

Risk Factors and Symptoms of Uterine Prolapse: Reality of Nepali Women

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Abstract

The aim of the review was to explore the risk factors and symptoms of uterine prolapse (UP) experienced by Nepali women. The literature review was completed by making use of Pub med, Google Scholar, and Medscape. The prevalence of uterine prolapse was found to be in the range of 10-40%. The grass root causes of UP in Nepal are poverty, illiteracy and male dominated social structure. These causes gender based discrimination, inaccessibility to health services, poor nutrition, early marriage, early pregnancy, multi parity in the need of son, work load during pregnancy and postnatal period, domestic violence, home deliveries, lack of awareness about UP, shyness to explain about reproductive health related problems which in turn leads to uterine prolapse.

Women suffering from UP start experiencing a variety of physical symptoms like back ache, difficulty in standing, sitting and walking, difficulty in lifting, vaginal foul smelling discharge/ itching, sore or ulcer in protrusion of tissue, painful intercourse, burning micturition, urinary incontinence, difficulty in passing stool, etc. The psycho-social dimension of life is also affected by having UP. These symptoms affects almost every aspect of women's daily living hence creating role limitation, physical limitations, social limitations, personal limitations and also psychology of sufferer. All of these finally have direct impact on the quality of life of the women.

Key words

Uterine prolapse, risk factors, symptoms, social structure, stigma, Nepal

Introduction

Maternal health is getting special attention globally as it is highlighted in many international declarations. The 1994 International Conference on Population and Development (ICPD) in Cairo discussed reproductive health and women's health in a holistic way. ICPD delegates reached a consensus that the equality and empowerment of women is a global priority. They approached the matter not only from the perspective of universal human rights, but also as an essential step towards eradicating poverty and stabilizing population growth. A woman's ability to access reproductive health and rights is the cornerstone of her empowerment. It is also the key to sustainable development. Nepal is also a signatory of Cairo Program of action (ICPD, 1994).

Millennium Development Goal (MDG)-5 has also highlighted maternal health throughout the world. The goals are to improve maternal health, reduce the maternal mortality ratio by three quarters by the year 2015. Promote gender equality and empower women; eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015 (World Health Organization, 2000).

According to world census there are 1,873 million women, among these over 500,000 die every year because of complications of pregnancy and child birth (Sadeghi-Hassanabadi, Keshavarz, Setoudeh-Maram, & Sarraf, 1998). WHO estimated that the reproductive ill health accounts for 33% of the entire disease burden in the women globally (Bajracharya, 2007).

Poor reproductive health among women has been a major public health problem in many developing countries like Nepal. Maternal death is only the tip of the iceberg, pregnancy related complications that do not lead to death but women suffer from severe lifelong disabilities are much more prevalent than maternal death. For every maternal death there are up to 30 women with complications that will affect them for rest of their lives (World Bank, 1999). One of such hidden morbidity is Uterine Prolapse (UP).

Uterine prolapse (UP) is the falling or sliding of the womb (uterus) from its normal position into the vaginal area (Dutta, 2001). Genital prolapsed including UP is mainly due to insufficiency of the pelvic floor

and consist of a herniation of an adjacent pelvic organ into vagina (Soderberg, Falconer, Bystrom, Malmstrom, & Ekman, 2004).

Uterine prolapse occurs when pelvic floor muscles and ligaments stretch and weaken, providing inadequate support for the uterus. Loss of normal vaginal support can be seen, to some degree or another, in as many as 43% to 76% of women (Swift, Tate, & Nicholas, 2003; Samuelsson, Victor, Tibblin, & Svardsudd, 1999).

There are three degrees of uterine prolapse:

1. First degree: The uterus descends down from its normal position but the external os still remains inside the vagina.
2. Second degree: The external os protrudes outside the vaginal introitus but the uterine body still remains inside the vagina.
3. Third degree: The uterine body descends to lie outside the introitus. This is also called procidentia or complete prolapse (Dutta, 2001).

Uterine prolapse was first recorded on the Kahun Papyri in about 2000 BC. Its many fragments were discovered by Flinder Petrie in 1889. Hippocrates described numerous nonsurgical treatments for this condition. In 98 BC, Soranus of Rome first described the removal of the prolapsed uterus when it became black (Barsoom & Sinert, 2011).

Despite of lot of attention, the exact scenario of uterine prolapse is still hidden and expanding as these issues are not openly shared due to shyness, stigma and discrimination. Most of the efforts to address the problem of uterine prolapse are mainly focused on physical symptoms as it has direct impact on biomedical implications. However, uterine prolapse directly affect other aspects of life as well. In fact it severely affect the quality of life of women, causing physical, social, psychological, occupational, domestic, sexual limitations on their lifestyle.

Only little importance has been given so far to symptoms for severity and impact on women's quality of life. In addition, the outcome of conservative and surgical treatment for uterine prolapse has rarely been evaluated in relation to change in quality of life. Improving quality of life should be the main aim of the treatment. Literature on obstetric morbidities such as uterine prolapse rarely give us a glimpse of what it means to women to live with the condition for years together, without support from the immediate family, and without access to appropriate

medical help. Only few studies have explored women's experience of living with uterine prolapse.

As per the 2011 census of Nepal out of a total population of 26,620,809 population of male and female is 12,927,431 and 13,693,378 respectively; indicating women to be leading in number (National planning commission, 2011). In this larger proportion of population uterine prolapse is widespread chronic problem. Many women are silently living with the pain of uterine prolapse. In many societies, women believe or are made to believe that reproductive health problems are part of women's fate and that the falling of uterus is just part of being a woman (Pradhan et al., 2010).

Due to less data and surveillance, the prolapsed uterus has become a scourge that is everywhere but nowhere in Nepal. The enormous physical and psychological burden it represents goes practically unnoticed in the public health debate raised in the country. For women, utero-vaginal prolapse is a matter of utmost discomfort, that affects many aspects of daily living, but social conditioning often deters women from seeking medical assistance even if it is available.

Prevalence of Uterine Prolapse in Nepal

More than 600,000 Nepali women suffer from some form of uterine prolapse and of these women; nearly 200,000 are in immediate need of surgery (Gurung, Amatya, Bista, Joshi, & Sayami, 2007). Another study suggests prevalence of uterine prolapse to be in the range of 10 to 40 percent among women in Nepal (Pradhan et al., 2010).

Study conducted in Siraha and Saptari of Nepal shows that women from all social groups and of all ages including relatively young are found to be affected from UP. Prevalence of UP was found as Siraha (30%), Saptari (42%), Acham (25.1%). In terai region of Nepal prevalence was higher, with Rautahat (44.5%), Saptari (27.6%), Dadeldhura (17.7%), Kapilvastu (11.1%), Mahottari (7.4%), Jumla (4.2%), Baglung (3.5%) and Dang (2.8%). The mean number of years living with prolapse was 10 years. In Acham 22.2% of UP sufferers reported the onset of prolapse before the age of 20 and 43.8% between the ages of 20 and 29. In terai the mean age when the prolapse first noticed was 27.9 years. In 30.4% of women, prolapse was noticed after their first delivery

and 44.9% women noticed it after second and third delivery (Women's Reproductive Right Program (WRRP) & Center for Agro-Ecology and Development (CAED), 2007; Bonetti, Erpelding, & Pathak, 2002; Gurung, 2006; Institute of Medicine (IOM) & United Nations Population Fund (UNFPA), 2006).

Risk Factors for the Development of Uterine Prolapse

Many studies have pointed out some risk factors for the development of uterine prolapse. The confirmed risk factors include older age, race, family history, increased body mass index, higher parity, vaginal deliveries, maximum birth weight and constipation. Possible risk factors include intrapartum variables (macrosomia, long second stage of labor, episiotomy, and epidural analgesia), increased abdominal pressure, and menopause (Olsen et al., 1997; Samuelsson et al., 1999; Rinne & Kirkinen, 1999; Swift, 2000; Progetto Menopausa Italia Study Group, 2000; Swift et al., 2003; Swift et al., 2005; Doshani et al., 2007).

Risk Factors of Uterine Prolapse in Nepal

Many studies have found that UP is the result of extensive physical labor, such as carrying heavy loads, especially during pregnancy and in postpartum period, prolonged labor during childbirth, forced delivery by untrained persons, lack of skilled birth attendants during delivery, low maternal weight due to malnutrition, lack of rest during postpartum period, insufficient spacing between births, bearing a large Number of children with inadequate spacing (Gurung, 2006; Upreti, Bhattarai, & Onta, 2001; Shakya, 2006; Bodner-Adler, Shrivastava, & Bodner, 2007; CAED, 2007).

The most important risk factor of UP in Nepal is considered to be extensive physical labor during pregnancy and immediately after pregnancy (Bodner-Adler et al., 2007). Majority of women (87%) expressed that they had heavy work load and no rest prior to their last birth and 21% of women said that they took rest for seven days or less after their last birth before resuming work (Bonetti et al., 2004). 72.1% reported of doing all kind of labor intensive work during pregnancy like cooking, washing dishes, getting firewood from the forest, carrying water from

long distances, taking care of domestic animals. Also the work load was found to be almost similar for post natal period, 68.1% of women started work immediately after delivery (less than 15 days) (Baruwal, Somronthong & Pradhan, 2011). This is also supported by another study which states 78.79% of respondents worked one week after delivery and 1.52% after three weeks of delivery (Darshan, 2009).

Pelvic organ prolapse is prevalent mostly in post-menopausal women in the West and is not related to childbirth (Samuelsson et al., 1999; Rortveit et al., 2007). Whereas, younger Nepali women are vulnerable to uterine prolapse making the incidence of UP particularly distinct in Nepal (Institute of Medicine (IOM) & United Nations Population Fund (UNFPA), 2006). In Nepal more than half (51%) women had UP before the age of 25. In some cases the first delivery was found to have been at the age of 14 and over 60% of women with UP had their first child under 19 years of age. Large number of women (60%) suffered from UP (first onset) after giving birth to their first or second child rejecting that the multiple and frequent child birth as the major cause of UP. 14% of UP cases occur before the age of 20 and other 44% of cases before the age of thirty. This study also suggested that there is a strong relation between UP and the economic condition of women (WRRP & CAED, 2007; Family health division, SAIPAL, & WHO, 2011; Shah, 2010). In western Nepal 37.5% of women had UP after completing their first pregnancy, 18.3% had completed two pregnancies and 2.3 were nulliparous (Bonetti et al., 2004). Another study also suggests that 65.16% of women with UP were first pregnant when they were teenagers and 34.86% were in the age group of 22-32 (Darshan, 2009).

In the Oxford Family Planning Association prolapse epidemiology study parity was the strongest risk factor for the development of pelvic organ prolapse (POP) (Mant, Painter, & Vessey, 1997). Study conducted in Surkhet found that total number of pregnancy was significantly associated with UP. Majority of women (28.1%) had three children, 16.3% had four children and 14.1% had more than four children (Baruwal et al., 2011).

Health services and health care facilities are not available everywhere in the country due to geographical challenges. Lack of health services and health care assistants is also one of the root cause of UP in Nepal.

Study conducted in Doti district shows the poor health care availability for women evident by the fact that 75% women did not visit any antenatal checkup (ANC) during their last pregnancy. Only 12% did four ANC visits in their last pregnancy and 89% of women delivered their last child at home. Only 10% of women had a hospital delivery. Similarly, in Surkhet 72.7% of deliveries took place at home and more than 34% of respondents had not made any antenatal visits. Only 5.3% had completed four antenatal visits (Family health division, South Asian Institute of Policy Analysis and Leadership (SAIPAL), World Health Organization, 2011; Baruwal et al., 2011).

Among UP sufferer, only 48% sought treatment in health facility. 32% of women with UP said that they were not aware that there are health services for UP. The main reason for not visiting health facility was found to be shyness (45%) and unaware about the treatment (32%). Most of the women were not able to decide for UP treatment by themselves. Also it was evident that health facilities were not always accessible. More than 76% women had to travel more than 2 hours to reach the nearest health facility (Family health division, SAIPAL, & WHO, 2011). Similarly another study indicated that the health facilities in Nepal were inadequate in meeting the demands of UP surgery and some women from Terai went India for surgery due to easy access (Centre for Social Sciences Studies, Family health division, Department of Obstetrics and Gynecology, & Kathmandu model hospital, 2012).

Lack of skilled birth attendants and forced delivery conducted by untrained person is also one of the causes of UP (Bodner-Adler et al., 2007). Study conducted in western Nepal suggested that labor and deliveries are under supervision of mother in laws or elderly village women, and are conducted at home. Only 7.1% women reported the assistance of trained health care workers in their last pregnancy (Bonetti et al., 2004). In Siraha and Saptari district study revealed that 91% of women gave birth in home and only 5% had delivered their babies in hospital. 52% of women were attended by their mother in laws, 50% received help from neighbors and 44% from trained birth attendants. 2% mentioned that there was no one to help them during their delivery (WRRP & CAED, 2007). 37.5% of women reported that they delivered baby in home with the help of relatives and almost 24% had it delivered alone without any help (Baruwal et al., 2011).

Gender based discrimination has also been perceived as one of the root causes for women's status in the society. Due to the discrimination women are deprived of their basic rights, education, nutrition and other aspects of living throughout their lives which leads to women's lack of control over their health and deprivation from their rights. Women are the victim of discrimination throughout their life cycle, from birth until death (Gurung, 2006). Study conducted in Doti shows that majority of women (73%) perceived gender discrimination in their community (Family health division, SAIPAL, & WHO, 2011). Another study argues that the problem of UP leads to gender based violence and the vice versa (Shakya, 2006).

One of the studies found knowledge level of women to be significant with uterine prolapse and also concluded that 47.2% women in Surkhet, were far away from formal education (Baruwal et al., 2011). 77.27% of women with UP were found to be illiterate by another study as well (Darshan, 2009).

Although in 2008 Supreme Court of Nepal recognized explicitly that a high incidence of uterine prolapsed may constitute a violation of human right, including specifically women's reproductive right the situation of uterine prolapse has been the same. Article 20(2) of the Interim Constitution, 2063 prescribes reproductive health as fundamental right (Shah, 2010). Patriarchal society with evident gender discrimination has been cultivating gender based violence and also it has been considered to be the root cause of UP in Nepal.

In Doti women with UP expressed their experience of violence by their husbands, mother in laws brother/sister in laws and father in laws. 45% of women reported their husband slapped them, 37% had their arms twisted and hair pulled, 36% were pushed / shaken or thrown, 33% were kicked / dragged, 25% were punched and 16% were victim of attempted choking or burning on purpose by their husbands. 20% of women experienced physical violence from their mother in laws, 17% from brother/sister in laws and 8% from their father in law (Family health division, SAIPAL, & WHO, 2011).

Difficult geography, inadequate health services and underdevelopment, pre and post natal periods marked by a heavy workloads, low rate of prenatal care, and restrictions on women's own decision making are viewed as the risk factors for UP in rural Nepal (Earth & Sthapit, 2002).

UP is regarded typically as a product of poverty, entrenched gender discrimination and inadequate health care services (Shah, 2010).

Quality of Life

Symptoms of Pelvic Organ Prolapsed (Physical Dimension)

Bulge symptoms: Sensation of vaginal bulging or protrusion, seeing or feeling a vaginal or perineal bulge, Pelvic or vaginal pressure, Heaviness in pelvis or vagina. Urinary symptoms includes urinary incontinence, urinary frequency, urinary urgency, weak or prolonged urinary stream, hesitancy, feeling of incomplete emptying, manual reduction of prolapse to start or complete voiding, position change to start or complete voiding. During prolapse the loss of vaginal support directly influences bladder or urethral function resulting in these symptoms.

Bowel symptoms includes incontinence of flatus or liquid/solid stool, feeling of incomplete emptying, hard straining to defecate, urgency to defecate, digital evacuation to complete defecation, splitting vagina or perineum to start or complete defecation, feeling of blockage or obstruction during defecation.

Sexual symptoms include dyspareunia, decrease lubrication, decrease sensation, decrease arousal or orgasm. Another symptom is pain; pain in vagina, bladder, or rectum, pelvic pain, low back pain (Barber, 2005). Other local symptoms include feeling of pressure or heaviness in the vagina, sensation or awareness of protrusion from the vagina, abdominal pressure or pain, blood stained and purulent discharge (Thakar & Stanton, 2002).

Women may develop single symptom as vaginal bulging or pelvic pressure or they may be present with multiple symptoms. Studies have found only weak to moderate correlations between the degree of vaginal prolapse and the presence of specific symptoms (Samuelsson et al., 1999; Barber et al., 2003; Ellerkmann et al., 2001; Burrows et al., 2004).

Uterine prolapse leads to severe degrees of physical disability, including inability to work, difficulties walking or standing up, sitting, difficulties urinating or defecating, painful intercourse, increased social stigma, and economic deprivation (Farkouh, 2009). In Nepal almost 96.9% of women suffering from uterine prolapse experienced abdominal pain.

Along with back ache while standing (72%), difficulty in standing, sitting and walking (33.8/32.9/30.4% respectively), difficulty in lifting (32.9%), vaginal foul smelling discharge/itching (33.3%/18.1%), sore or ulcer in protrusion of tissue (18.8%), painful intercourse (15%) and menorrhagia (6.4%). 71.4% of women had complications related to urinary symptoms like urinary frequency and burning micturation (33%), difficulty in urinating or incomplete voiding (25%), urinary incontinence (urge) (6.9%) and stress (3.9%). Vesico-vaginal fistula was also reported in two cases. 9.8% had difficulty in passing stool and one reported case of recto-vaginal fistula (Gurung et al., 2007).

In western Nepal 88% of women with UP experienced difficulty lifting heavy objects, 82% experienced difficulty sitting, 79% in walking, 65.5% in standing, 55% had backaches, 49% experienced burning micturation, 41.1% had painful intercourse, 34.9% had abdominal pain, 33% noticed white watery discharge, 32% registered foul smelling discharge, 30.7% experienced difficulty urinating and 27% of women complained itching. Similar findings were noted in far western development region of Nepal with 88.6% experienced difficulty in lifting loads, 82% in sitting, 79% in walking, 65.5% in standing, 55% had backache, 49% experienced burning urination, 41.1% had painful sexual intercourse (Bonetti et al., 2002, 2004).

Psycho-Social Dimensions

The psycho-social problems faced by women with UP include stress, emotional isolations, abandonment by husband or divorce, ridicule and shame, inability to work, lack of economic support, risk of violence and abuse and more notably discrimination (Darshan, 2009).

Many women with UP reported symptoms of anxiety like shaking of entire body, insomnia, restlessness and weakness. Also depressive feelings and guilt were expressed through the negative thoughts of suffering from chronic disability condition. Some women expressed guilt for not being able to work and having to put unnecessary burden on family (Adhikari, Amatya, Shrestha, Verdegaal, & Bhurtyal, 2012).

Women suffering from UP are considered impure and looked down upon by husbands, families and society, which isolates them from social activities. Also women with UP reported that their husbands threaten

to take another wife when they do not get sexual satisfaction. This causes various problems for the women and even lead to breakdown of the family which in turn has adverse effects on the lives of rejected women and their children (CAED, 2007).

Women reported that they had fear of death, cancer and surgery due to UP. Support from family and husband was not good and social stigma was observed when they expressed difficulty to participate in social gathering due to discharge, stains in clothes and bad smell so many women hesitated to participate in such activities (Adhikari et al., 2012).

With the current intensity of all these symptoms in the daily basis there occur role limitations, physical limitations, social limitations, personal limitations which causes the women to experience psychological and social problems, ultimately compromising the overall quality of life.

Conclusion

Many women are silently victims of uterine prolapse in Nepal. Despite the fact that uterine prolapse is a matter of discomfort for women which affect many aspects of daily living they hesitate to seek medical assistance due to the social positioning and conditioning.

Women who suffer from pelvic floor disorders like UP endure symptoms that decrease their quality of life, but rarely result in morbidity or mortality. It is not only socially embarrassing and disabling, but the surgical treatments are costly and complex. UP is commonly caused during pregnancy, labor and childbirth (Bodner-Adler et al., 2007; Dangal, 2008; Messerschmidt, 2009).

Usually they push the cervix back with their fingers and start daily work on fields, carrying water and firewood, cooking, cleaning and unknowingly worsening the condition by hiding it. Despite of lots of focus, still hidden and expanding is the exact scenario of uterine prolapse as these issues are not openly shared due to shyness, stigma and discrimination. Most of the efforts to address the problem of uterine prolapse are mainly focused on physical symptoms as it has direct impact on biomedical implications. Uterine prolapse directly affect various aspects of life. In fact it severely affect the quality of life of women, causing physical, social, psychological, occupational, domestic and sexual limitations on their lifestyle.

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