e-ISSN: 0975-1556, p-ISSN:2820-2643

Available online on www.ijpcr.com

International Journal of Pharmaceutical and Clinical Research 2024; 16(6); 2118-2125

Original Research Article

Study of Prolapsed Uterus in Adult Porous Female of Gujarat Population

Dinesh Kumar[1], Hitesh Parmar[2], Jayshreeparmar[3], Khushboo Agnani[4]

[1]Associate Professor, Department of Obstetrics and Gynaecology, Zydus Medical College and Hospital Dahod Gujarat 389151

[2]Assistant Professor, Department of Obstetrics and Gynaecology, Zydus Medical College and Hospital Dahod Gujarat 389151

[3]Assistant Professor, Department of Obstetrics and Gynaecology, Zydus Medical College and Hospital Dahod Gujarat 389151

[4]Post Graduate Student, Department of Obstetrics and Gynaecology, Zydus Medical College and Hospital Dahod Gujarat 389151

Received: 25-03-2024 / Revised: 23-04-2024 / Accepted: 26-05-2024

Corresponding Author: Dr. Dinesh Kumar

Conflict of interest: Nil

Abstract:

Background: Prolepse of the uterus (UP) is one of the major gynecological problems in both young and post-menopausal women, which impair their sexual and social life.

Method: 30 (thirty) adult parous females with uterine prolapse (UP) were studied. The same number of normal (controlled) groups were compared for various parameters of clinical manifestations, type of UP, age distribution, VAS score PFIQ-7 were compared in both groups.

Results: Socio-economic groups of both groups were compared. The mode of delivery was 22 (73.3%) NVD, 5 (16.6%) LSCS, 3 (10%) were forceps, 9 (30%) utero-vaginal prolapsed, 6 (20%) cystocels, 2 (6.6%) retrocele, 3 (10%) cystocele, with utero-vaginal prolpse, 4 (13%) cystocele with rectocele, 3 (10%) cystoale, rectoale, and utero vaginal prolapse, 1 (3.3%) vault prolapsed, and 2 (6.6%) cervical descent was observed in UP females.

Conclusion: UP is strongly associated with socio-economic status, age, parity, and place of delivery. UP reduces the quality of life if left untreated.

Keywords: UP = uterine prolapse, VAS score scale, parity, PFIQ-7, utero-vaginal, prolapse.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0) and the Budapest Open Access Initiative (http://www.budapestopenaccessinitiative.org/read), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

Uterine prolapse (UP) prevails at 27% in India and 33% globally. Among them, 2 to 20% women are younger than 45 years of age [1]. Approximately 50% of all porous women present with the same degree of uterine prolapse, whereas only 10–20% have symptoms of uterine prolapse.

Uterine prolapse (UP) is a reproductive health problem characterized by the obtrusion of the uterus partially or wholly into the vagina, which occurs when pelvic floor muscles and ligaments become weak and no longer support the uterus [2].

It is the most often reported cause of poor health among women of reproductive age and post-menopausal age as well [3]. Despite the fact that it is preventable and curable, it remains a major problem in adult females.

It is one of the most frequent gynecological problems that causes morbidity because women with UP cannot lead a normal sexual life or day-to-day activities; hence, her abnormality impairs marital and social life [4]. Hence, an attempt is made to rule out the degree and types of prolapse in different age groups and associated clinical manifestations.

Material and Method

30 (thirty) adult parous female patients aged between 20 to 70 years regularly visiting the obstetrics and gynecology departments of Zydus Medical College and hospital Dahod, Gujarat 38915 were studied.

Inclusive Criteria: The patients having clinical features prolapsed of pelvic organs and confirmed by USG were selected for study.

Exclusion Criteria: patients with malignancy of pelvic organs, previously undergone pelvic surgery, pregnant women, and immune-compromised patients were excluded from the study.

Method: Thirty (30) clinically diagnosed POU patients were selected, and thirty (30) non-symptomatic (controlled) groups were also selected for comparison to study various parameters, includ-

ing socio-economic status, status of parity, place and types of delivery, PFIQ-7 (pelvic floor impact questionnaire), VAS analogue types of POU, and distribution of age group.

The duration of the study was August 2022 to May 2023.

Statistical analysis: Various parameters of POU in both groups were classified by percentage. The statistical data was analyzed in SPSS software.

Observation and Results

Table-1: Comparison of clinical manifestation in both groups

1. Socio-economic status:(a) 1 (3.3%) in POU group, 2 (6.6) in controlled group, (b) 12 (40%) in status of POU was Middle class, 11 (36.6%) in controlled group, (c)status lower 18 (60%) in POU group, 17 (56.6%) in controlled group.
2. Parity: 3.1 (±1.1) in POU group, 3 (±1.0) in controlled group and p>0.009 (p value is insignificant).
3. Place of delivery: 23 (76.6%) home in POU group. 25 (83%) in controlled group,7 (23.3%) at In hospital in POU group and 5 (16.6%) in controlled group.
4. Mode of Delivery NVD: 22 (73.3%) in POU group, 15 (50%) in controlled group, LSCS – 5 (16.6%) in POU group, 13 (43.3%) in controlled group.

Forceps delivery 4 (10%) in POU group, 2 (6.6%) in controlled group.

Associated Medical Problems:

- 7 (23.3%) HTN in POU group A, 1 (3.3%) in controlled group.
- DM4 (13.3%) in POU group, 1 (3.3%) in controlled group.
- Hypothyroidism 5 (16.6%) in POU group, 1 (3.3%) in controlled group.
- HTN+DM 3 (10%) in POU group, 1 (3.3%) in controlled group.
- History of Surgery for in continue 4 (13.3%) in POU group, 1 (3.3%) in controlled group
- History of cough 4 (13.3%) in POU group, 1 (3.3%) in controlled group.
- History of constipation 6 (20%) in POU group, 2 (6.6%) in controlled group.
- Family history of prolapsed7 (23.3%) in POU group, 1 (3.3%) in controlled group.

Table-2: Utero-vaginal prolapsed – 9 (30%) in POU group, 4 (13.3%) in controlled group,

- Cystocoele – 6 (20%) in POU group, 3 (10%) in controlled group.
- Rectocele – 2 (6.6%) in POU group, 1 (3.3%) in controlled group.
- Cystocoele with uteri-vaginal prolapsed– 3 (10%) in POU group, 1 (3.3%) in controlled group,
- Cystocoele with rectocele – 4 (13%) in POU group, 2 (6.6%) in controlled group.
- Cystocoele, rectocele and utero vaginal prolapsed– 3(10%) in POU group, 1 (3.3%) in controlled group.
- Vault prolapsed– 1(3.3%) in POU group only
- Cervical descent – 2 (6.6%) only in POU group.

Table-3: Age distribution pf POU and controlled group population –

- 20-30 years of age – 3 (10%) POU group, 1 (3.3%) in controlled group.
- 31-40 years of age – 9 (30%) in POU group, 4 (13.3%) in controlled group.
- 41-50 years – 6 (20%) in POU group, 13 (43.3%) in controlled group.
- 51-60 years – 8 (26.6%) in POU group, 7 (23.3%) in controlled group,
- 61-70 years of age - 4 (13.3%) in POU group, 5 (16.6%) in controlled group.

Table-4: Comparative study of Visual analogue scale score in both group –

- In Mild Vas: 21 in POU group, 3 in controlled group.
- In moderate VAS: 9 in POU group A, 2 in controlled group.
- In severe VAS 3 in POU group, 1 in controlled group.

Table-5: Comparison of PFIQ-7 parameters in both groups –

- Ability to perform the house hold: 23 (76.6%) in POU group and10 (33.3%) in controlled group.
- Ability to physical activity:23 (76.6%) in POU group, 19 (64.4%) in controlled group.
- Activities such as social gathering at home:24 (80%) in POU group, 19 (64.4%) in controlled group.
- Activities social gathering outside the home: 17 (56%) in POU group, 10 (33.3%) in controlled group.
- Ability to travel distances more than 30 minutes of duration: 22 (73.3%) in POU group, 16 (53.3%) in controlled group.
- Emotional health:24 (80%) in POU group, 17 (56%) in controlled group.
- Feeling frustrated:19 (63.3%) in POU group, 5 (16%) in controlled group.

Table 1: Comparison of clinical manifestation in both groups

Manifestation	Group A 30 patients (POU group)	Group B controlled group 30 patient
Socio-economic a- Status Upper	1 (3.3%)	` 2 (6.6%)
b- Status Middle	12 (40%)	11 (36.6%)
c- Status lower	18 (60%)	17 (56.6%)
Parity (SD)	3.1 (±1.1)	3 (±1.0) p>0.09
Place of Delivery a- Home	23 (76.6%)	25 (83%)
b- Hospital	7 (23.3%)	5 (16.6%)
Mode of Delivery NVD	22 (73.3%)	15 (50%)
LSCS	5 (16.6%)	13 (43.3%)
Forceps	3 (10%)	2 (6.6%)
Associated Medical Problem 1- HTN	7 (23.3%)	1 (3.3%)
2- DM	4 (13.3%)	1 (3.3%)
3- Hypothyroidism	5 (16.6%)	1 (3.3%)
4- HTN + DM	3 (10%)	1 (3.3%)
H/o surgery for incontinence	4 (13.3%)	1 (3.3%)
H/o Cough	4 (13.3%)	1 (3.3%)
H/o constipation	6 (20%)	2 (6.6%)
Family History of prolapsed	7 (23.3%)	1 (3.3%)

NVD = Normal vaginal delivery, LSCS = Lower segment caesarean section, HTN = Hypertension, DM = Diabetes Mellitus.

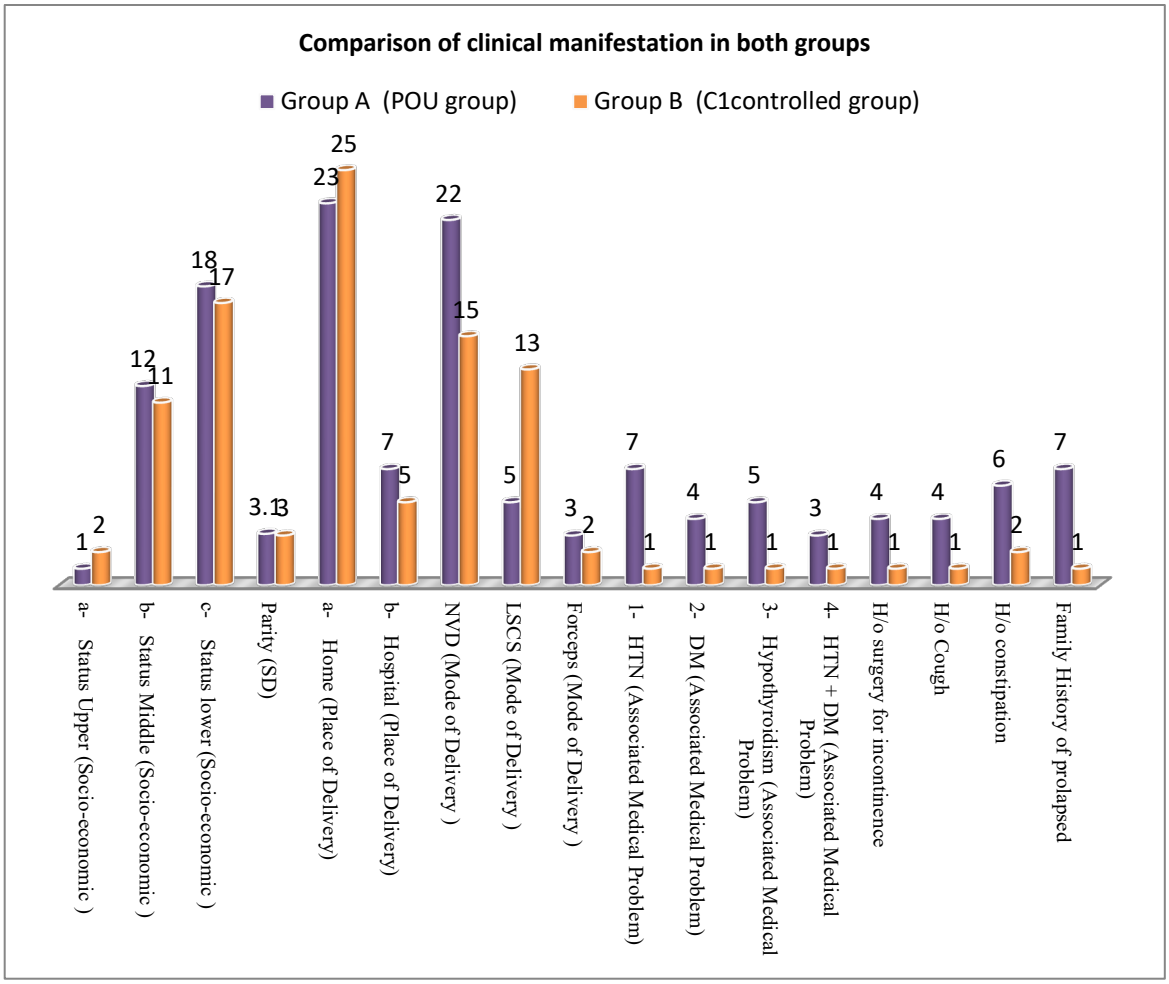

Figure 1: Comparison of clinical manifestation in both groups

Table 2: Type of pelvic organ prolapsed in both groups (A & B)

Sl. No	Type of organ prolapse	Group-A with % (30) (POU)	Group-B with % (30) (Controlled)
1	Utero-vaginal prolapsed	9 (30%)	4 (13.3%)
2	Cystocoele	6 (20%)	3 (10%)
3	Rectocele	2 (6.6%)	1 (3.3%)
4	Cystocoele with utero -vaginal prolapsed	3 (10%)	1 (3.3%)
5	Cystocoele and Rectocele	4 (13%)	2 (6.6%)
6	Cystocoele, Rectocele and utero vaginal prolapsed	3 (10%)	1 (3.3%)
7	Vault prolapsed	1 (3.3%)	--
8	Cervical descent	2 (6.6%)	--

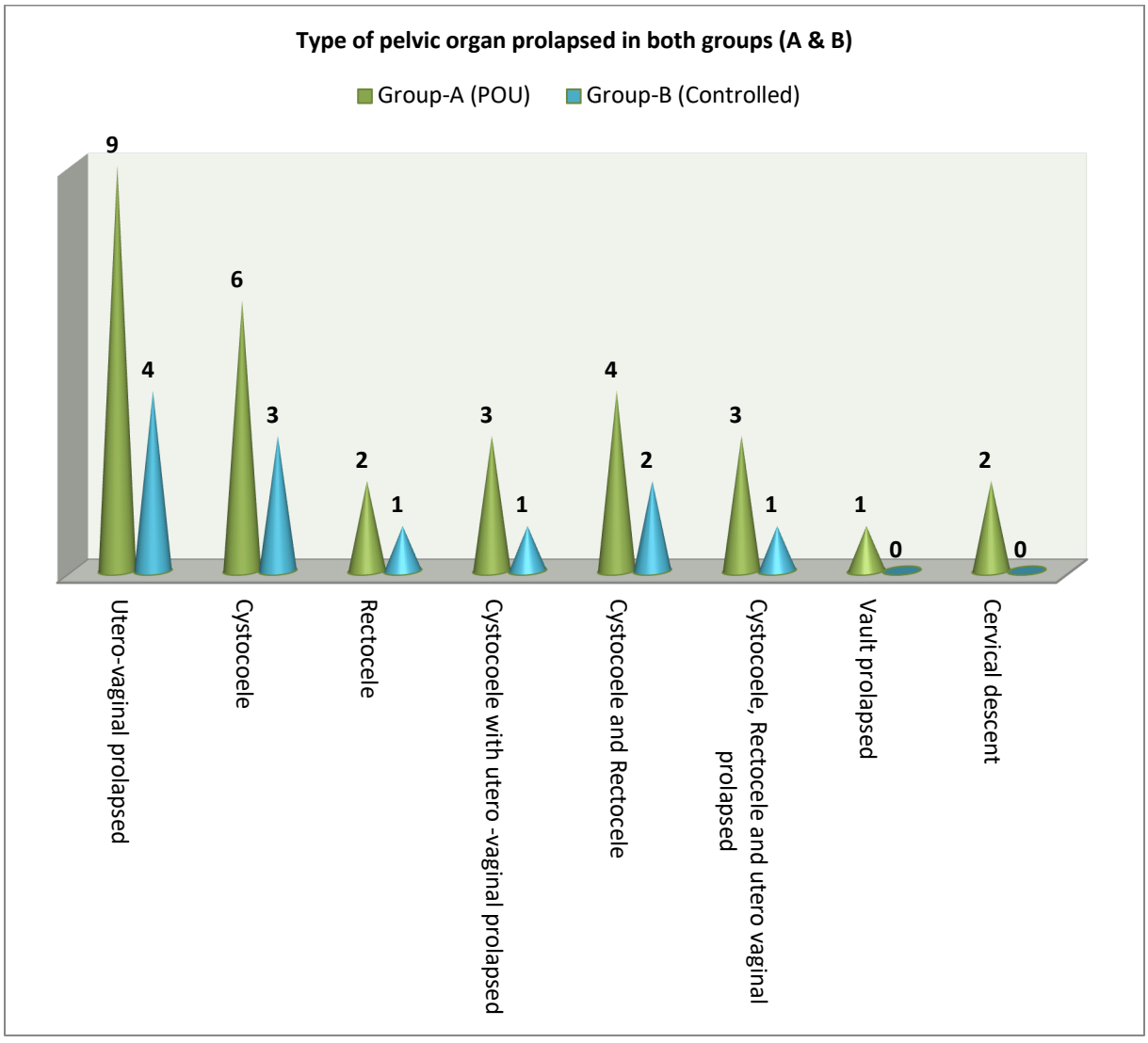

Figure 2: Type of pelvic organ prolapsed in both groups (A & B)

Table 3: Age distribution of patients in both groups (A & B)

Age group	Group-A with % (30) (POU)	Group-B with % (30) (Controlled)
20-30	3 (10%)	1 (3.3%)
31-40	9 (30%)	4 (13.3%)
41-50	6 (20%)	13 (43.3%)
51-60	8 (26.6%)	7 (23.3%)
61-70	4 (13.3%)	5 (16.6%)

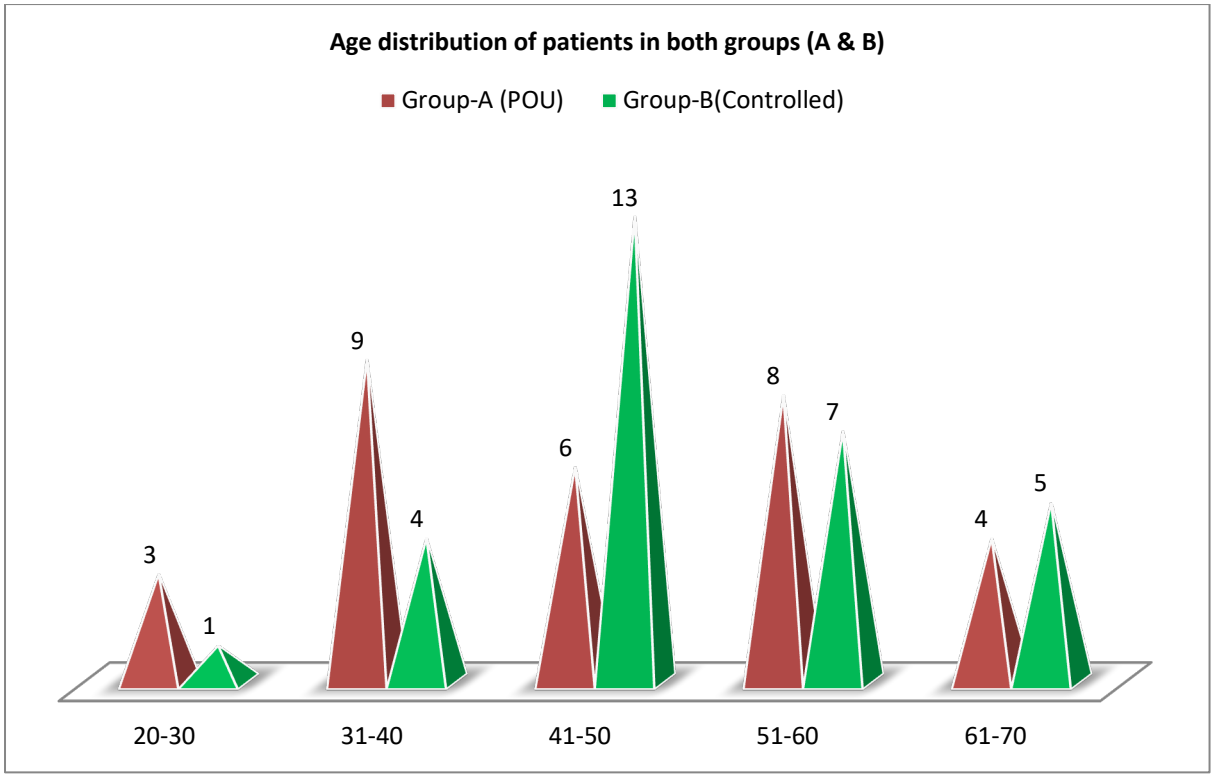

Figure 3: Age distribution of patients in both groups (A & B)

Table 4: Comparative study of visual Analogue scale score in both groups

Group	Mild VAS	Moderate VAS	Severe VAS
Group-A 30 (POU)	21	6	3
Group-B 30 (controlled)	3	2	1

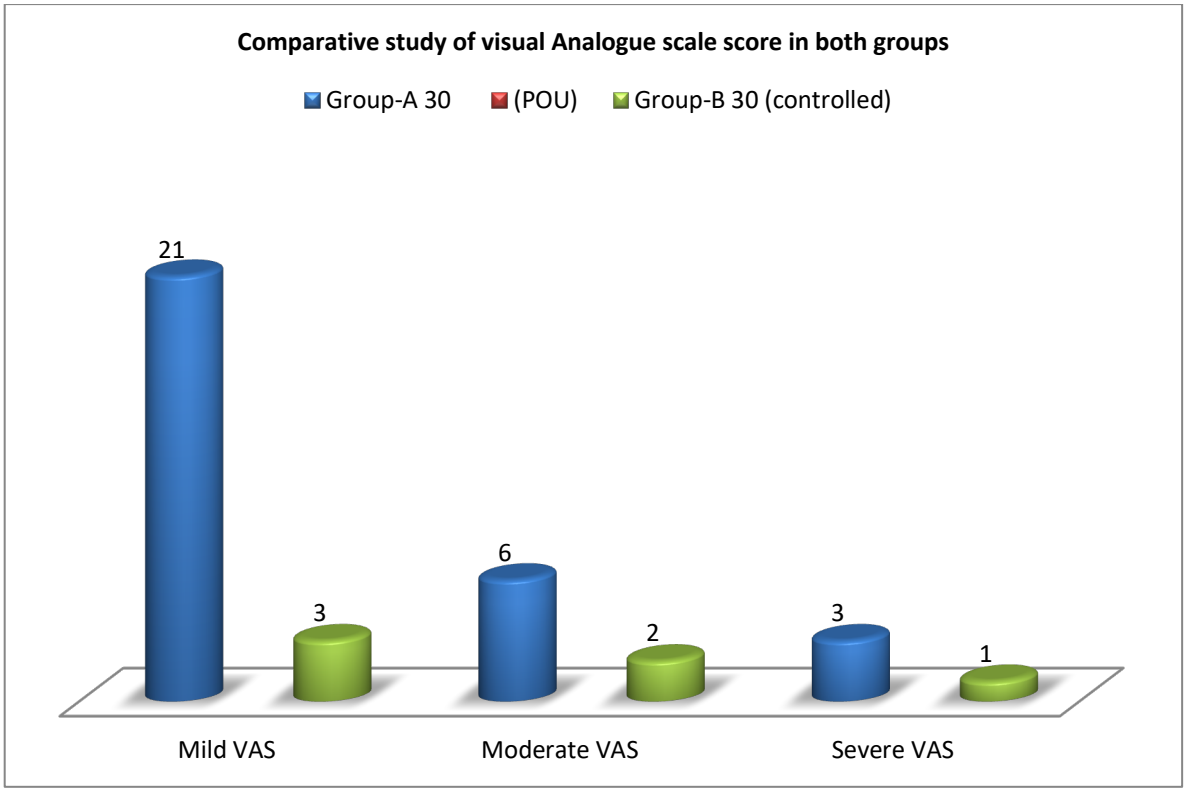

Figure 4: Comparative study of visual Analogue scale score in both groups

Table 5: Comparison PFIQ-7 parameter in both groups

PFIQ-7 (pelvic floor impact questionnaire)	Group-A with % (30) (POU)	Group-B with % (30) (Controlled)
Ability to perform House hold work	23 (76.6%)	10 (33.3%)
Ability to do physical activities	23 (76.6%)	19 (64.4%)
Activities such as social gathering at home	24 (80%)	19 (64.4%)
Activities (social gathering outside home)	17 (56%)	10 (33.3%)
Ability to travel distances more than 30 minutes of duration	22 (73.3%)	16 (53.3%)
Emotional health	24 (80%)	17 (56%)
Feeling Frustrated	19 (63.3%)	5 (16%)

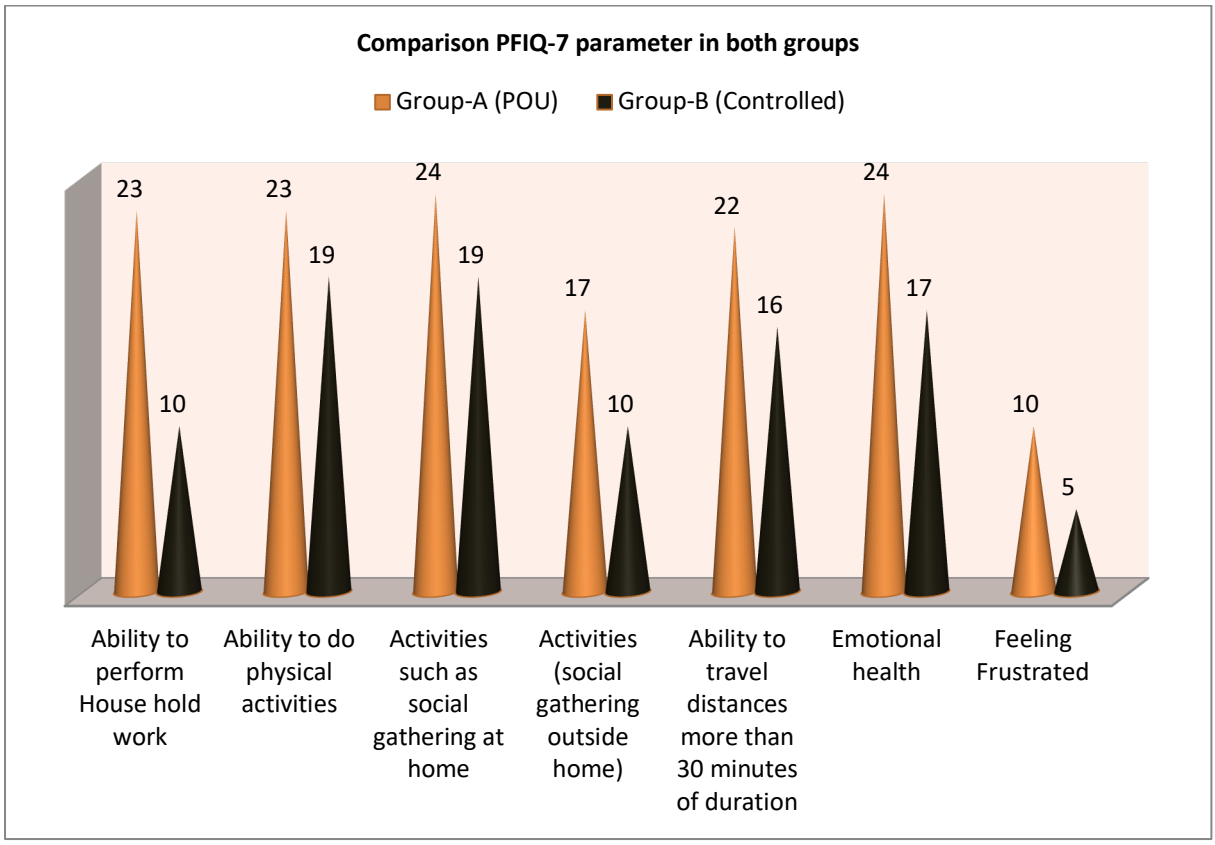

Figure 5: Comparison PFIQ-7 parameter in both groups

Discussion

The present of POU among parous and aged women, Comparison of clinical manifestations in both groups Socio-economic status: (a) 1 (3.3%) in the POU group, 2 (6.6%) in the controlled group, (b) 12 (40%) in the status of the POU was middle class, 11 (36.6%) in the controlled group, (c) status was lower. 18 (60%) in the POU group, 17 (56.6%) in the controlled group Parity: 3.1 (±1.1) in the POU group, 3 (±1.0) in the controlled group, and p > 0.009. Place of delivery: 23 (76.6%) homes in the POU group. 25 (83%) in the controlled group, 7 (23.3%) in the hospital in the POU group, and 5 (16.6%) in the controlled group.

Mode of Delivery: NVD: 22 (73.3%) in the POU group, 15 (50%) in the controlled group; LSCS: 5 (16.6%) in the POU group, 13 (43.3%) in the controlled group. Forceps delivery 4 (10%) in the POU group, 2 (6.6%) in the controlled group. Associated Medical Problems: 7 (23.3%) HTN in POU group A, 1 (3.3%) in the controlled group, DM 4 (13.3%) in the POU group, 1 (3.3%) in the controlled group, Hypothyroidism 5 (16.6%) in the POU group, 1 (3.3%) in the controlled group, HTN+DM 3 (10%) in the POU group, 1 (3.3%) in the controlled group, History of Surgery to Continue 4 (13.3%) in the POU group, 1 (3.3%) in the controlled group, History of cough 4 (13.3%) in the POU group, 1 (3.3%) in the controlled group, History of constipation 6 (20%) in the POU group, 2 (6.6%) in the controlled group, Family history of prolapse 7 (23.3%) in the POU group and 1 (3.3%) in the controlled group (Table 1). Utero-vaginal prolapse: 9 (30%) in the POU group, 4 (13.3%) in the controlled group. Cystocoele: 6 (20%) in the POU group, 3 (10%) in the controlled group, Rectocele: 2 (6.6%) in the POU group, 1 (3.3%) in the controlled group. Cystocoele with uteri-vaginal prolapse: 3 (10%) in the POU group, 1 (3.3%) in the

controlled group. Cystocoele with rectocele: 4 (13%) in the POU group, 2 (6.6%) in the controlled group. Cystocoele, rectocele, and utero vaginal prolapse: 3 (10%) in the POU group, 1 (3.3%) in the controlled group. Vault prolapsed: 1 (3.3%) in the POU group only. Cervical descent: 2 (6.6%) only in the POU group (Table 2).

Age distribution of the POU and controlled group population – 20-30 years of age – 3 (10%) POU group, 1 (3.3%) in controlled group, 31-40 years of age – 9 (30%) in POU group, 4 (13.3%) in controlled group, 41-50 years – 6 (20%) in POU group, 13 (43.3%) in controlled group, 51-60 years – 8 (26.6%) in POU group, 7 (23.3%) in controlled group, 61-70 years of age - 4 (13.3%) in POU group, 5 (16.6%) in controlled group (Table 3).

A comparative study of the visual analog scale score in both groups – In mild VAS: 21 in POU group, 3 in controlled group; in moderate VAS: 9 in POU group A, 2 in controlled group; in severe VAS: 3 in POU group, 1 in controlled group (Table 4) Comparison of PFIQ-7 parameters in both groups – Ability to perform the house hold: 23 (76.6%) in the POU group and 10 (33.3%) in the controlled group, Ability to engage in physical activity: 23 (76.6%) in the POU group, 19 (64.4%) in the controlled group.

Activities such as social gathering at home: 24 (80%) in the POU group, 19 (64.4%) in the controlled group, Activities for social gathering outside the home: 17 (56%) in the POU group, 10 (33.3%) in the controlled group, Ability to travel distances longer than 30 minutes: 22 (73.3%) in the POU group, 16 (53.3%) in the controlled group, Emotional health: 24 (80%) in the POU group, 17 (56%) in cthecontrolledgroup, Feeling frustrated: 19 (63.3%) in the POU group, 5 (16%) in the controlled group (Table 5). These findings are more or less in agreement with previous studies [5,6,7].

It is reported by reproductive health experts in India and other countries that gynecological problems are often considered a usual part of women's lives, with which they suffer in silence [8]. Women often consider reproductive morbidities to be normal and don't report them to anyone or seek any treatment. The reasons are low socio-economic status, multiparity, undernutrition, and early marriage. They perform the heavy domestic work during pregnancy, and soon after delivery, lifting heavy weights and assuming erect posture continuously for a longer time will lead to POU.

Chronic pulmonary diseases, presenting chronic cough, constipation contribute to dysfunction the pelvic floor and lead to prolapse of pelvic organs [9]. It is also reported that, lack of adaptation to environment or diet (nutrition) may also play an contributory role in POU [10]. High parity and child marriages are also major risk factors for POU. It is due to the superstitions and illiteracy prevailing in our society that causes POU. Apart from this early marriage, high parity, heavy lifting during and early pregnancy, early return to work after parturition, order age at last birth, post-menopausal status, and a lack of sufficient rest and nutritious food contribute to high rates in the US.

Most of women high their UP problems being conscious of the embarrassment, lack of family support unsuccessful treatment and high cost of treatment also responsible for prevalence of up.

Summary and Conclusion

The genital problems in women are not given due importance, and women continue to suffer for long before seeking treatment. Early identification of POU on routine checkups can be beneficial so as to reduce the morbidity associated with POU. It is essential to create awareness among the women of the country regarding the symptoms of POU, and the government must appoint a lady medical officer or lady medico-social worker in health centers in rural areas. This gesture will reduce the risk factors in POU. But this study demands further genetic, nutritional, hormonal, patho-physiological, and neuro-muscular studies because the exact mechanism and factors by which pelvic organs prolapse are still unclear.

Limitation of study: Due to the tertiary location of the study center, the small number of patients, and the lack of the latest techniques, we have limited findings and results.

This research paper was approved by the ethical committee of Zydus Medical College and the hospital Dahod, Gujarat 38915

References

1. Handa VL, Blomquist JL: Pelvic floor disorders after vaginal birth; effect of episiotomy perianal laceration and operative birth – obstetric Gynaecology 2012, 119 (2); 233-9.
2. World health organisation measuring reproductive morbidity Geneva WHO 1989, 1-39.
3. Mawajdeh SM: Prevalence and risk factors of genital prolapsed. A multicentre study sandi medical Journal 2003, 24; 161-5.
4. Report for selected countries and subjects. IMF available at http://goo.gl/Fo+1yz viewed on 5th August 2020.
5. Choi KH and Hong JY: Management of pelvic organ prolapsed. Korean J. Urol. 2014, 55; 693-702.
6. Elkermann RM: Correlation of symptoms with location and symptoms with location prolapsed.
7. Moriston L and Larsen JP: symptoms, bother and POU Q in women referred with pelvic organ prolapsed Int. Uro-gynaecol pelvic floor Dysfunction 2003, 14; 122-127.

8. Nygaad I: Prevalence of symptomatic pelvic floor disorder in US women JAMA 2008, 300; 1311-1316.
9. Gyhagen M, Bullarbo M: prevalence and risk factors of pelvic organs prolapsed 20 year after child birth BJOG 2013, 120(2); 152-60.
10. Giazener C, Elders A – Child birth and prolapsed Long term associations with the symptoms and objective measurement of pelvic organ prolapsed BJOG 2013, 120(2); 161-68.