Effect of Maya Massage on Relieving Women's Uterine Prolapse Manifestations

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ABSTRACT

Maya massage is one of the alternative therapy which helps in natural healing with external non- invasive self manipulation for abdominal pelvic organs. **Aim**: The aim of this study is to investigate the effect of Maya massage on relieving uterine prolapse manifestation. **Study design**: An intervention study was used. **Sample size:** sample size was 30 women suffered from uterine prolapse, based on the following criteria: women suffered from stage 0, I, II of uterine prolapse , married and educated women. Data collection started from beginning of December 2013 to the end of July 2014. **Setting:** This study was conducted at Gynaecological outpatient clinic and urogenital dynamic unit at Ain Shams Maternity University Hospital. **Tools of data collection:** two tools were used in this study, the first tool was structured interview Arabic questionnaire it includes women sociodemographic characteristics and lifestyle, current and past women medical surgical history, obstetric gynaecological history and women knowledge regarding uterine prolapse and Maya massage; Second tool was uterine prolapse manifestation follow up sheet to assess women manifestations of uterine prolapse pre/post Maya massage intervention**. Results:** findings of the present study showed that 66.7% of the studied women carry heavy object. Moreover, 70.0% of them have moderate obesity. Furthermore, all of the studied women have total mild manifestation of uterine prolapse before intervention. Finally, there is a highly statistical significant difference between mean score of uterine prolapse manifestation before and 12 week after intervention, **Conclusion:** Maya massage significant relieve uterine prolapse manifestation after intervention by eight and twelve week. **Recommendations: In the light of the finding of the present study, the following are recommended:** Maya massage as complementary alternative therapy considered as one of most effective therapeutic option for relieving uterine prolapse manifestations.

Key words: Maya massage - uterine prolapse.

INTRODUCTION

Uterine prolapse derives from Latin word prolapce literally means "to fall out of place" ,which means the uterus "womb" fall down below it's normal anatomical position and protruding through vagina as a result of weakness in the uterine supporting structures, which includes muscles, ligaments and fascia that may be associated with prolapse of other pelvic organs include vagina, bladder or rectum. It called pelvic relaxation, uterus displacement or pelvic floor herniation **(Loomis, 2012).**

Incidence of uterine prolapse is difficult to determined accurately because many women with (0) stage of uterine prolapse are asymptomatic. While, women with other stages are reluctant to seek medical care because too embarrassed to mention symptoms for their physicians. Therefore, incidence of pelvic organ

prolapse cases in USA is 3.3 million. Meanwhile, in Nepal there are 600,000 women suffer from uterine prolapse while, 14% of Egyptian women's are suffer from uterine prolapse **(World Health Organization, 2012).**

There are a large number of potential risk factors of uterine prolapse, that consist of weak and/or damage of pelvic tissues, ligament and muscles that support the uterus due to multiple pregnancies especially at teenage and childbirths. In addition to, extra stresses on abdominal, pelvic muscles and ligaments from large fetal size, twins, large fibroids uterus and pelvic tumors, and heavy lifting **(Chen and Soo-Cheen, 2007).**

Other risk factors are instrumental delivery, subinvolution and ascites. Pelvic inflammatory diseases, neuromuscular diseases as diabetic neuropathy and congenital weakness in pelvic uterine supporting structures. Decreased oestrogen hormones with menopause result in pelvic muscles lose their strength and elasticity. Vitamin "C" and collagen deficiency, abnormal uterine position, previous pelvic surgery and genetics from family history of genital prolapse **(Tsikouras et al., 2014).**

Uterine prolapse is classified according to pelvic organ prolapse quantification system (POPQs) into the following five stages, stage (0) means no prolapse is demonstrated during maximal straining, stage (I) the most distal of the prolapse descent 1 cm above the level of the hymen, stage (II) the most distal portion of the prolapse is ≤ 1 cm or extends 1 cm through the plane of hymen, stage (III) the most distal portion of the prolapse is below hymen 2cm but not further than 3 cm and stage (IV) prolapsed uterus descent more than 3 cm below hymenal

ring and complete eversion outside vagina **(Fashokun et al., 2014).**

Uterine prolapse manifestations vary according to its stage. Therefore, (0) stage of uterine prolapse usually don't cause any symptoms. Meanwhile, advanced stages of uterine prolapse can cause the following symptoms; severe dull pain in the pelvic region, lower back and lower abdomen and feeling with heaviness and pulling pressure in the pelvic region **(Samreen et al., 2013).**

Uterine prolapse has several complication as; keratinization of prolapsed organ, decubital ulceration occur on the prolapsed uterus and cervix, incarceration of the uterus in severe cases when inverted outside vagina and cannot be pushed back through the vagina from swelling and congestion. This condition requires surgery as it may cause wide spread pelvic infection **(Nakhoda and Patel, 2012).**

There are different types of uterine prolapse treatment includes conservative non-surgical treatments and surgical treatment. Conservative non-surgical treatment includes the following types; lifestyles modification as body weight reduction and maintain within ideal body weight , avoid heavy lifting and smoking, also vaginal pessary and topical estrogen therapy **(JIYI et al., 2013).**

Other conservative treatment modalities include Kegel exercise, Maya abdominal self care massage of complementary alternative therapy. Surgical treatment of uterine prolapse aimed to repair prolapse which not respond to conservative treatment. Uterine prolapse treatment modalities decision based on the type of prolapse, severity of the condition

as well as women health, age and desire to have children **(Jelovsek et al.,2014).**

Maya abdominal self care massage "Arvigo techniques" is one of complementary alternative therapy, which centred around the ancient Mayan techniques and represent an external non invasive gentle manipulation to the reproductive organs through hands abdominal massage that help in reposition of prolapsed internal reproductive and digestive organs into proper normal position through help to restore healthy and optimal blood flow, lymph, nerve and energy flow within the body. This massage helps to support the body's natural healing capacity **(Hut, 2014).**

Technique of this massage includes the following steps; women empty the urinary bladder, wear loos clothes then lie on the back and place a pillow under head and knees (if desired), then elevate the hips by place a pillow under pelvis and bring the hands together, which not lift but slide them above the pubic bones with apply comfortable consistent pressure into the soft tissue with slow move fingertips toward the navel and stop just below it and repeat this step three times. This technique done twice daily for constant three months **(Tilbury, 2012).**

Nurses as members in health professional have an integral roles toward complementary alternative therapy. However, nurses must be well informed and possess the appropriate skills and clinical decision that based on recent, accurate, and impartial evidenced based, also appeared at times to influence their attitude towards complementary alternative therapy to help the women to use complementary and alternative therapy safely and accurately to achieve a higher quality of life **(Fowler and Newton, 2010).**

Most of the previous studies focus on the medical and surgical treatment modalities of uterine prolapse. The present study is conducted to shed light on the effect of Maya massage on relieving uterine prolapse manifestations.

Aim of the Study:

The aim of this study is to investigate the effect of Maya massage on relieving uterine prolapse manifestations.

Research Hypothesis:

Maya massage will relieve uterine prolapse manifestations.

Subjects and Methods:

An intervention study design was used.

Setting*:* The study was conducted at Gynaecological outpatient clinic and Urogenital dynamic unit at Ain Shams Maternity Hospital.

Subjects*:* The study population consisted of all women with uterine prolapse, who fulfilled inclusion criteria, furthermore they selected according to the following criteria:

Inclusion Criteria: Married educated women suffered from stage 0, I, II of uterine prolapse were included in this study, *Exclusion Criteria*: women were excluded from this study with the following criteria: Women at first trimester of pregnancy, first 6 weeks following a normal vaginal delivery or the first 3 months after a cesarean section, after

abdominal surgery within 6-8 weeks and use intrauterine device (IUD) as contraceptive method. In addition cancer is present or suspected anywhere in the pelvis, acute abdominal pelvic pain and/or infection. Also gastroesophageal reflux disorders (GERD) or a Hiatal Hernia.

Thirty women having the inclusion criteria included in the study that represent 30% of the previous year 2011- 2012 hospital statistic (100 women) according to sensitivity test.

Tools of Data Collection:

Tools:

Two tools adopted by researcher were used in this study after reviewed by expert jury panel three expert form maternity neonatal nursing field.

First tool: An Interviewing Arabic Questionnaire Sheet titled "women's knowledge regarding Maya massage for uterine prolapse treatment". It was divided into four parts;

- **First part** was designed to assess sociodemographic characteristics and lifestyle of the women (question No. 1 to 9).

- **Second part** was designed to assess current and past women medical-surgical history (question No. 10 to 13).

- **Third part** was designed to assess women obstetric gynecological history (question No. 14 to 19).

- **Fourth part** was designed to assess women knowledge regarding uterine prolapse and Maya massage (from question No. 20 to 39). This was divided into two parts; part one women knowledge about uterine prolapse and methods of treatment (13questions), and part two women knowledge about Maya massage (7 questions).

Second tool: Uterine prolapse manifestation follow up sheet was designed to assess the women manifestations of uterine prolapse which included (8) manifestations, each manifestation had 4 level to be selected by women as follow; 0 mean no manifestation, 1 mean mild manifestation, 2 mean moderate manifestation, and 3 mean severe manifestation this score used before and after intervention for constant 12 weeks.

Supportive material was included Arabic leaflet about uterine prolapse and Maya massage.

Methods of data collection:

An official approval was obtained from Dean of faculty of nursing Ain Shams University to conduct this study, also from director of Ain Shams University Maternity Hospital as an approval for data collection through written letter clarifying the title, aim and sitting of the study.

Validity test:

The tools of data collection were tested by three experts from maternity neonatal nursing staff of Faculty of Nursing, Ain Shams University.

Field work

Oral approval was obtained from the women to be included in the study before interviewing each woman and after

explaining the purpose of the study. Data collection started from the beginning of December 2013 till the end of July 2014, were collected 3 days/week. The researcher attend in the Gynaecological outpatient clinic at Ain Shams Maternity Hospital from 9.00 am to 2.00 pm then met each woman separately to fill interviewing questionnaire sheet and conduct orientation training session on private room at Urogenital unit regarding technique of Maya massage in addition to supplying woman with supported material Arabic leaflet, this session taken approximately 30 minutes. Therefore the researcher was observed each woman at least 3 times through first two weeks after training session to ensure that each woman practice massage correctly. Then the researcher were carried on regular telephone contact with the women every week to ensure continuity of massage application and record women weekly evaluation in uterine manifestation follow up sheet for three months consistency. Finally at the end of three months the researcher was met women to assess the effect of Maya massage on relieving uterine prolapse manifestations.

Ethical Consideration:

Approval was obtained from the Scientific Research Ethical Committee in Faculty of Nursing at Ain Shams University before starting the study. The researcher was clarify the objective and aim of the study to women that will included in this study then oral consent obtained from them. In addition to assured maintaining anonymity and confidentiality of the subject data and informed them had the right to withdraw from the study at any time. There was no harm was occurred for women.

Results

Table (1) shows the distribution of the study sample according socio demographic characteristics. Concerning women's age 70.0% of them their age range between 30 to 39 years with mean age (32.1 ± 3.34). As regard their place of residence 66.7% of them from urban area. Meanwhile, 40.0%, 30.0%, and 30.0% of them are read & write, finish their primary and university education respectively. On other hand, all the studied women are married and house wife. Concerning women's life style none of them are smoking while, 66.7% of them carry heavy object. Moreover, 30.0% and 70.0% of the studied women have mild and moderate obesity respectively.

Table (2) shows the distribution of the study sample according medical - surgical history. As regard chronic diseases none of the studied women have any diseases. Concerning pelvic abdominal surgery 70.0% of the studied women have surgery .In addition, 57.1%, and 42.9 % of them have pelvic and abdominal surgery respectively.

Table (3) illustrates the distribution of the study sample according to obstetric history. Concerning women's gravida and para 40.0% of them have four to five time pregnancy and delivery. In relation to mode of delivery 60.0% and 40.0% of them have normal and instrumental delivery respectively. Moreover, all of the studied women have associated complication with delivery. Regarding kind of complication 30.0% and 70.0 % of them have laceration and uterine prolapse respectively.

Table (4) shows that 80.0% of the studied women have incomplete correct

knowledge regarding uterine prolapse with mean knowledge score (17.87 ± 3.97). While, 20.0% of them have incorrect knowledge regarding uterine prolapse with mean knowledge score (11.00 ± 0.0). Meanwhile, none of them have complete correct knowledge regarding uterine prolapse.

Table (5) reveals that 100.0% of the studied women have incorrect knowledge regarding maya massage with mean knowledge score (17.00 ± 0.00).

Table (6) shows that 30.0%, 40.0%, and 30.0% of the studied women have their information about uterine prolapse through family, physician and friends respectively.

Table (7) shows that 30.0% of the studied women have dyspareunia as severe manifestation of uterine prolapse. While, 40.0% of them have heaviness on pelvic area and back pain as moderate manifestation of uterine prolapse. Meanwhile, 30.0%, 70.0%, and 30.0% of them have Feeling and seeing something on vagina and increase vaginal discharge as mild manifestation of uterine prolapse. Finally , all of the studied women have total mild manifestation of uterine prolapse with mean score (13.8 ± 1.31) before Maya massage intervention.

Table (8) shows that 30.0% of the studied women have dyspareunia as severe manifestation of uterine prolapse. While, 40.0% of them have heaviness on pelvic area and back pain as moderate manifestation of uterine prolapse. Meanwhile, 30.0%, 70.0%, and 30.0% of them have feeling and seeing something

on vagina and increase vaginal discharge as mild manifestation of uterine prolapse respectively. Finally , all of the studied women have total mild manifestation of uterine prolapse with mean score (13.5 ± 1.35) 4 weeks after Maya massage intervention.

Table (9) shows 40.0%, 40.0%, 70.0% and 30.0% of the studied women have heaviness on pelvic area and back pain, dyspareunia and increase vaginal discharge as mild manifestation of uterine prolapse. Finally , 70.0% of the studied women have total mild manifestation of uterine prolapse with mean score (9.5 ± 1.35).

Table (10) shows 30.0% of the studied women have dyspareunia as mild manifestation of uterine prolapse. Finally , 30.0% of the studied women have total mild manifestation of uterine prolapse with mean score (8.3 ± 0.48).

Table (11) reveals that there is no statistical significant difference between mean score of uterine prolapse manifestations before and 4 week after maya massage intervention.

Table (12) indicates that there is a highly statistical significant difference between mean score of uterine prolapse manifestations before and 8 week after maya massage intervention.

Table (13) shows that there is a highly statistical significant difference between mean score of uterine prolapse manifestations before and 12 week after maya massage intervention.

Table (1): Socio demographic characteristics and lifestyle of the studied women (n= 30)

Items	No	%
Women's age		
< 20	0	0
20-29	9	30.0
30-39	21	70.0
Mean ± SD	32.1 ± 3.34	
Place of residence:		
Urban	20	66.7
Rural	10	33.3
Marital status:		
Married	30	100
Divorced	0	0
Widow	0	0
Educational level:		
Illiterate	0	0
Read & write	12	40.0
Preparatory	0	0
Primary	9	30.0
Secondary	0	0
University	9	30.0
Occupation:		
Housewife	30	100
Working for cash	0	0
Smoking:		
Yes	0	0
No	30	100
Carrying heavy object:		
Yes	20	66.7
No	10	33.3
BMI:		
Normal	0	0
Mild obesity	9	30.0
Moderate obesity	21	70.0
Sever obesity	0	0

Table (2): Medical -surgical and obstetric history of the studied women (n= 30)

Items	No	%
Chronic diseases:		
Yes	0	0
No	30	100
Type of chronic diseases		
DM	0	0
HIN	0	0
Anemia	0	0
Bronchitis	0	0
Chronic constipation	0	0
Pelvic abdominal surgery:		
Yes	21	70
No	9	30
Kind of surgery:		
Pelvic operation	12	57.1
Abdominal operation	9	42.9

Table (3): Obstetric history of the studied women (n= 30)

Items	No	%
Gravida :		
1	9	30
2-3	9	30
4-5	12	40
Para:		
1	9	30
2-3	9	30
4-5	12	40
Mode of delivery:		
Normal	18	60
Instrumental	12	40
Cesarean section	0	0
Complications with previous delivery:		
Yes	30	100
No	0	0
Kind of complications:		
Laceration	9	30
Precipitated labor	0	0
Uterine prolapse	21	70

Table (4): Women's knowledge regarding uterine prolapse (n= 30)

Items	Incorrect	Incomplete correct	Complete correct
	%	**%**	**%**
Concept of uterine prolapse	30.0	70.0	**%**
Stages of uterine prolapse	40.0	60.0	0
Signs and symptoms	40.0	60.0	0
Causes of uterine prolapse	40.0	40.0	0
Effect of uterine prolapse on daily life activity	40.0	40.0	20.0
Physiological effect	40.0	40.0	20.0
Psychological effect	50.0	50.0	20.0
Social effect	60.0	40.0	0
Diagnosis of uterine prolapse	70.0	30.0	0
Treatment of uterine prolapse	100	0	0
Side effect of treatment	100	0	0
Total	20	80	0
Total mean score	11.0 ± 0.0	17.87 ± 3.97	0.0 ± 0.0

Table (5): Women's knowledge regarding Maya massage (n= 30)

Items	Incorrect	Incomplete correct	Complete correct
	%	**%**	**%**
Concept of maya massage	100	0	0
Benefits of maya massage	100	0	0
Indications of maya massage	100	0	0
Technique of maya massage	100	0	0
Contraindications of maya massage	100	0	0
Signs of effectiveness of maya massage	100	0	0
Total score	100	0	0
Total mean score	17.00 ± 0.00	0.0 ± 0.0	0.0 ± 0.0

Table (6): Women's source of knowledge regarding uterine prolapse & Maya massage

Items	No.	%
Source of information about uterine prolapse:		
Family	9	30.0
Physician	12	40.0
Friends	9	30.0
Internet , books & magazine	0	0.0
Source of information about Maya massage:		
Family	0	0.0
Physician	0	0.0
Friends	0	0.0
Internet , books & magazine	0	0.0

Table (7): Percentage distribution of uterine prolapse manifestations before Maya massage intervention (N= 30)

Items	None	Mild	Moderate	severe
	%	%	%	%
Heaviness on pelvic area	0.0	60.0	40.0	0.0
Back pain	0.0	60.0	40.0	0.0
Dyspareunia	30.0	0.0	40.0	30.0
Feeling something on vagina	70.0	30.0	0.0	0.0
Seeing something out of vagina	30.0	70.0	0.0	0.0
Constipation	100.0	0.0	0.0	0.0
Stress urinary incontinence	100.0	0.0	0.0	0.0
Increase vaginal discharge	70.0	30.0	0.0	0.0
Total score	0.0	100.0	0.0	0.0
Total mean score	0.0 ± 0.0	13.8 ± 1.31	0.0 ± 0.0	0.0 ± 0.0

Table (8): Percentage distribution of uterine prolapse manifestations after Maya massage intervention by 4 week (N= 30)

Items	None	Mild	Moderate	sever
	%	%	%	%
Heaviness on pelvic area	0.0	60.0	40.0	0.0
Back pain	0.0	60.0	40.0	0.0
Dyspareunia	30.0	0.0	40.0	30.0
Feeling something on vagina	70.0	30.0	0.0	0.0
Seeing something out of vagina	30.0	70.0	0.0	0.0
Constipation	100.0	0.0	0.0	0.0
Stress urinary incontinence	100.0	0.0	0.0	0.0
Increase vaginal discharge	70.0	30.0	0.0	0.0
Total score	0.0	100.0	0.0	0.0
Total mean score	0.0 ± 0.0	13.5 ± 1.35	0.0 ± 0.0	0.0 ± 0.0

Table (9): Percentage distribution of uterine prolapse manifestations after Maya massage intervention by 8 week (N= 30)

Items	None	Mild	Moderate	sever
	%	%	%	%
Heaviness on pelvic area	60.0	40.0	0.0	0.0
Back pain	60.0	40.0	0.0	0.0
Dyspareunia	30.0	70.0	0.0	0.0
Feeling something on vagina	100.0	0.0	0.0	0.0
Seeing something out of vagina	100.0	0.0	0.0	0.0
Constipation	100.0	0.0	0.0	0.0
Stress urinary incontinence	100.0	0.0	0.0	0.0
Increase vaginal discharge	70.0	30.0	0.0	0.0
Total score	30.0	70.0	0.0	0.0
Total mean score	8.0 ± 0.0	9.5 ± 1.35	0.0 ± 0.0	0.0 ± 0.0

Table (10): Percentage distribution of uterine prolapse manifestations after Maya massage intervention by 12 week (N= 30)

Items	None	Mild	Moderate	Severe
	%	%	%	%
Heaviness on pelvic area	100.0	0.0	0.0	0.0
Back pain	100.0	0.0	0.0	0.0
Dyspareunia	70.0	30.0	0.0	0.0
Feeling something on vagina	100.0	0.0	0.0	0.0
Seeing something out of vagina	100.0	0.0	0.0	0.0
Constipation	100.0	0.0	0.0	0.0
Stress urinary incontinence	100.0	0.0	0.0	0.0
Increase vaginal discharge	100.0	0.0	0.0	0.0
Total score	70.0	30.0	0.0	0.0
Total mean score	8.0 ± 0.0	8.3 ± 0.48	0.0 ± 0.0	0.0 ± 0.0

Table (11): Comparison between uterine prolapse manifestations before and 4week after Maya massage intervention (N= 30)

Items	Before intervention	After intervention by 4 week	Paired T test	P value
Uterine prolapse manifestation mean score	13.8 ± 1.31	13.5 ± 1.35	1.96	0.81

NB: * Statistical significant difference at >0.05   * * Highly Statistical significant difference at >0.01

Table (12): Comparison between uterine prolapse manifestations before and 8 week after Maya massage intervention (N= 30)

Items	Before intervention	After intervention by 8 week	Paired T test	P value
Uterine prolapse manifestations mean score	13.8 ± 1.31	9.5 ± 1.35	28.15	0.001**

NB:* * Highly Statistical significant difference at >0.01

Table (13): Comparison between uterine prolapse manifestations before and 12 week after Maya massage intervention (N= 30)

Items	Before intervention	After intervention by 12 week	Paired T test	P value
Uterine prolapse manifestations mean score	13.8 ± 1.31	8.3 ± 0.48	12.84	0.001**

NB: * * Highly Statistical significant difference at >0.01

Discussion

Uterine prolapse is a common silent gynaecological disorder among women suffering from asymptomatic stage of uterine prolapse. However this stage can be deteriorated over time to advanced stages , which associated with weakness in pelvic muscles, ligaments and fascia that represent the main cause of prolapse. Thus result in many physical , social and psychological symptoms affecting women's quality of life according to severity of prolapse **(Fritel et al., 2011).**

Complementary alternative nurse has an important roles in supporting, maintaining, restoring for women health and assisting them to adapt with enduring effect of the uterine prolapse through appropriate training on Maya abdominal self care massage therapy to sustain a healthy lifestyle and achieve high quality of their life (**Antigoni and Dimitrios, 2009&; Licastro, 2014**).

The current study was an intervention study which aimed to investigate the effect of Maya massage on relieving uterine prolapse degrees. This study was conducted at the Gynaecological outpatient clinic and urogenital dynamic unit at Ain Shams Maternity Hospital. A Purposive sample technique was used to recruit thirty women's suffering from stage 0, I, II of uterine prolapse. Subsequently Maya massage technique applied for constant three months in addition to supplying the women with supported material "Arabic leaflet "about uterine prolapse and Maya massage.

Regarding to socio demographic characteristics of the studied women, the results of the current study revealed that more than two third of the studied women their age ranged between 30-39 years. This result was supported with **Ab. Rahman (2011)**, who found that about half of the studied women their age ranged between 30-55years and mentioned that prevalence of uterovaginal prolapse increases steadily with age. This similarity could be explained by advanced women age associated with hormonal change as predisposing factors for uterovaginal prolapse.

Concerning other sociodemographic characteristic ,the results of the present study showed that about one third of studied women from rural area. On the other hand, forty percent of them were read and write. While, all of them were housewives. Furthermore two third of them are carrying heavy objects and about more than two third of them are moderately obese.

The previous study findings was in accordance with **Puri (2011);**who study "Prevalence, risk factors and traditional treatments of genital prolapse **in Manma, Kalikot District ,Nepal** :A Community Based Population Study", and found that major common risk factors of uterine prolapse with statistical significant prevalence were illiteracy among more than two third of studied women's, whose lived in rural places, housewives and performed hard work like farming and load carrying with less rest time.

This similarity could be explained by reproductive morbidity with gynaecological uterine prolapse disorders have a very high prevalence among women in rural areas result from lack of women access to medical facilities. Moreover illiterate women have silent ignorance and unhealthy life style, which make them

didn't seek for health care and carrying heavy objects that leads to weakness and laxity of uterine support structures that represent precipitating factors of prolapse.

The pervious study finding also supported by **Shrestha et al., (2010);** who study "Prevalence of uterine prolapse amongst gynaecology OPD patients in Tribhuvan University Teaching Hospital in Nepal and its Socio Cultural Determinants", and reported that more than one third of the studied women with uterine prolapse their age ranged between 41-50 years ,and most of them are lived in rural communities. Also more than three quarters of them were uneducated and done heavy work immediately after child delivery. These factors put them more prone to having uterine prolapse than others and referred for education is the most important indicators to understand the socio-economic status and level of awareness among the women ,which influence on their decision toward health seeking behaviour.

Regarding medical history of the studied women , the result of the current study revealed that all of them not have chronic diseases. This finding was on contrary with Puri (2011); found that chronic constipation, and chronic cough had significant prevalence in about two third of studied women with these factors might help for uterine prolapse.

Concerning surgical history of the studied women, the result of the present study showed that more than two third of studied women have abdominal pelvic surgery. This finding was consistent with Puri (2011); who reported that prior abdominal pelvic surgery had significant prevalence in about two third of studied

women with these factors may be risks for uterine prolapse.

This similarity guaranteed that abdominal pelvic surgery causing injuries, adhesions and scars in abdominal pelvic tissues, which effect on support structures of pelvis as prejudicing factors for uterine prolapse.

Regarding obstetric history of the studied women, the result of this study showed that more than one third of them have four to five time pregnancy and delivery, in addition to sixty percent of them was delivered with normal vaginal delivery (NVD). Moreover, all of the studied women have associated complication with previous delivery. Uterine prolapse as associated complication with delivery represent seventy percent, while laceration represent thirty percent.

The result of the current study was congruent with Gyhagen et al., (2013); who studied " prevalence and risk factors for pelvic organ prolapse 20 years after childbirth: a national cohort study in singleton primipara after vaginal or caesarean delivery" and found that more than three quadrates of the studied women are multiparous , which carry a doubled risk for pelvic organ prolapse after vaginal delivery, than caesarean section. Also more than two third of them had uterine prolapse after having more than four children.

The result of the present study also in agreement with Freeman (2012); who study the effect of pelvic floor exercise on patients who had antenatal bladder neck mobility and were incontinent 3 months after delivery reported stress urinary incontinence (SUI) more often during their

pregnancy and found that, about two thirds of studied women are delivered their infants with large birth weight that associated with lacerations in genital tissues was represented higher jeopardy factors for prolapse after vaginal delivery than caesarean section.

Concerning women's knowledge regarding uterine prolapse, the result of the current study revealed that none of the studied women had complete correct knowledge regarding uterine prolapse. On the other hand majority of the studied women (eighty percent) had incomplete correct knowledge, and the remainders had incorrect knowledge regarding uterine prolapse.

The previous study finding was in the same line with **Baruwal (2010):** who studied "Knowledge, attitude and preventive measures amongst the married women at reproductive age towards uterine prolapse in the surkhet Nepal", and reported that thirty seven percent of the studied women had low knowledge level,while fifty two percent of them had moderate level of knowledge.

In addition the previous study finding also supported with **Meadow et al., (2013);** who studied "Prolapse-related knowledge and attitudes toward the uterus in women with pelvic organ prolapse symptoms", and found that above two third of studied women had low level of knowledge related to uterine prolapse and don't believe the uterus is important for body image or sexuality. While less than third of them had correct knowledge related to prolapse.

Meanwhile, the prior study finding was disagree with **Shrestha et al., (2014),** who studied uterine prolapse knowledge

among married women of reproductive age in Nepal and reported that more than half of the studied women (Fifty-three percent) had no knowledge about uterine prolapse , while another fourty seven percent had a satisfactory level of knowledge about uterine prolapse.

This difference could be explained by difference of both community regarding women social norms, community health facilities and multiple channel/sources women used to access their information about uterine prolapse.

Concerning women's source of knowledge regarding uterine prolapse , the result of the current study showed that thirty percent, forty percent, and thirty percent of the studied women have their information about uterine prolapse through family, physician and friends respectively. This findings was in agreement with **Shrestha et al., (2014)** ,who reported that fifty three percent of the studied women accessed their information's related uterine prolapse via radio. While other sources of women information as television, friends, relatives (about thirty five percent) and health workers (about twelve seven percent).

Regarding women's uterine prolapse manifestation before intervention, the result of the present study revealed that thirty percent of the studied women have severe dyspareunia as manifestation of uterine prolapse.

This results was consistent with **Shrestha et al.,(2014)**, who studied uterine prolapse knowledge among married women of reproductive age in Nepal and reported that most of the studied women (above eighty percent) described their major manifestation of uterine prolapse as

difficulty with sexual activity, which result in women inability to perform home tasks or fulfill their husband's sexual desires causing severe emotional stress, and above two thirds of them was complained from bulging sensation and a heavy feeling in their pelvic region, and increase vaginal discharge.

Moreover, the result of the current study showed that thirty percent, seventy percent, and thirty percent of the studied women have feeling and seeing something on vagina and increase vaginal discharge as mild manifestation of uterine prolapse.

Those findings were guaranteed by **Miedel (2009)**: who found that above two thirds of the studied women were complained from feel something coming from their vagina and mentioned that vaginal bulging represent the key symptoms of prolapse and report that mild to moderate pelvic organ prolapse is a dynamic condition, but only a small proportion of affected women get worse within their lifespan. Hence pelvic floor related symptoms could not predict the anatomic location of the prolapse in women with mild to moderate prolapse.

The prior study finding was in the same line with **Baruwal (2010)**, who mentioned that more than two third (sevety eight percent) of the studied women was suffered from feeling with something coming out of their vagina,while more than half of them was complained from difficult urination and excessive foul vaginal discharge.

Relating to women's uterine prolapse manifestation four week after intervention with Maya massage, the result of the present study revealed that thirty percent of the studied women have

dyspareunia as severe manifestation of uterine prolapse. While, forty percent and forty percent of them have heaviness on pelvic area and back pain as moderate manifestations of uterine prolapse. Meanwhile, thirty percent, seventy percent, and thirty percent of them have feeling and seeing something on vagina and increase vaginal discharge as mild manifestation of uterine prolapse. Finally, all of the studied women have total mild manifestation of uterine prolapse.

Concerning comparison between uterine prolapse manifestation before and twelve week after Maya massage intervention the result of the present study showed that there is a highly statistical significant difference between mean score of uterine prolapse manifestation before and twelve week after Maya massage intervention.

The previous study finding was congruent with **Whelan et al., (2013):** who investigates the effect of manual therapy "exercise" on women with stage I or II pelvic organ prolapse. and reported that pelvic organ prolapse (POP) symptoms, severity significantly improved in a positive direction with intervention of manual therapy.

Finally, traditional exercise approach provides cure without significant risk, burden, or complication. Furthermore, this massage therapy is an example of a successful low cost, low technology intervention, less need for further treatment than women successfully demonstrated the efficacy of the regime used for training women with prolapse in the correct technique of performing it **(Kashyap et al., 2013).**

Conclusion

Based on the results of the present study the following can be concluded:

Maya massage significantly relieve uterine prolapse manifestations after intervention by eight and twelve weeks.

Recommendations

The Based on the study, the following were recommended:

- Awareness session should be provided for women about maya massage as complementary alternative therapy.

- Maya massage as complementary alternative therapy considered as one of most effective therapeutic , low cost, option for reliving uterine prolapse manifestations.

Further researches:

- Study the effect of Maya massage versus other therapeutic option on reliving uterine prolapse manifestations.

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