Committee (IRC) of Manmohan Memorial Institute of Health Sciences (MMIHS). Verbal informed consent from the respondent of study subjects was obtained before the data collection process and the objectives of the study were explained to them. The collected information was dealt with highest confidentiality and utilized only for the study purpose. The respondents could withdraw from the study at any time if they weren't willing to answer any question without providing any justification.

FINDINGS

1. Demographic characteristics of the respondents

A total of 331 respondents were interviewed during the data collection. Among them 192 respondent (58%) were between 20- 39 years of age being the majority population and 119 respondents (36%) were at the age between 40- 59 and 20 respondents (6%) were at the age between 60- 79. Mean age of the respondents was 38.33 and standard deviation was 10.96.Out of them 295 respondents (89.1%) had married at the age between 15 -24 years of age (Table1).

Table 1: Distribution of the respondents by age and age at marriage

n=331

Variables	Number (n)	Percentage (%)
Age in years		
20-39	192	58
40-59	119	36
60-79	20	6
Mean age= 38.33 years		
Married age in years		
5-14	25	7.6
15-24	295	89.1
25-34	11	3.3

2. Socio-economic status of the respondents

Out of total 331 respondents, the majority of households follow Hinduism i.e. 72.8% and minority of households follow Christian .i.e. 5.5% respectively. According to the ethnicity, Janajati was the major ethnic group with 40.2% of the total respondents followed by Brahmin and Chhetri with 27.5% and 12.7% respectively of the total population .The above table shows the different level of education of all respondents where 87.9% of the respondents were literate whereas 12.1% of them were illiterate.

According to the occupational status of the participants, 56.8% of the participants were unemployed and worked as a housewife followed by business .i.e. 30.2% of respondents. (Table2)

Table 2: Distribution of the respondents by religion, ethnicity, family type and economic status. **n=331**

Variables	Number (n)	Percentage (%)
Religion		
Hindu	241	72.8
Buddhist	63	19.0
Christian	5	1.5
Muslim	22	6.6
Ethnicity		
Brahmin	91	27.5
Chhetri	42	12.7
Janajati	133	40.2
Dalit	36	10.9
Musalman	22	6.6
Thakuri	7	2.1
Types of family		
Single	186	56.2
Joint	141	42.6
Expanded	4	1.2
Education		
Illiterate	40	12.1
Literate	291	87.9
If literate,		
-Able to write name only	27	8.2

-Primary Education	40	12.1
-Lower Secondary Education	50	15.1
-Secondary Education	103	31.1
-Higher Secondary Education	47	14.2
-Higher Education/ University	24	7.3
Main job/ occupation		
Agriculture	26	7.9
Business	100	30.2
Worker	6	1.8
Social Worker	2	0.6
Housewife	188	56.8
Student	3	0.9
Others	6	1.8
Family monthly income		
-less than or equal to Rs.15000	36	10.9
-Rs.15000- Rs.25000	84	25.4
-Rs.25000- Rs.35000	66	19.9
-more than or equal to Rs.35000	145	43.8

3. Information related to uterine prolapse and its associate factors

Regarding the associated factors of uterine prolapses more than half (62.8%) of the participants responded that they had heard about UP and 37.2% of the participants had not heard about UP. Those 62.8% of respondents who heard about UP accessed information from multiple sources/channels, including radio (13.5%), television (14.2%), female community health volunteers (11.4%), friends/relatives (56.4%) and others such as newspapers, internet surf or online (4.5%).

Out of total 331 respondents, 6.6% of the respondents had history of Uterine Prolapse and 7.3% of the respondents had the family history of Uterine Prolapse. Majority (92.4%) of participants responded that appropriate age for the marriage should be more than 20 years of age for the women. (Table 3)

Table 3: Respondents having Information regarding uterine prolapse and its factors

n =331

Variables	Number (n)	Percentage (%)
Heard about uterine prolapse		
Yes	208	62.8
No	123	37.2
Family history of uterine prolapse		
Yes	24	7.3
No	307	92.7
History of uterine prolapse		
Yes	22	6.6
No	309	93.4
Appropriate age of women for marriage		
less than or equal to 20 years	25	7.6
more than 20 years	306	92.4
Source of information		**n=208**
Radio	39	18.8
Television	41	19.7
FCHV's	33	15.9
Friends and relatives	163	78.4

Others	13	6.2

4. Knowledge about uterine prolapse and its risk factors

It was found that out of 331 participants, the majority 61.9% of them had the correct knowledge about the meaning of the Uterine Prolapse .i.e. Uterine Prolapse is the feeling of something bulging out from birth canal whereas 27.8% of them even don't know the meaning of Uterine Prolapse. While 10.3% respondents had wrong meaning regarding the knowledge .i.e. UP is the development of the tumor in the womb or rupture of the womb.

According to the risk factors regarding UP, out of all 331 respondents, 192 (58%) of respondents had the knowledge about risk factors. Majority of the women (51.2%) said doing heavy work after delivery is the major factor to cause UP followed by nutritional deficiency after delivery and frequent childbearing. Result regarding sign and symptoms, less than half of married women (26%) had knowledge regarding sign and symptoms of UP. (Table 4)

Table 4: Respondents having knowledge regarding meaning of uterine prolapse and its risk factors

Variables	**Number (n)**	**Percentage (%)**
Meaning of uterine prolapsed		**n=331**
Right	205	61.9
Wrong	34	10.3
Don't know	92	27.8
Knowledge on risk factors of uterine prolapse		**n=331**
	192	58

Yes	139	42
No		
Causes /risk factor of uterine prolapse		**n=192**
-Frequent childbearing	47	24.5
-Doing heavy work after delivery	186	96.9
-Giving birth at early age	36	18.8
-Nutritional deficiency after delivery	83	43.2
-Frequent and risky abortion	4	2.1
-Delivered by untrained personnel	6	3.1
-Constipation	1	0.5
Knowledge on symptoms of uterine prolapse		**n= 331**
Yes	86	26
No	245	74
Symptoms of uterine prolapse		**n= 86**
-Frequently loss of urine	17	19.8
-Feeling of something coming down	52	60.5
-Vaginal bleeding or offensive discharge	67	77.9
-Difficulty in walking	54	62.8
-Others	44	51.2

5. Knowledge regarding prevention and treatment of Uterine Prolapse

It was found that out of 331 participants, less than half of married women (43.8%) had knowledge regarding preventive measures of UP. Similarly regarding preventing measures of UP, not lifting heavy loads during lactation period (47.3%) followed by intake of nutritional foods (24.3%) were the measures that most of the participants responded.

The majority of the studied married women (86.4 %) reported that they will seek medical advice or refer to hospital/health post, in case of suffering from uterine prolapse. According to the most of the respondents (41.4%), complication of Uterine Prolapse leads women to suffer from cancer and at last death of the women would occur. (Table 5)

Table 5: Respondents having Knowledge regarding prevention and treatment of Uterine Prolapse

Variables	Number (n)	Percentage (%)
Knowledge on prevention of uterine prolapse		**n= 331**
Yes	145	43.8
No	186	56.2
Prevention of uterine prolapse		**n= 145**
-Not lifting heavy loads during lactation period	142	97.9
-Avoid early and too many pregnancy	30	20.7
-Practice of family planning	14	9.7
-Eating nutritious foods after delivery	73	50.3
-Avoid early marriage	30	20.7
-Doing yoga and exercise after delivery	11	7.6
Knowledge on treatment of uterine prolapse		**n= 331**
Yes	164	49.5
No	167	50.5
Treatment of uterine prolapse		**n= 164**
-Traditional home treatment	24	14.6
-Dhami/ jhakri	1	0.6
-Hospital/health post	159	97
Uterine prolapse is communicable disease		**n=331**
Yes	5	1.5

No	276	83.4
Don’t know	50	15.1
Complication of uterine prolapse		**n=331**
-Ulcer	29	8.8
-Cancer	171	51.7
-Death	132	39.9
-Prolapsed urinary bladder and rectum	3	0.9
-Don't know	78	23.6

6. Factors associated with Uterine Prolapse

Out of all the respondents majority 56.8% of respondents have poor knowledge regarding uterine prolapse and its categories and 34.1% of respondents have fair/satisfactory knowledge about uterine prolapse and only 9.1% of respondents have good knowledge regarding uterine prolapse and its categories.(Table 6).

Table 6: Status of overall knowledge on Uterine Prolapse among respondents

Overall knowledge	**Number**	**Percentage**
Poor knowledge	188	56.8
Fair knowledge	113	34.1
Good knowledge	30	9.1

7. Association between UP knowledge and its study factors

Regarding the statistically significant association between various factors and knowledge on Uterine Prolapse. There was statistically significant association between religion and Uterine

prolapse (p=0.039). Similarly, appropriate age of women during marriage and knowledge regarding Uterine Prolapse were statistically significant and had an association (p=0.014).

The association of the knowledge score about Uterine Prolapse was statistically highly significant with the history of Uterine Prolapse of the respondents. (p= 0.000**)

The association of the knowledge score about Uterine Prolapse was statistically highly significant with heard about Uterine Prolapse of the respondents. (p= 0.000**). (Table 7)

Table 7: Chi-square test of association between UP knowledge and its study factors

Factors	**Knowledge on UP**			**P-value**	**Result**
	Poor	**Fair**	**Good**		
Age					
20-39	113	64	15		Not significant
40-59	64	41	14	0.692	
60-79	11	8	1		
Married age					
≤ 18 years age	101	50	15	0.282	Not significant
≥ 19 years age	87	63	15		
Ethnicity					
Janajati	81	41	11	0.466	Not significant
Non-janajati	107	72	19		
Religion					
Hindu	128	92	21	0.039*	Significant
Non-hindu	60	21	9		
Education					
Uneducated	25	12	3	0.737	Not significant
Educated	163	101	27		

Family type					
Nuclear	101	68	17	0.550	Not significant
Non-nuclear	87	45	13		
Occupation					
Employed	71	55	14	0.157	Not significant
Unemployed	117	58	16		
Monthly income					
≤ Rs. 25000	73	38	9	0.5	Not significant
>Rs. 25000	115	75	21		
Appropriate age of women during marriage					
Less than 20	21	4	0	0.014*	Significant
Equal or more than 20	167	109	30		
Family history of Uterine Prolapse					
Yes	11	11	2	0.449	Not significant
No	177	102	28		
History of Uterine Prolapse					
Yes	4	13	5	0.000**	Significant
No	184	100	25		
Heard about Uterine Prolapse					
Yes	92	89	27	0.000**	Significant
No	96	24	3		

DISCUSSION

The majority of the participants included in this study were between the age group 20-39 years. Similar study conducted by Tamrakar Anupamain Kaski district showed the similar pattern,

where majority of the respondents were above 30 years of age[15]. In like the previous study done by Kabita Pathak, SudipKhanal in Gorkha district clarified majorities of the respondents were over 35 years of age[16].

Majority of respondents in this study were Janajati, Brahmin and Chhetri .i.e. 40.2%, 27.5% and 12.7% respectively whereas most of them were Hindu. In like the previous study done by Kabita Pathak, Sudip Khanal in Gorkha district which stated most of the respondent to be Janajati followed by Brahmin and Chhetri.[16]

In this study, we had the multiple respond questions for the source of information regarding Uterine Prolapse. The majority (78.4%) of the respondents said that they got the information from their friends and relatives and followed by television and radio and minimum (6.2%) got information from internet, newspaper. Similar study conducted in Lekhnath, Kaski by Silwal M, Gurung R et al revealed that they got information mostly from (24%) friends and (23%) from family members and minimum (14%) got information from media[10].

In the present study, 7.3% of the respondents out of total 331 respondents were suffered from Uterine Prolapse. This finding was in line with a study conducted by Kabita Pathak, SudipKhanal in Gorkha district which clarified that among 153 respondents (13.7%) were suffered from uterine prolapse[(16)]. Also in like with the study conducted by Anupama Tamrakar, studied the prevalence of the uterine prolapse and its associated factors in Kaski revealed that 11.7% of respondents suffered from uterine prolapse[15].

Majority (96.9%) of the respondents said that doing heavy work after delivery is the major risk factor for women to suffer from Uterine Prolapse which is similar to the findings of a study conducted by Pokharel B., Jain V. GN among Women Attending Gynecology OPD in Kathmandu OPD resulted that majority (82.9%) respondents used to do heavy work during pregnancy and 95.2 percent were doing heavy work in daily activities[14].

Regarding signs and symptoms of Uterine Prolapse, this study had multiple respond questions where majority (77.9% and 60.5%) of respondents answered vaginal bleeding and offensive discharged followed by feeling of something coming down from the birth canal. Similar study

done by Anupama Tamrakar in Kaski showed that feeling of something coming down was reported by more than 42% cases followed by vaginal bleeding by more than 37% as a major symptoms of Uterine Prolapse[15].

CONCLUSION

This study has provided understanding regarding Uterine Prolapse and its risk factors among married women. The mean age of the respondents was 38.33 years. Majority of them were Hindu from single family and they belong to Janajati followed by Brahmin and Chhetri caste group.

More than half, 62.8% of the participants responded that they had heard about UP. Many women who had heard, most of them didn't know any knowledge or had poor knowledge about its symptoms, prevention complication and treatment. Among the respondents 192 (58%) of them had the knowledge about risk factors. The study had found that there is the wide gap in the knowledge level regarding UP. This study predicted the major risk factors regarding UP were lifting heavy load after delivery, nutritional deficiency, frequently childbearing as recognized by the respondents and others were giving birth at early age, delivery by untrained personnel, frequent and risky abortion.

RECOMMENDATION

Uterine prolapse is the public health hidden problem in Nepal. Most of the women in our Nepalese society hesitate to say anything about such problem.There is an urgent need to take an advance and new approach in addressing such hidden issue with more effective interventions that will improve women reproductive health and quality of life in the society.

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REFERENCES

1. Jaime H. Uterine Prolapse: Risk Factors, Symptoms, and Diagnosis [Internet]. [cited 2018 Mar 31]. Available from: https://www.healthline.com/health/uterine-prolapse
2. Uterine Prolapse | Florida Hospital [Internet]. [cited 2018 Mar 31]. Available from: https://www.floridahospital.com/uterine-prolapse
3. Radl CM, Rajwar R, Aro AR. Uterine prolapse prevention in Eastern Nepal: The perspectives of women and health care professionals. Int J Womens Health. 2012;4(1):373–82.
4. Khatri R. Situation of Uterine Proplapse in Salyan, Mugu and Bajhang Districts of Nepal: A Clinic Based Study. Heal Prospect [Internet]. 2011;10:10–3. Available from: http://www.nepjol.info/index.php/HPROSPECT/article/view/5638
5. Shrestha B, Devkota B, Khadka BB, Choulagai B, Pahari DP, Onta S, et al. Knowledge on uterine prolapse among married women of reproductive age in Nepal. Int J Womens Health. 2014;6(1):771–9.
6. Health Related Quality of Life of Women Suffering from Pelvic Organ Prolapse. 2013 [cited 2018 Apr 13]; Available from: http://nepal.unfpa.org/sites/default/files/pub-pdf/UNFPA-QualityBook-Final-ALL.pdf
7. Prolapse: Uterine and vaginal | Women's Health Concern [Internet]. [cited 2018 Mar 31]. Available from: https://www.womens-health-concern.org/help-and-advice/factsheets/prolapse-uterine-vaginal/
8. Singh DR, Lama S, Maharjan S. Knowledge on risk factors of uterine prolapse among reproductive age group women of Bajrabarahi Municipality of Lalitpur , Nepal. 2016;5(10):3343–8.
9. Opala T. Associated factors for uterine prolapse. Ann Agric Env Med. 2012;10(1):1–4.
10. Nygaard I, Bradley C, Brandt D. Pelvic organ prolapse in older women: Prevalence and risk factors. Obstet Gynecol. 2004;104(3):489–97.
11. Silwal M, Gurung R, Shrestha N, Gurung A, Ojha S. Prevalence and Factors Affecting Women with Uterine Prolapse in Lekhnath , Kaski , Nepal. 2016;09(2).
12. PT. V. an exploratory study to assess the knowledge of postnatal mother who had vaginal delivery on prevention on Uterine Prolapse in Jayanagar, general hospital, Banglor south, Karnataka. 2006.
13. Adhikari Rojita. The pain and shame of 1 million Nepali women | Nation | Nepali Times

[Internet]. 2017 [cited 2018 Mar 31]. p. 864. Available from: http://archive.nepalitimes.com/article/nation/the-pain-and-shame-of-Nepali-women-uterine-prolapse,3786

14. Pokharel B., Jain V. GN. Study on Factors Contributing Uterine Prolapse among Women Attending Gynecology OPD in Kathmandu, Nepal. Int J Heal Sci Res. 2016;6(1):387–91..
15. Tamrakar A. prevalence of uterine prolapse and its associated factors in Kaski District of Nepal. Vol. 2, Jhas. 2012. p. 38–41.
16. Pathak K, Khanal S. Factors Associated with Uterine Prolapse among Married Women of Reproductive Age Group of Gorkha District. 2018;(3):72–7.