



**TREATMENT OUTCOME OF PATIENT WITH PELVIC ORGAN  
PROLAPSE IN JIMMA MEDICAL CENTER**

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## **Abstract**

**Background:** Mothers with pelvic organ prolapse (POP) encounter serious problems that affect mother's quality of life and lead morbidity and mortality. POP exhibit multiple symptoms that can severely affect a woman's quality of life by limiting physical, social, psychological and sexual function. Care for patient with pelvic organ prolapse focuses on clinical outcomes and determine the status of patient quality of life and associated factors were neglected; scientific studies focusing on this area is lacking in the study locality, thus, this study is designed to determine the psychosocial and mental health impact of pelvic organ prolapsed among patient attending treatment at Jimma Medical Center.

**Methods:** A hospital based prospective cohort study will be employed. Data will be collected by interviewer administered pre-tested semi structured questionnaire from all patients attending follow up service of Jimma Medical Center. Patient quality of life will be assessed using Pelvic Organ Prolapse Quality of Life (P-QOL) tool. Level of social support will be assessed by using Oslo Social Support Scale (OSSS-3) and patient perceived stigma will be measured by using stigma scale. In addition treatment outcomes like degree of prolapse, emotional distress, post operation complication will be assessed. The data will be collected in 4 phases. Thus, at admission (baseline data), at discharge (immediate treatment outcome), at 3 and 6 month post-operative assessment will be done. Data entry will be done using Epi data version 3.1 and statistical analysis will be done by using SPSS 20 statistical software.

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## **Acronyms**

**FI:** Fecal Incontinence

**JMC:** Jimma Medical Center

**LAMICs:** Low and Middle Income Countries

**PFM:** Pelvic Floor Muscle

**PFD:** Pelvic floor disorder

**POP:** Pelvic Organ Prolapse

**UI:** Urinary incontinence

**UVP:** Uturo-Vaginal Prolapse

**WHO** – World Health Organization



## **Introduction**

Pelvic organ prolapsed (POP) is a significant downward descent of the female pelvic organs (uterus, vagina, bladder, and/or rectum) which may protrude partly or completely into or through the vagina (1). It causes disturbing symptoms, such as pelvic fullness, back pain, incontinence, vaginal discharge, and bleeding (2).

Pelvic floor muscle (PFM) dysfunctions have a negative impact in the quality of life of many women. These dysfunctions mainly include pelvic organ prolapse (POP), urinary incontinence (UI), and fecal incontinence (FI) (3, 4).

Female stress urinary incontinence and POP are prevalent conditions and are rarely associated with severe co-morbidities, despite the costs and restriction caused to women's lives (3).

Prolapse of the uterus is one of the most common sequelae of a difficult childbirth (5, 6). This condition is caused by the weakening of the pelvic muscles and ligaments that support the uterus, usually following damage after a difficult delivery, but sometimes, also following gynecological surgery. The uterus sags down into the vagina, and may even protrude out between the vaginal lips. However, the symptoms may not appear till after menopause, when the damaged muscles lose tone and the ligaments atrophy (7).

Irrespective of the causes of the condition, POP can be considered as a form of hernia in which there is downward displacement of the bladder, uterine cervix, small bowel and/or rectal ampulla into the vagina through the levator hiatus (8).

There are three degrees of utero-vaginal prolapse. In first-degree prolapse, the cervix appears at the vaginal opening only when the woman is asked to bear down. In second degree prolapse, the cervix descends to the level of the vulva, and in third-degree prolapse, the cervix protrudes outside the vulva. The condition where the entire uterus may protrude outside the vulva, bringing with it both the vaginal walls, is called procidentia.

## **Statement of the problem**

POP is considered to be a major cause of morbidity among women in both high-income and low-income countries (9). The worldwide prevalence of POP has recently been reported to be around 9% (10). It is a very common problem in women over the age of 40-year and the prevalence is estimated to be about 41–50% (11).

The women in developing countries are affected disproportionately and it is estimated to be closer to 20% in low-income countries (12). In sub-Saharan Africa, studies from Ghana, Gambia and Ethiopia have reported prevalence rates which vary from 12-55% (13-15). Example, in Sub-Saharan Africa like in Ghana a significant portion of women had stage II-IV anatomical pelvic organ prolapse. Similarly, studies in Nigeria and Nepal showed that different forms of POP have been affecting women's health and quality of life alarmingly. Studies conducted in Tunisia found out that 64.6% of women had an anatomical POP stage II-IV and 6.7% had a severe POP

Women with POP have been suffering from significant social problems such as sexual relationships problems, functional impairment, depression, and poor quality of life. In Ethiopia, gynecological problems are important health problems affecting maternal health outcomes and women's productivity. In clinical setups, POP accounted for 40.7% of major gynecological operations. In Tikur Anbesa, POP was the major (41.1%) identified reason for hysterectomy, followed by leiomyoma (23%). Studies showed that obstetric characteristics (parity and gravidity and delivery position) and socio-demographic factors (educational status, occupational status, and early return to work) were found to be significant risk factors for POP.

The development of pelvic organ prolapse is complex and multi-factorial (11). A number of risk factors have been implicated in the pathogenesis including aging, obesity, and chronic increase in intra-abdominal pressure, genetics, ethnicity, connective tissue disorder, previous pelvic surgery and childbirth (16).

Pelvic floor defects may develop as a result of repeated pregnancies and childbirth and are caused by the stretching and tearing of the endo-pelvic fascia, levator ani muscles, and perineal body (17). Prolapse may also follow labor, in which the woman attempted to bear down before full cervical dilatation or during vacuum extraction in the first stage of labor (18). When compared with vaginal delivery, cesarean section has a protective effect in the development of genital prolapse. Parity is associated with increasing chance of prolapse. Prolapse was seven times more common in women who had more than seven children compared to those who had one (19). In Ethiopia, numerous factors were implicated with POP. The common factor found includes early

marriage (20), grand-multiparity, obstructed labour, and lack of a fully developed maternal healthcare infrastructure (15).

POP exhibit multiple symptoms that can severely affect a woman's quality of life by limiting physical, social, psychological and sexual function. Due to the stigma surrounding pelvic floor disorders, which is pronounced in low-income countries, women affected by POP often hide their emotional feeling and did not seek help.

A variety of surgical procedures has been used as a standard of care for patients with POP. The major operations performed for patients with Utero-Vaginal Prolapse (UVP) in Jimma University Specialized Hospital (JUSH) during the study period were vaginal hysterectomy with anterior colporrhaphy and posterior colpoperinorrhaphy, 76.7% and 14.3%, respectively. Whereas the remaining had vaginal hysterectomy with sacrospinous fixation and manchester operation (21). The overall cure rate 1 year after POP surgery was 80% (with mesh 86% vs. 77% without mesh). The rate of severe complications was low for both primary and repeat POP surgery.

A large and increasing body of studies has shown the relevance of assessment of life and functional status as important in predicting patient's clinical outcome. To date there have been limited community-based studies to determine the treatment outcome of POP in Ethiopia. This situation warrants an accurate epidemiological approach among local populations. Hence, the aim of this study was to assess the prevalence of POP, treatment outcome of POP. This will serve as a baseline against which the development of healthcare services and public health policy can be developed.

## **Significance of the study**

The significance of this research is too. It is very important for the whole women first. Because most of the time physician, politician, hospital and etc bother on the physical impact of POP. But it's huge damage on their psychosocial and mental also. I was going to revise on the literatures but the bad news that I don't gate a lot and enough information from the sources. Mostly we focus on the physical damage and its impacts those present on the hospital. Look, most uninformed are available in the community. But not seen and gate focus. Like tip of ice berg we visualize those informed presents with physical damage not entertain those with physical, psychosocial and mentally traumatized and available within community. The investigator intension looking forward to those not treated well.

## **Literature Review**

### **Magnitude of POP**

Pelvic floor disorders (PFDs) including urinary incontinence (UI), faecal incontinence (FI) and pelvic organ prolapse (POP), are common debilitating conditions among women across the world. In developed countries, one in every four women experience at least one or more PFDs (22, 23). Little is known about POP among women in low/middle-income countries (LMICs).<sup>3</sup> Furthermore, there is a paucity of studies that have comprehensively investigated all the conditions that comprise POP in LMICs. It is anticipated that PFDs may be more prevalent among women living in LMICs (12).

The few studies on prolapse available from low- and middle-income countries have reported prevalence rates ranging from 3 to 56% and include research on prolapse symptoms and prolapsed verified by pelvic examination (12, 13, 24).

Cross-sectional study conducted in rural Ghana showed that POP was observed in 12.1% of women (14). Community based reproductive health survey at was Gambia showed that uterovaginal prolapse (UVP) was present in 46% of the women (13). A retrospective review of all cases of genital prolapse admitted and operated in the university of Port Harcourt Nigeria teaching hospital showed that genital prolapse accounted for 37.5 per 1000 gynecological admission (25).

According to a population-based survey carried out by the United Nations Population Fund, World Health Organization and the Institute of Medicine at Tribhuvan University in 2006, more than 600,000 Nepali women suffer from some form of uterine prolapse. Of these women, nearly 200,000 are in immediate need of surgery (26).

Study conducted in Tanzania found that 64.6% of the women were found to have an anatomical POP stage of II-IV with the most predominant site being the anterior segment (62.7%), followed by the posterior segment (8.5%) and the central segment (1.8%) (27). Another study conducted in West Africa Utero-vaginal prolapse was present in 46% of women; the most common being cystocele 57%, enterocele 34%, and urethrocele 28%, rectocele 20%, and uterine prolapse 16% were less frequent (13).

Community based conducted in Ethiopia showed a prevalence of POP which ranges from 10.6 per 1000 women to 6.3% (15, 28). However, institutional based study conducted in Jimma university hospital on patient who had gynecological operation showed prevalence rate of POP to be 40.7% and another community based study conducted on pedestrian back-loading women in Bench Maji zone of Southern Ethiopia indicated the prevalence rate of 13.3% (21, 29).

### **Treatment and treatment outcome**

Pelvic floor dysfunction can be successfully managed with a range of conservative or behavioral treatments including lifestyle modification, bladder retraining, pelvic floor muscle training, and as well as the use of pessaries. These treatments may be used alone, but are typically offered in combination. Pharmacological intervention is frequently required for women with an overactive bladder (OAB), whilst the lifetime risk of having surgery for urogenital prolapse or stress incontinence is 11%, with 29.2% requiring repeat surgery (30). Almost 10% of women need surgery for pelvic organ prolapse, urinary incontinence, or both during their lifetime, and 30% of them will undergo 2 or more surgical procedures (30).

Prolapse of the anterior vaginal wall (cystocele) is the most common and typical segment requiring surgical repair. It has traditionally been treated with anterior colporrhaphy, which entails central plication of the fibromuscular layer of the anterior vaginal wall (31). Recurrent anterior vaginal wall prolapse after conventional repair has occurred in more than 30% of the cases (32).

The lifetime risk of undergoing POP surgery alone varies between 5 and 19% (33). The use of mesh has shown improvement of anatomical and functional results compared with native tissue, but in recent years, alarming reports have arisen about increased complications due to mesh. New international guidelines recommend vaginal mesh repair to be performed by specialists and reserved for high-risk patients, such as women with recurrent prolapse (34). The outcome of POP surgery cure rates following anterior colporrhaphy was between 37 and 97% and for posterior colporrhaphy was between 56 and 100% (35). The overall cure rate 1 year after POP surgery was 80% (with mesh 86% vs 77% without mesh). The rate of severe complications was low for both primary and repeat POP surgery (36).

### **Quality of life of people with POR**

POP exhibits multiple symptoms that negatively impact women's quality of life (37). POP might be more common, generally more severe and disproportionately affect women's life in low-income (12). Although not life threatening, prolapse has a significant impact on women's physical,

psychological and social well-being and quality of life (38). Urinary incontinence often co-exists with prolapse, adding considerable distress, embarrassment, and discomfort (39).

Women who experience urinary incontinence will have their quality of life affected in different ways. This will depend largely on the severity of the urinary incontinence but also on her main activities and areas of interest. Further, body image and the way a woman manages medical problems will influence how she reacts to urinary incontinence (40). In general, symptoms of urgency and in particular urge incontinence have a greater negative impact on quality of life than stress urinary incontinence (41) because in the latter women know when to expect episodes of leakage and are often able to keep the amount of urine in the bladder low at these times.

In areas where access to health care is often limited, women usually have to live with the consequences of fistula or prolapse for the rest of their lives which can be a challenge, both physically and emotionally, as the symptoms can disrupt the woman's day-to-day life (42, 43). Failure to control sphincters or having a the uterus outside the vagina, swinging in between thighs, can severely affect a woman's quality of life by limiting her physical, social, psychological and sexual functions and may cause a great deal of discomfort and distress (44). Study conducted In Poland indicated that POP negatively affected QoL, whereas reconstructive mesh surgery significantly improved various QoL dimensions (45).

## **Objectives**

### **General Objective**

To determine treatment outcome of pelvic organ prolapse (POP) and associated factors among patients attending follow up service at Jimma medical center.

### **Specific Objectives**

- To determine treatment outcome of POP among patients attending treatment at Jimma medical center.
- To determine factors associated with treatment outcome among patients of POP attending treatment at Jimma medical center.



## **4. Methods**

### **4.1. Study Setting**

The study will be conducted in Jimma medical center. Jimma medical center is one of public health facility located at Jimma city. Jimma medical center is one of the oldest governmental hospitals, which was established in 1937 and currently named as “Jimma medical center”. It renders service including inpatient and outpatients for about 15 million populations in southwest Ethiopia and it is the only medical center which deliver care for patient with fistula and pelvic organ prolapsed in Southwest Ethiopia.

### **4.2. Study Period**

The study was conducted from April to October 30, 2020.

### **4.3. Study Design**

Hospital (institutional) based prospective cohort study design was employed

### **4.4. Population**

#### **4.4.1. Source Population**

All women admitted to gynecology ward for POP treatment at Gynecology clinic of Jimma medical center

#### **4.4.2. Study Population**

All women admitted to gynecology ward and who had surgery for POP of Jimma medical center during the study period

### **4.5. Inclusion and Exclusion Criteria**

#### **4.5.1. Inclusion Criteria**

All women who are diagnosed with POP

#### **4.5.2. Exclusion Criteria**

Unfit patients for surgery and those who were not able to communicate

## 4.6. Sample Size Determination and Sampling Procedures

### 4.6.1. Sample Size Determination

The minimum number of sample size required is determined by using the formula to estimate single population proportion by considering P=50% (as there is no previous study done in the locality) and with 95% confidence level and 5% margin of error.

$$n = \frac{\left(\frac{Z\alpha}{2}\right)^2 p(1-p)}{d^2}$$

Where,

n= minimum sample size required for the study

Z= the reliability coefficient corresponding to 95% confidence level (Z=1.96)

P= proportion of cases undergoing surgery for POP (10%)

d= Absolute precision or tolerable margin of error (d) =5%=0.05

$$n = \frac{(1.96)^2 [0.1](1-0.1)}{(0.05)^2} = 138$$

Thus, the total sample size for this study was 138.

### 4.6.2. Sampling Technique

Consecutive sampling technique was employed to select women who had POP and attend gynecology clinic during data collection period.

## **4.7. Study Variables**

### **Dependent variable/s:**

- Quality of life
- Perceived stigma
- Psychological distress
- Infection
- Stage of prolapse
- Recurrence
- 

### **Independent variables**

#### **Socio-demographic factors**

- Age, parity, gravidity, mode of delivery, residence, religion, ethnicity, marital status, educational status and occupational status

## **4.8. Data Collection Procedure and Instrument**

Structured questionnaire was used for data collection. Hospital nurses were recruited for data collection and trained for two days.

## **4.9. Definitions**

Pelvic organ prolapse: women examined and diagnosed by health professional as ‘cases’ of pelvic organ prolapsed.

Quality of life: Patients subjective report of once quality of life as assessed by P-QOL

Psychological distress: women who scored 5 and more during screening by PHQ-9

## **4.10. Data Quality Assurance**

Standard tools, pre-tested questionnaires was used to collect information. The questionnaire was translated into Amharic/Afan Oromo by linguistic then translated back to English to check for consistency and understandability of the tool. Training was given for data collectors and supervisors on the data collection tool. The questionnaire was pretested prior to the actual data collection on 5% of sample size in Shenen Gibe Hospital and the questionnaire was checked for its clarity, simplicity, and understandability. During data collection, the questionnaire was checked for its completeness on daily basis by data collectors, supervisors and then by the investigator.

#### **4.11. Data Processing and Analysis**

The data was edited, cleaned, coded and entered into Epi-data 4.4.1 version and analyzed by using SPSS 21 version. Logistic regression was used to determine the association of depression and perceived stigma with predictor variable. The p-value less than 0.05 was considered as statistically significant. The strength of the association was presented by odds ratio with 95% C.I. Results were presented in tables & summary statistics such as mean, & percentage to describe the study population in relation to different variables.

#### **4.12. Ethical Considerations**

Ethical clearance was obtained from Jimma University research ethical review board. The data collectors will clearly explain the aims of the study for study participants. Data was collected after obtaining verbal/written informed consent from each study participant. The right will be given to the study participants to refuse or discontinue participation at any time they want and the chance to ask any thing about the study. Privacy and confidentiality of information given by each respondent was kept by data collectors and moderators. Data collectors will put their signature at the end. Those patients who do have medical concern were linked for treatment.

## CHAPTER FIVE

### Result

#### Socio-demographic characteristics

About 55 POP patients were surgically intervened by SSLF technique and observed for 12 months for possible complications. The mean age was  $49.62 \pm 13.79$  years that ranges from 35-65 years where majority of them [32(58.2%)] were belong to menopausal age. Thirty-eight (69%) of respondents were married while 13(23.6%) of the study participants were divorced from their husband as a result of the problem. Regarding religion, three fourth (65.5%) of study participants were Muslim while 14(25.5%) of respondents were orthodox in religion. More than half (69.1%) of respondents had no formal education and only less than one fourth (18.2%) of study participants can read and write. A majority (74.5%) of study participants were housewives in occupations. The age at first marriage for a majority (70.5%) of respondents was in the age group of 15-19 years while also the age at first pregnancy for the majority (69.2%) was in the age group of 15-19 years. Fifty-four (69.2%) of respondents had given birth in the health facilities. Of the study participants, 47 (60.3%) of respondents had a history of the previous stillbirth at least once. The majority (87.2%) of study participants had no own income. Three fourth (74.4%) of the study participants had no history of antenatal care follow up. The majority (90.9%) of respondents had given birth by SVD. The median duration of current labor was 39 hours (Table 1).

**Table 1: Socio-demographic characteristics of respondents with pelvic organ prolapse in Jimma medical center, 2020/21**

<b>Variables</b>		<b>Frequency</b>	<b>Percentage</b>
Age	Less than 20 years	23	42
	20-30	18	33
	Greater than 30 years	14	25
Marital status	Divorced	13	23.6
	Married	38	69.1
	Single	1	1.8
	Widowed	3	5.5
Educational status	No formal education	38	69.1
	Primary education (grade 1-8)	6	10.9
	Read & write only	10	18.2
	Secondary (grade 9-10)	1	1.8
Religion	Muslim	36	65.5
	Orthodox	14	25.5
	Protestant	5	9.1
Occupation	Daily laborer	4	7.3
	Government employee	2	3.6
	House wife	41	74.5
	Merchant	8	14.5
Parity			
Mode of delivery	CS SVD	1	1.8
	Instrumental	1	1.8
	SVD	50	90.9
	SVD Instrumental	3	5.5

## Psychosocial characteristics

Of the respondents, the majority (61.8%) of them had not at all pleasure in doing things and three fourth (74.5%) of study participants were feeling down, depressed or hopeless. But about one fifth (18.2%) of them encounter the problem of feeling down, depressed or hopeless. The majority (63.6%) of study participants had no problem of trouble falling or staying asleep while 33(60%) of women feel bad about themselves several times/days. The majority of women do not have problem of trouble concentrating on things. Thirty two (58.2%) of women encounters the problem of moving or speaking so slowly or the opposite (being so fidgety or restless) but 33(60%) of them had no thoughts that they would be better off dead or hurting themselves in some way. For 32(58.2%) of study participants, it is not difficult at all if checked off any problems and difficulty of problems made it for them to do work, take care of things at home, or get along with other people (Table 2).

**Table 2: Psychosocial characteristics of respondents with pelvic organ prolapse in Jimma medical center, 2020/21**

Variables	Frequency	Percentage
<b>Little interest or pleasure in doing things</b>		
More than half the days	1	1.8
Nearly every day	2	3.6
Not at all	34	61.8
Several days	18	32.7
More than half the days	1	1.8
<b>Feeling down, depressed, or hopeless</b>		
More than half the days	3	5.5
Nearly every day	1	1.8
Not at all	41	74.5
Several days	10	18.2
<b>Trouble falling or staying asleep, or sleeping too much</b>		
More than half the days	4	7.3
Nearly every day	2	3.6
Not at all	35	63.6
Several days	14	25.5
<b>Feeling tired or having little energy</b>		
More than half the days	4	7.3
Nearly every day	3	5.5
Not at all	34	61.8
Several days	14	25.5
<b>Poor appetite or overeating</b>		
More than half the days	6	10.9
Nearly every day	1	1.8

Not at all	35	63.6
Several days	13	23.6
<b>Feeling bad about yourself or that you are a failure or have let yourself or your family down</b>		
More than half the days	4	7.3
Not at all	18	32.7
Several days	33	60.0
<b>Trouble concentrating on things, such as regarding the newspaper or watching television</b>		
More than half the days	1	1.8
Not at all	48	87.3
Several days	6	10.9
<b>Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual</b>		
More than half the days	4	7.3
Not at all	19	34.5
Several days	32	58.2
<b>Thoughts that you would be better off dead or of hurting yourself in some way</b>		
More than half the days	5	9.1
Not at all	33	60.0
Several days	17	30.9
<b>If you checked off any problems, how difficult have these problems made it for you to do work, take care of things at home, or get along with other people?</b>		
Extremely difficult	2	3.6
Not difficult at all	32	58.2
Some what difficult	19	34.5
Very difficult	2	3.6

### Stages of pelvic organ prolapse and treatment outcomes

The majority (87.3%) of study participants present with pelvic organ prolapse were not developed infection. For 49 (89.1%) of women the stage of POP at 3 months after surgery, was at the stage one while at 12 months it was 19(34.5%) and 29(52.7%) was at stage zero and one respectively. There was a buttock pain for 21(38.2%) study participants and pain was ranges from 6 to 12 moths. The majority (78.2%) of study participants were unable to retain urine and 50(90.9%) of



women had no vault infection. About half (47.3%) of study participants had short vaginal length. Of the study participants 52(94.5%) of them did not have problem of anemia (Table 3).

Table 3: Stages of pelvic organ prolapse and treatment outcomes of respondents with pelvic organ prolapse in Jimma medical center, 2020/21

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Infection	Absent	48	87.3
	Present	7	12.7
Stage of POP after surgery	Stage 0	10	18.2
	Stage 1	42	76.4
	Stage 2	3	5.5
Stage of POP at 3 month follow up	Stage 0	4	7.3
	Stage 1	49	89.1
	Stage 2	2	3.6
Stage of POP at 12 months	Stage 0	19	34.5
	Stage 1	29	52.7
	Stage 2	7	12.7
Buttock pain	No	34	61.8
	Yes	21	38.2
When was Buttock pains	6 months	9	16.4
	At 12 months	9	16.4
	At discharge	3	1.8
Urinary retention	No	43	78.2
	Yes	12	21.9
Vault infection	No	52	90.9
	Yes	3	5.6
Stress incontinence	No	50	87.3
	Yes	5	9.1
When Stress incontinence	6 months	4	7.3
	At 12 months	1	1.8
Short vaginal length	No	29	49.1
	Yes	26	47.3
When Short vaginal length	6 months	15	27.3
	At 12 months	9	16.4
	Immediate	2	3.6
Recurrence (cystocelle rectocele vault)	No	53	96.3
	Yes	2	3.6
Anemia	No	52	94.5
	Yes	1	1.8

## **CHAPTER FIVE**

# Discussion

Following the surgical repair there is an improvement in the stage of pelvic organ prolapse. This result was in line with a study done in India in which the overall quality improvement by 85% following the surgical repair(5). The majority of women have no money to meet their needs, able to get enough information in their daily life, and have no opportunity for leisure activities. The possible explanation for this might be women faced poor support. In this regard Jimma university provide some financial support for them. Primarily, women with pelvic organ prolaps need assistance from husband, from family and community members. In contrary, they may divorced because of the prolapse and become psychological ill and lack necessary support. The majority of women who participated in the study were illiterate. Education has direct relationship with awareness. It has been known that lack of awareness affects health-seeking behavior. In this study majority of women married and got pregnant in the age group of 15-19, which may indicate the prevalence of early marriage in the country which contribute a lot to the number of parity.

In this study, majority of women who were with pelvic organ prolapses who participated in this study had given birth at their home, the place of delivery was a significant factor associated with the problem encounter during the delivery(20). Early pregnancy and home delivery expose women to the risk of pelvic organ prolapse(10).

In our study, there is a significant change in the psychological health domain among women who underwent surgical repair at the Jimma University Medical Center. This result is explained by the fact that relief from physical pain, physical improvement, satisfied with their sleep and their day to day work. This result is in line with a study done in India, Nigeria, and another part of the country(5,15,18). Similarly, the social health domain showed significant improvement after a woman gets a surgical repair. Rejection from their husband, friends, families and feeling dissatisfied in their condition of living place was the manifestation of social impacts. Statistically, there is a significance improvement of the social score after the surgical procedure. The result of the present study was in line with the study done in other parts of the world in which the surgical repair improves the social aspect of women(5,7,15,18).

In our study, there is no significant difference in mean value of pre-operative and post-operative psychological health score.



## CHAPTER SIX

### Conclusion and Recommendation

#### **Conclusion**

In conclusion, the majority of women were at the stage one at 3 months and at the stage one at 12 months after surgery respectively. The majority of women were unable to retain urine but had no vault infection. There is also short vaginal length and they do not developed anemia. It is recommended that the concerned body should work towards the psychological support in order to improve the quality of life of women with pelvic organ prolapse in addition to medical treatment.

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## ANNEX

### Annex 1: Information and Consent sheet

This is a research work by Dr. Fedlu Abdulhay (OBGYN Specialist). Now he is conducting this research work as a part of fulfilment for his sub-specialty in Urogynecology and pelvic reconstructive surgery.

The aim of this research work is to examine treatment outcome for patients with pelvic organ prolapse. Thus after the surgical repair (treatment) of this health problem, we wanted to assess outcome in terms of degree of prolapse, rate of infection, operative complications, emotional state, and their quality of life after treatment.

Thus the outcome of this research work will guide us to improve the routine clinical care for similar condition for future.

The information from this interview will not be disclosed to a 3<sup>rd</sup> body and only will be used for the purpose of this research work.

Participation is based your full free will.

Are you volunteered to participate in this study?

1. Yes

2. No

Name of study participant \_\_\_\_\_ signature \_\_\_\_\_

Name of data collector \_\_\_\_\_ signature \_\_\_\_\_

Date \_\_\_\_\_

Annex 1: Information and Consent sheet

(Afaan oromo )–

Ani Dr fadluu Abdulhaay jedhama ispeshalisti gadameeessa hospitaala jimmati amma qorannoo tokko gegeessuutti jirra, qorannon kuni hadholii gedemeessi jaraa gara alaa bahe ilaalleta. Qorannoon kuni rakkoo hadholii kana qunnamaa jiru sirriitti hubachuufi gara, fuulduraattis yaalii kana fooyyesuuf nu gargaara.

Infoormeeshiniin asirraa sassaabame kan qaama sadaffatiif hin saaxilamne isin hubachiisaa qorannoo kanarrati hirmaachuun bu’aa guddaa ummata kenyaaf waan qabuuf akka hirmaattanu kabajaan isin gaafanna. Hirmaachunis hirmaachuu dhiisunis fedhii keessan.

Qoranno kanarratti hirmaachuu barbaadduu?

- 1) Eyyee
- 2) Hin barbaadu

Maqaa hirmaataa qorannichaa; \_\_\_\_\_

Maqaa Qorataa; \_\_\_\_\_

Guyaa; \_\_\_\_\_

Annex 2: Questionnaire

**English Version Questionnaires**

**1. Socio-demographic and economic data**

**Instruction 1:** Please circle the option and write the response which represents appropriate answer on the space provided.

No	Back ground information	Response
	Age of mother	_____years
	Marital status	1. Married 2. Single 3. Divorced 4. Widowed 5. Separated
	Educational Status of mother	1.No formal education 2.Primary education(1-8) 3. Secondary education(9-12) 4. Higher education
	Religion of mother	1. Muslim 2. Orthodox 3. Protestant 4. Catholic 5. Other specify _____
	Occupation	1. House wife 2. Government employee 3. Merchant 4. Daily laborer 5. Others specify _____
	Parity	_____
	Mode of delivery	1. SVD 2. CS 3. Instrumental
		4.

**2. Patient health questionnaire (Psychological distress)**

Instruction- the following questions are in the last 4 weeks circle the response

	Over the <u>last 2 weeks</u> , how often have you been bothered by any of the following problems?	Not at all (0)	Several days	More than half the days	Nearly every day
PHQ1	Little interest or pleasure in doing things				
PHQ2	Feeling down, depressed, or hopeless				
PHQ3	Trouble falling or staying asleep, or sleeping too much				
PHQ4	Feeling tired or having little energy				
PHQ5	Poor appetite or overeating				
PHQ6	Feeling bad about yourself or that you are a failure or have let yourself or your family down				
PHQ7	Trouble concentrating on things, such as regarding the newspaper or watching television				
PHQ8	Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual				
PHQ9	Thoughts that you would be better off dead or of hurting yourself in some way				
PHQ10	If you checked off any problems, how difficult have these problems made it for you to do work, take care of things at home, or get along with other people?	1. Not difficult at all	2. Somewhat difficult	3. Very difficult	4. Extremely difficult

Outcomes	
Infection	<ol style="list-style-type: none"> <li>1. Present</li> <li>2. Absent</li> </ol>
Stage of POP after surgery	<ol style="list-style-type: none"> <li>1. Stage 0</li> <li>2. Stage 1</li> <li>3. Stage 2</li> <li>4. Stage 3</li> <li>5. Stage 4</li> </ol>
Stage of POP at 3 month follow up	<ol style="list-style-type: none"> <li>1. Stage 0</li> <li>2. Stage 1</li> <li>3. Stage 2</li> <li>4. Stage 3</li> <li>5. Stage 4</li> </ol>
Quality of life	

### WHO Quality of Life Scale-Brief

**Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last two weeks. For example, thinking about the last two weeks, a question might ask:**

		Not at all 1	Not much 2	Moderately 3	A great deal 4	Completely 5
	Do you get the kind of support from others that you need?					

**You should circle the number that best fits how much support you got from others over the last two weeks. So you would circle the number 4 if you got a great deal of support from others as follows.**

		Not at all 1	Not much 2	Moderately 3	A great deal 4	Completely 5
	Do you get the kind of support from others that you need?					

**You would circle number 1 if you did not get any of the support that you needed from others in the last two weeks.**

Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.

		Very poor	Poor	Neither poor nor good	Good	Very good
1(G1)	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2 (G4)	How satisfied are you with your health?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	An extreme amount
3 (F1.4)	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4(F11.3)	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5(F4.1)	How much do you enjoy life?	1	2	3	4	5
6(F24.2)	To what extent do you feel your life to be meaningful?	1	2	3	4	5

The following questions ask about **how much** you have experienced certain things in the last two weeks.

		Not at all	A little	A moderate amount	Very much	Extremely
7(F5.3)	How well are you able to concentrate?	1	2	3	4	5
8 (F16.1)	How safe do you feel in your daily life?	1	2	3	4	5
9 (F22.1)	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

		Not at all	A little	Moderately	Mostly	Completely
10 (F2.1)	Do you have enough energy for everyday life?	1	2	3	4	5
11 (F7.1)	Are you able to accept your bodily appearance?	1	2	3	4	5
12 (F18.1)	Have you enough money to meet your needs?	1	2	3	4	5
13 (F20.1)	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14 (F21.1)	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither	Good	Very good
				poor nor good		
15 (F9.1)	How well are you able to get around?	1	2	3	4	5

The following questions ask you to say how **good or satisfied** you have felt about various aspects of your life over the last two weeks.

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16 (F3.3)	How satisfied are you with your sleep?	1	2	3	4	5
17 (F10.3)	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18(F12.4)	How satisfied are you with your capacity for work?	1	2	3	4	5
19 (F6.3)	How satisfied are you with yourself?	1	2	3	4	5
20(F13.3)	How satisfied are you with your personal relationships?	1	2	3	4	5
21(F15.3)	How satisfied are you with your sex life?	1	2	3	4	5
22(F14.4)	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23(F17.3)	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24(F19.3)	How satisfied are you with your access to health services?	1	2	3	4	5
25(F23.3)	How satisfied are you with your transport?	1	2	3	4	5



The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Seldom	Quite often	Very often	Always
26 (F8.1)	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

Did someone help you to fill out this form?.....

How long did it take to fill this form  
out?.....