**REPORT** 

# Effect of uterine prolapse on the lives of rural north Indian women

Amarjeet Singh Arvinder Kaur Arora

# **ABSTRACT**

Objective: To ascertain the effect of uterine prolapse on the lives of village women in Haryana, India.

Setting: Rural North India.

Methods: House to house survey was done by a female social worker. Four villages were prospectively selected (population 13733). Women aged 15–54 years were screened for self-reported uterine prolapse on the basis of presence of indicator symptoms. These women were interviewed further for effect of prolapse on their lives.

Results: Prevalence of self-reported uterine prolapse was 9.9%. Consultation rate was 55% Hysterectomy was advised in 28 (19%) cases. In 15 cases husbands did not favour the operation. Daily activities were affected in 24–84% women. Urinary problems (40–54%), backache (48%), difficulty in sexual intercourse (47%) were common problem faced by women due to prolapse.

Conclusion: Uterine prolapse seriously compromises the quality of life of the affected women whose access to operation is constrained due to various social reasons.

Key words: Reproductive health, Women's health, Uterine prolapse, Treatment seeking behaviour.

# INTRODUCTION

Women in developing countries have been documented to postpone or ignore treatment seeking for their various reproductive health problems<sup>1</sup>. Often they continue to tolerate the morbidity till it progresses to unbrearable severity. Reasons for the delay in going to doctors are many e.g. lack of resources/money, non-availability of doctors in remote areas and above

Department of Community Medicine, Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh 160 012, India

Correspondence:
Dr. Amarjit Singh
Department of Community Medicine,
Postgraduate Institute of Medical Education & Research
(PGIMER),
Chandigarh 160 012,
India

all a 'culture of silence' regarding diseases of women<sup>2,3</sup>. Of these, uterine prolapse deserves special mention as unlike other common reproductive health problems of women, viz. vaginal discharge, menstrual problems, anemia, backache etc., it usually requires surgery. This adds another dimension to the delayed treatment of diseases of women since the implications of the need of surgery of a woman in Indian setting are grave<sup>1</sup>. The problem is further accentuated in rural India where the women are busy in household affairs throughout the day and the surgery keeps on getting postponed again and again. This is because in India women are often socialized to give more preference to their household commitments than to their health problems. As a result the affected women continue to tolerate the symptoms and the effects of prolapse. Thus, they continue to suffer silently.

Uterine prolapse is therefore a common and disabling condition caused by a break in the integrity of the uterosacral – cardinal ligament complex and a weakening of the pelvic floor musculature. It is defined as the herniation of the uterus through the vagina, below its anatomic position. Uterine prolapse has been

quoted by Hippocrates and Galen although the prevalence of this condition was realized after several centuries<sup>4</sup>.

The etiology of genital prolapse is probably multifactorial. Earlier studies have shown the relationship between multiparity, high birthweight and pelvic floor disorders<sup>5,6</sup>. Clinically, women with genital prolapse have weaker pelvic floor muscles than normal women. This may be due to the denervation of the pelvic floor after vaginal delivery<sup>7</sup>. Furthermore, abnormal connective tissue may be one of the intrinsic factors that leads to pelvic floor disorders<sup>8-10</sup>.

An important predictor for prolapse is menopause with oestrogen deficiency<sup>11</sup>. After menopause, the tissues become weakened and atrophic. This may be aggravated by anything that increases intra-abdominal pressure, e.g. chronic cough, constipation or heavy lifting.

With regards to clinical manifestations, most parous women have relative pelvic floor laxity; thus, asymptomatic prolapse is very common. An estimated 50% of parous women have some degree of genital prolapse and 10-20% of them have symptoms<sup>12</sup>. Symptoms range from mild to severe and include a sensation of vaginal fullness or dragging, pulling on the lower abdomen, the feeling of a firm mass within or coming out of the vagina. low backache, and urinary symptoms, including urgency, frequency, dysuria, a feeling of incomplete emptying of bladder, and stress incontinence 13-16. In extreme cases, there is an inability to defecate or urinate without first pushing in the prolapsed organ manually<sup>15</sup>. Other symptoms reported by women with uterine prolapse include vaginal discharge, rectal pressure and swelling, and a feeling of passing "gas" or "noise" through vagina<sup>17-19</sup>.

The present study was conducted to ascertain the effect of uterine prolapse on the lives of women in village of Haryana, North India.

## **METHODS**

The study was conducted in rural field practice area of the department of Community Medicine, Post-Graduate Institute of Medical Education and Research (PGIMER) Chandigarh, India. A female social worker was recruited for the purpose. She was trained in interviewing techniques. An interview schedule was developed for the study. It was finalised after pretest/pilot survey. For the purpose of the study four roadside villages were purposively selected from the field practice area of the department. Total population of the selected villages was screened through houses to house visits. All the respondents (married women aged

15–54 yrs) were explained about the purpose of the survey. Confidentiality of the information sought was ensured. Consent was taken before conducting the interviews. At the outset, after getting socio-demographic data, information on presence or absence of prolapse was elicited by asking the women about indicator symptoms like – mass in vagina, something coming out, heaviness down below, backache, vaginal discharge, frequency or difficulty in micturition. Local terminology used for prolapse was used to explore presence or absence of prolapse ('roof has fallen' 'weakness in body'). No gynecological examination was done because of logistic constraints.

Women giving history of these symptoms were considered as having 'self reported' uterine prolapse and were interviewed further. They were asked about reproductive history – number of pregnancies, details of ante-intra and post-natal history, contraception and daily routine. Details of treatment taken was also recorded.

#### **RESULTS**

Various symptoms indicative of uterine prolapse as reported by the respondents during screening are given in Table 1.

In all, 13733 population was covered in 4 villages. Women aged 15–54 years (1512) were screened for the presence of uterine prolapse. One hundred and fifty women were identified to have self-reported prolapse of uterus. More than half (52%) of the cases were aged less than 25 years (11% were less than 25 years). Literacy rate of the subjects was 57%. Male (husbands) literacy was 82%. Most of the cases (90%) were housewives. In 45% cases age at marriage was less than 18 years and in 77 (51%) cases the first child was born at the age of 20 years or earlier. History of prolapse in close relatives (mother/sister) was given in 20 (13%) cases. History of constipation was given by 31 (21%) cases.

Age specific prevalence of uterine prolapse is given in Table 2.

Table 3 depicts the effect of uterine prolapse on daily lives of affected women and various corrective measures undertaken by them.

Treatment seeking behaviour of the cases is reflected in Table 4.

Majority (119; 79.3%) of the cases reported that they had resorted to the help of traditional birth attendants (TBAs) who used **heel pressure technique on** them for correction of prolapse<sup>1</sup>.

Thirty six (24%) women said that they knew an operated case of uterine prolapse. Of them, 26 cases had reported total relief from symptoms after hysterectomy.

Most of the cases (92%) belonged to middle, lower middle or lower social class.

Of the 150 cases 82 (55%) had taken some treatment

for prolapse. In 68 (45%) cases no treatment was taken.

Hysterectomy was advised in 28 (18.7%) cases. In 13 cases husbands favoured the advice for operation. The reason for not favouring operation were – fear of blood donation (3), no money (3), 'I have nothing to do with it' (6), 'household work will suffer' (2), 'I will not be able to enjoy sex (after operation)' (1).

TABLE 1
Symptoms indicating uterine prolapse reported during screening of women

Symptoms	No.	%
Mass coming out of vagina with or without stress	123	82
Frequent urge to pass urine	81	54
Stress incontinence	60	40
Backache	72	48
Difficulty in sexual intercourse	70	47
Cannot sit on heels - need manipulation	55	36.6
Weakness	20	13.3
Constipation	15	10
Vaginal discharge	14	9.3
Swelling below while passing urine	5	3.3

**TABLE 2**Age specific prevalence of uterine prolapse among the respondents

Age Group (yrs)	No. of women surveyed	No. of prolapse cases	Age specific prevalence (%)
15–24	288	17	5.9
25–34	600	61	10.2
35–44	389	55	14.1
45–54	235	17	7.2
Total	1512	150	9.9

**TABLE 3**Effect of uterine prolapse on daily lives of women

	Extent of limitation			Corrective measures adopted			
Activity	Little	Much	None	Changed routine posture during the act	Sought others' help	Reduced frequency	None
Cooking	121 (80.7)	7 (4.6)	22 (14.6)	123	5	_	-
Washing clothes/ utensils	125 (83.3)	8 (5.2)	17 (11.3)	130	3	-	-
Mopping/dusting	84 (56.0)	39 25.9)	27 (18.0)	76	15	21	11
Sewing/stitching	71 (47.3)	14 (9.2)	65 (43.3)	80	5	_	-
Walking	36 (24.0)	14 (9.3)	100 (66.7)	-	-	33	17
Sexual intercourse*	79 (52.6)	15 (9.9)	53 (35.3)	5	_	72	17

<sup>\*</sup> Three cases were widows (Figure in parentheses are percentages).

**TABLE 4**Treatment seeking behaviour of uterine prolapse cases

Treatment seeking behaviour	No.	%
First agency consulted (n = 82)		
Home remedy/TBA	53	64.6
Private (qualified doctor)	11	13.4
Govt. Doctor	7	8.5
Registered medical practitioner	2	2.4
Other (nurse, relatives)	9	10.9
No. of agencies consulted (n = 82)		
One	41	50.0
Two	16	19.6
Three or more	25	30.5
Reasons for not taking treatment (n = 68)		
Considered it normal; will be cured on its own	27	39.7
No money	10	14.7
No time	14	30.6
Does not want to bother husband	8	11.8
Money spent on treatment (n = 82) (1 US\$ = Rs.48)		
Nil	46	56.1
< Rs. 100	11	13.4
Rs. 100 - 1000	20	24.4
> Rs. 1000	5	6.0

## **DISCUSSION**

Prevalence of uterine prolapse (9.9%) as estimated in this study is comparable to the global prevalence of 2-20% reported by WHO and also to the prevalence range of 1-18% reported in studies from India<sup>13,20,21</sup>. Thus, uterine prolapse is an important public health problem of reproductive system of women. The impact of the prolapse on daily lives of the women can be judged by the fact that the variety of indicator symptoms viz. frequent urge to pass urine, backache, difficulty in sexual intercourse, inability to sit properly and vaginal discharge reflect considerable discomfort throughout the day for the patient. This is coupled to the fact that usually the women continue to tolerate the prolapse for years together before ultimately resorting to operation. Thus, the quality of life of the affected women is seriously compromised.

This is reflected by the following narration of a woman having uterine prolapse:

'I can not sit on my haunches. The body (uterus) touches the thighs while walking. After working for a while I feel a desire to rest for some time. I find it difficult to wash clothes. I do not feel like doing hard work. Often, I feel it is better to die (rather than tolerating it)'.

# Another women told:

'I can not do any work because of this body (uterus) coming out. I can work only when I sit down and keep a cloth-piece (pad) down-below. There is difficulty while walking also. Now I am so much troubled that I think it is time now to get the operation done.'

The fact that in more than half of the cases the onset of prolapse was before 35 years of age further indicates that these women would spend more than half of their lives with uterine prolapse and its sequelae unless surgical intervention was resorted to (life expectancy of women in India is 64 years)<sup>22</sup>. With the focus of health care planners shifting to quality of life, and burden of disease, the chronic nature of uterine prolapse assumes special importance.

Our study also indicated that in more than 85% cases cooking, washing clothes/utensils and mopping/dusting were considerably affected. As of present, most of the women in rural India are housewives and these activities are their daily chores. Added to this is the difficulty in sexual intercourse as reported by women suffering from prolapse. Thus, uterine prolapse has a potential of profoundly affecting the intra-familial relations/status of women who are aporoaching middle age. Relations with husband may also deteriorate. As one of the respondents told:

'All of my anger and tension due to this (prolapse) used to be transferred to my daughter. I used to curse her since the problem started after her birth. I had become very irritable. I used to become angry on trivial matters.'

The joint family system, however, was helpful in these cases... as one of the respondents said:

"...I could work only in sitting posture... later severity of pain increased. I could not eat anything. I could not work. Since my daughters-in-law helped in household work there was no difficulty."

Another woman said:

"We do not have any problem during illness. All of us help each other. Hosehold work is carried on smoothly as we live together.'

One women even ascribed the malady to lack of joint family (support by other women in the family):

"...There was no one else to help (in domestic work) after my delivery...' so I had to lift heavy objects myself... and do all the heavy work. My husband drinks a lot... He did not abstain and started 'tallking' (having sex) with me before 40 days (puerperium) were over... These things precipitated prolapse.'

In India surgery of any kind is usually a dreaded proposition and people tend to avoid it as far as possible. Probably because of this women usually continue to tolerate symptoms/consequences of prolapse before resorting to operation, if at all, when the situation becomes unbearable.

As one of the respondents said:

'For 7-8 years this has persisted. Now I can not tolerate it. Operation is the only way out. I was not afraid (of the operation) since the problem was serious... with a lot of suffering. It is better to get it corrected rather than dying of it. They use ring if the problem is not grave. If it is serious, operation is done.'

It has been reported in many studies on reproductive health problems that when it comes to their own health needs women in India receive very low priority. They tend to suffer silently without seeking health care until it reaches severity. Many reasons have been ascribed for this viz. shyness, poverty, non-cooperation by husband<sup>23</sup>.

This is true for uterine prolapse also where the operation is often postponed as long as possible, as revealed in the present study where one of the respondent said –

'I used to go to a local indigenous practitioner who prescribed herbal therapies. But there was no relief. I went to many doctors. They advised operation. But my husband did not like this idea. Neither did I. We felt that it is better if it gets corrected on its own. We were afraid of going to doctor for operation.'

Some of the women told:

'It was difficult to get out of household work. Going to doctor also appeared to be difficult. Many a time when I planned to go there, some or other work would crop up.'

A 54 years old women told -

'The doctor has advised me operation for this. But I feel shy of telling about this to my children at this age. Now very little of life is left. I will pass it like this only.'

In India women often ascribe their health problems to family planning operation (tubectomy) as some of the respondents said:

'My body (uterus) got weakened after operation, (tubectomy). Since then it has started coming out.'

Another one said:

'I got operation (tubectomy) done 10 days after my delivery. I started having this problem (prolapse) as soon as I came out after operation.'

Respondents were quite eloquent about the aetiology of prolapse as perceived by them as some of the respondents told -

'There are many causes of prolapse – early resumption of strenuous activity in puerperium, sitting on haunches in puerperium.'

'During my delivery the pains continued for a long time for one full day and full night. Little bit of body (uterus) started coming out after my third child. Some prolapse used to occur during micturition and defecation also. I used to push it inside again manually. This winters when I had cough the problem aggravated.'

'I got married at the age of 14 and my child was born at 15. The delivery occurred at an unripe age. It is not surprising then if the body (uterus) got damaged.'

'Everybody told that it can be prevented if care is taken during puerperium – not to sit on haunches, putting heel underneath while sitting, abstinence for 4 months, not to exert, to cover body properly when

exposed to outside air, walk carefully, particularly on uneven surface.'

'If anyone has this problem - she should sit on the peg of a bed.'

"This affects those who start working within 4–5 days of delivery. Body is weak during puerperium – one should not exert and there should not be prolonged sitting on haunches. It strains uterus. One should not carry loads on stairs. It affects those also who start having sex within 6–7 days of delivery. Exposure to outside air during puerperium also lead to prolapse. Sometime 'pushes' used by TBAs precipitate this. Extreme weakness may also be a cause."

It is of interest to note that the perceptions of etiology of uterine prolapse by women in the low socioeconomic strata of society as indicated in above description somewhat is in agreement with standard gynaecological literature where obstetric trauma, chronic cough, straining, exertion, lifting of weight etc. are documented as precipitating factors for prolapse<sup>12,14,15,16,24,25</sup>.

The principal causes of uterine prolapse are obstetric trauma and post-menopausal atrophy<sup>4,14,15</sup>. Thus the condition is most common in multiparous or postmenopausal woimen<sup>13,14,24</sup>. Pregnancy, labor, and vaginal delivery lead to various degrees of damage to pelvic structures, including muscles, ligaments, fascia, and nerves. The most damage occurs when labor is prolonged, the baby's head is large, or when forceps are used improperly. Uterine prolapse can also occur in nulliparous women<sup>12-14,24</sup> and may result from an inherent weakness of the endopelvic connective tissue support structures as seen in Ehler Danlos syndrome<sup>16,4,25</sup>. It is said to be aggravated by conditions leading to intra-abdominal pressure, including chronic cough, obesity, tumor, ascites, straining, exertion, lifting of weight, and chronic constipation<sup>2,14,24,25</sup>.

Thus, uterine prolapse seriously affects the quality of lives of the affected women. The duration of suffering is usually prllonged because of various socio-economic reasons since treatment is often delayed and the advice for operation, is usually not complied with. There is a need to enhance the access of women to operation and quality care for uterine prolapse particularly in rural areas of India.

In conclusion, the concept of reproductive health envisages enablement of women to remain free of disease, disability, fear, pain, or death associated with reproduction and sexuality<sup>26</sup>. Appropriate management of uterine prolapse will greatly improve the quality of life of women in developing nations. There is an urgent need to improve the access of women with prolapse

to safe, affordable facilities for surgical correction. Research and development of non-surgical management of prolapse is also required.

### **ACKNOWLEDGEMENT**

The study was funded by PGIMER, Chandigarh, India.

## **REFERENCES**

- Kumari S, Walia IJ & Singh AJ. Self-reported uterine prolapse in a resettlement colony of North India. Journal of Midwifery & Women's Health. 2000; 45:343-350.
- Bang RA, Baitule M, Sarmokkadam S, Bang AT, Choudhary Y, Tale O. High prevalence of gynaecological disease in rural Indian women. Lancet 1989; 1:8629, 85-8.
- Dixon Mueller R, Wasserheit J. The culture of silence reproductive tract infections among women in the third world. New York, USA: IWHC Publication, 1991.
- ThompsonJD. Surgical correction in defects in pelvic support. In: Te Linde's Operative Gynecology, 8<sup>th</sup> ed. Rock JA, Thompson JD, editors. Philadelphia: Lippincott Raven Publishers, 1997; 951:1085.
- Norton PA. Pelvic floor disorders: the role of fascia and ligaments. In: Clinical obstetrics and gynecology, Lippincott-Raven, Philadelphia, 1993.
- 6. Stanton SL. Vaginal prolapse. In: Shaw R, Soutter P, Stanton SL, editors, Gynaecology, Churchill Livingstone, 1992.
- Smith ARB, Hosker GL, Warrell DW. The role of partial denervation of the pelvic floor in the aetiology of genitourinary prolapse and stress incontinence of urine. A neurophysiological study. Br J Obstet Gynaecol 1989; 96:24-8.
- Jackson SR, Avery NC, Tarlton JF et al. Changes in metabolism of collagen in genitourinary prolapse. Lancet 1996; 347:'658-61.
- 9. Falconer C, Blomgren B, Johansson O et al. Different organization of collagen fibrils in stress-incontinent women of fertile age. Acta Obstet Gynecol Scand 1998; 77:87-94.
- Bergman A, Elia G, Cheung D et al. Biochemical composition of collagen in continent and stress urinary incontinent women. Gynecol Obstet Invest 1994; 37:48-51.
- Versi E, Cardizo L, Brincat M et al. Correlation of uretral physiology and skin collagen in postmenopausal women. Br J Obstet Gynaecol 1988; 95:147-52.
- Cardozo L. Prolapse. In: DewHurst's textbook of obstetrics and gynaecology for postgraduates, V ed. Whitfield CR, editor. Victoria, Australia: Blackwell Science Ltd., 1995; 642-52.
- World Health Organization. Measuring reprodutive morbidity. Report of technical working group WHO/MCH/90./4. Division of Family Planning, Geneva. Aug. 30 - Sept. 1, 1989; 1-39.
- Dawn CS. Practical highlights of genital prolapse. J Obstet Gynecol India 1998; 48:213-5.

- Dutta DC. Textbook of gynaecology, 2<sup>nd</sup> ed. Calcutta: New Central BookAgency (P) Ltd., 1996.
- Padubidri V, Daftary SN, editors. Hawkins and Bourne-Shaw's textbook of gynaecology. New Delhi: Churchill Livingstone Pvt. Ltd., 1998.
- Mitra J, De Rc, Lahiri D, Barbhuian PKN, Sil J, Khara BN. Surgical treatment of genital prolapse. J Indian Med Assoc 1986; 84:333-5.
- Sen S, Mukharjee KK, Chakraborty BK. Genital prolapse. J Indian Med Assoc 1984; 82:159-61.
- Zurayak H, Hind K, Nabil Y, Olfia K, Mahinaz EH. Comparing medical diagnosis of reproductive conditions in rural Egypt. Studies Fam Plann 1995; 26:14-21.
- Omran Ar, Standlay CC. Family formation pattern and health: an international collaborative study in Columbia, Egypt, Pakistan and Syrian Arab Republic. Geneva: WHO 1981; 217-302.
- Shah B. Correction of utero-vaginal prolapse by Shirodkar's sling operation. The J Obstet Gynecol India 1993; 43:123-5.
- Park, K. Park's textbook of Preventive and Social Medicine. 17th edition, Jabalpur, M/s Banarsidar Bhanot Publishers, 2002.
- 23. Mulgaonkar VB, Parikh IG, Taskar VR, Dharap ND, Pradhan VP. Perception of Bombay slum women regarding refusal to participate in a gynaecological health programme. In: Listening to women talk about their health-issues and evidence from India. Gilttlesohn J, Bentley ME, Pelto PJ, Nag M, Pachauri S, Harrison AD, et al., editors. New Delhi: Har Anand Publications, 1994; 145-67.
- 24. Symmonds RE. Relaxation of pelvic supports. In: Current obstetrics and gynecological diagnosis and treatment. Benson RC, editor. United States of America, Lange Medical Publications, Maruzen Asiaan edition, Maruzen Asia, Singapore, 1984; 287-307.
- Thompson JD. Surgical correction indefects in pelvic support. In: Te Linde's Operative Gynecology, 8<sup>th</sup> ed. Rock JA, Thompson JD, editors. Philadelphia: Lippincott Raven Publishers, 1997; 951-1085.
- World Bank. India's Family Welfare Program: towards a reproductive and child health approach. Population and Human Resources Operations Division. South Asia Country Department II. Report no. 14644-IN; 1995.