



Women's perception and experiences regarding post partum exercise in Khartoum University Hospitals –Khartoum Locality -2015 Sudan

KEYWORDS

Postpartum, Exercises, Women Perception.

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ABSTRACT *Background: The postpartum period or puerperium is the six weeks after child birth, in which the body undergoes major physiological changes .It is a critical transition time for women affecting significantly her physical and mental health. Postpartum exercises are exercises performed after birth to improve physical and mental health of mothers and started as soon as possible in order to improve circulation, strength pelvic floor and abdominal muscles and prevent transient and long term physical and mental problems. There are several types but the important exercises are Kagle, Abdomen, Legs and feet and Relaxation.Objective: to study puerperal women perception regarding post partum exercises. Methods: A descriptive cross sectional hospital based study design was used .The data was collected using structured interview for 100 post partum women selected randomly from Khartoum university hospitals.March-juine 2015.Results: study showed that women knowledge regarding postpartum exercises (PPE) mainly (Kagle, Abdomen, Legs-feet andRelaxation exercises) was72% .Women performance of PPE mainly (Kagle, Abdomen, Legs-feet andRelaxation exercises) was 9% . Barriers to performing PPE, mainly ether they donot knew, aware of their health or occupied by the care of their children (37, 30, 13 respectively) Majoroury of Women 91% in Post partum period experience and practices traditional methods used Warm drink to relief pain and comfortable 70% used Warm perniem care with warm water mixed by certain herbal twice aday for comfortable and prevention of infection Talh for relaxation, prevention of infection and cofortable by enjoy its nice oder practices by 24%of the participants. There was no significant association between post partum exercise and socio-demographic and obstetric factors Conclusion: women had more knowledge than practices regarding postpartum exercises and majoroury experience and practices traditional methods as means of PPE.*

Introduction

Postpartum or puerperium is a period begins immediate after birth and lasts about 6 weeks or until body has returned to near pre-pregnancy state,in which anatomical and physiological changes during pregnancy have the potential to affect the women health and contribute to obesity (1,2). The postpartum period is a critical transition time for women; the body undergoes major changes affecting significantly the physical and mental health which need women to adjust physically and psychologically (3,4) By six weeks after delivery, most of the changes of pregnancy, labour and delivery have resolved and the body return to the pre-pregnancy condition (5). A good post partum care including post partum exercise (PPE) can influence the health for rest of the women life, exercise helps to improve the muscle tone which is stretched during pregnancy and labour, and offers a whole range of benefits for the mother;by speed up the recovery process and build valuable strength, would give energy, help to drop a few pounds , keep the women to be fit and helps the women to adapt to the physical changes in her body during the child bearing year(6).

The health benefits of physical activity are well recognized, and conversely sedentary habits and low levels of cardiorespiratory fitness are leading risk factors for subsequent development of cardiovascular disease(7). The exercises in post partum period is imprtant and essential to maternal health.(8).In uncomplicated birth, exercises should begin during the first postpartum day and increased gradually or slow progression, a new exercise can be added daily with each done five to ten times per day for at least six weeks after delivery .(1). Retain physical activity in post partum has been associated with psychological well been, decrease post partum depression, anxiety, sleep disorder and prevent urinary incontinence.(9,10). Exercise

is beneficial during any part of reproductive process and more benefit for post partum women where have been found to improve cardiorespiratory fitness, weigh loss, and prevent long term weigh retention (7)

Types of Postpartum Exercises: kegel exercise (Pelvic floor exercise),foot and leg exercise, relaxation exercise,abdominal exercise (abdominal breathing), pelvic tilting or rocking, head and shoulder raising ,leg raising .knee rolling and hip hitching (11).Abdominal tightening on outward breath, foot bending and foot stretching, ankle rotating, leg sliding, straight curl_up and diagonal curl_up. (12)

General benefits of PPE: Hasten recovery, prevent postpartum complication, strengthen the muscles of the back, pelvic floor, and abdomen, facilitate perineal healing and help restore vaginal, perineal, and pelvic muscle tone by increasing circulation and by isometric muscle activity. (12) Promote weight loss, improve cardiovascular, improve mother mood, help prevent and promote recovery from postpartum depression (13) .Increasing lactation, enhanced mothering abilities and capacity to implement regular physical activity regimens for herself and her child. (14)Decrease urinary problem, promotes a feeling of well-being, improves circulation, helps reduce constipation, bloating, increases energy level, improves posture, helps sleep, promotes relaxation and rest, and relieves the lower back discomfort.(12)

Justification for the study: Although post partum exercises are shown to create a more benefits,and recommended to improve women health after birth, but it is not known where PPE is performed by women in Sudan or not, data on issues surrounding PPEwas not available to the best knowledge of the author, so the study conducted with a

view to develop a health education pamphlet on postpartum exercise as part of the safe motherhood.

General Objective: To study women perception regarding post partum exercises in Khartoum university hospitals.

Specific Objectives:

- To assess the knowledge among the mothers regarding postnatal exercises.
- To identify the practice of mothers on postnatal exercises.
- To find out the association between knowledge of mothers on postnatal exercises and demographic variables. (education level and parity)

Methodology

A descriptive cross section hospital based study was conducted in primary health care units in university of Khartoum hospitals (Soba and Saad abu alala hospital).

Sample calculated using formula for discriptive study, 100women were recruited randumly using simple randum sampling methods, during the period march –June 2015. A structured interview was

developed based on the literature,and data was collect-ed from mothers attended Postnatal visit

Result: Majouraty of the participants80% were young ladies, their age ranged between 20-39 years; most of them are house whifes 88% , their education level secondary school and university (42% and 34% respectively).38 women were primi parus and 62 were experinces more deliveries (48multiparus and 14 grand multiparous table (1).. knowledge of the participants regarding postpartum exercises (ppe) mainly (kagle, abdomen, legs-feet andrelaxation exercises) was72% table (2).women knowledge regarding benefit of post partum exercise was 75.4% table (3). women knowledge regarding benefit of kagel exercise was 46.8% table (4). women knowledge regarding benefit of leges and feet exercise was 80.3% table (5). women knowledge regarding benefit of abdominal exercise was 75.8% table (6). Women knowledge regarding benefit of relaxation exercise was 82 %tables (7). Women performance of ppe mainly (kagle, abdomen, legs-feet andrelaxation exercises) was 9% table (8). barriers to performing ppe, mainly ether they donot knew, aware of their health or occupied by the care of their children (37, 30, 13 respectively) table (9).43% Women experience and practices other Post partum exercises(Majourty 91% in Post partum period experience and practices traditional methods used Warm drink with Fenugreek or solenostemma argel to relief pain and comfortable and 70% used warm perium care with warm water mixed by certain herbal Garad (Acacia nilotica) or tea, twice aday for comfortable means.Talh(special type of Acacia smoke) for relaxation, prevention of infection and cofortable by injoy its nice oder which practiced by 24% of the participants and Tie the Abdomen for comfortable and walking were experinces by 17,13 respectively)table (10). Result reveals that there is no association between education level, number of deliveries and their knowledge regarding PPE.

Table (1) Demographic data and Obestetric Information of Post Partum Women n=100

Item	Result	Percent%
Age		
<20	8	8
20 -29	51	51

30- 39	29	29
≥40	12	12
Education level		
Illiterate	4	4
Primary level	24	24
Secondary level	42	42
University level	30	30
Social Status		
House whife	88	88
Employer	12	12
Obstetric Information		
Paraty		
Primipara	38	38
Multi para	48	48
Grand multipara	14	14
Types of delivery experinces		
Normal delivery	73	73
Operative delivery	21	21
Normal and Operative delivery	6	6

Table (2) Women Knowledge Regarding Post Partum Exercises and their Benefit n=100

No	Items	Correct Answer Frequency	%
1	Women Knowledge Regarding Benefit of Post Partum Exercise	75	75.4
2	Women Knowledge Regarding Benefit of Kagel Exercise	47	46.8
3	Women Knowledge Regarding Benefit of Leges and Feet Exercise	80	80.3
4	Women Knowledge Regarding Benefit of Abdominal Exercise	76	75.8
5	Women Knowledge Regarding Benefit of Relaxation Exercise	82	82
	Mean		72

Table (3) Women Knowledge Regarding Benefit of Post Partum Exercise n=100

No	Benefit of exercises post partum	Correct Answer Frequency	%
1	Regain health and get rid of access weight	85	85
2	Relife pain	76	76
3	Improve health and tolarence	81	81
4	Prevent constipation	64	64
5	Enhance circulation	89	89
6	Improve mood and decrease depression	85	85
7	Increase milk production and facilitate lactation	52	52
8	Strength abdominal musle	84	84
9	Increase appitite	63	63
	Mean		75.4

Table (4) Women Knowledge Regarding Benefit of Kagel Exercise n=100

No	Benefit of kegle Exercise	Correct Answer Frequency	%
1	Prevent haemorroid	45	45
2	Enhance bladder control and prevent incontinence	42	42
3	Prevent uterine prolabse	52	52
4	Strength pelvic flour muscle	43	43
5	Snhance good sexual in the future	52	52
	Mean		46.8

Table (5) Women Knowledge Regarding Benefit of Leges and Feet Exercise n=100

No	Benefit of leg and feet exercise	Correct Answer Frequency	%
1	Prevent edema	79	79
2	Prevent thromboses	83	83
3	Enhance circulation	84	84
4	Prevent or decrease varicose viens	75	75
	Mean		80.3

Table (6) Women Knowledge Regarding Benefit of Abdominal Exercise n=100

No	Benefit of abdominal exercise	Correct Answer Frequency	%
1	Prevent back pain	79	79
2	Mentain posture	73	73
3	Maitaine health for spine	72	72
4	Helps in retain uterus to be intra pelvis	79	79
	Mean		75.8

Table (7) Women Knowledge Regarding Benefit of Relaxation Exercise n=100

No	Benefit of relaxation exercise	Correct Answer Frequency	%
1	Helps the lady to be active and healthy	83	83
2	Increase appetite	76	76
3	Enhance sleep	87	87
4	Prevent anexity and depreition	82	82
	Mean		82

Table (8) Women performance of Post Partum Exercise n=100

No	Kagle, Abdomen, Legs and feet and Relaxation(yoga) exercise	frequency	%
2	Kagle exercise	6	6
3	Abdomen exercise	1	1
4	Legs and feet exercise	1	1
5	Relaxation exercise yoga	1	1
	total		9

Barriers to performing Post partum exercises

Table (9) Women opestical of Practices Post partum exercises (Kagle, Abdomen, Legs-feet andRelaxation) n=100

No	Items	Frequency	%
1	Not aware of Post partum exercises	37	37
2	Fear about their health	30	30
3	Occupy by their children	13	15
4	Neglection	6	6
5	Diffecult to do it post partum	3	3
6	Prefear to be fat post partum	2	2

Table (10) Women experience and practices in Post partum period regarding exercises n=100

No	Items	Frequency	%
1	Warm drink with Fenugreek or solenostemma argel to relief pain and comfortable	91	91
2	Warm perniem care using differnce traditional practice like warm water mixed by certain herbal (Garad (Acacia nilotica) or tea) twice aday for comfortable means	70	70
3	Moldy for relaxation, prevention of infection and cofortable by injoy its nice oder.	24	24
4	Tie the Abdomen for comfortable	17	17
5	Walking around	13	13
	Mean		43

Discussion

Postnatal exercise is playing important role such as encourage drainage of lochia , minimize the risk of deep venous thrombosis (DVT), contraction and relaxation of the pelvic floor muscles, diminish , prevent backache and genital prolapse, help in losing extra body weight and getting fit and healthy,women with no complications during pregnancy or delivery can resume exercise immediately after the delivery (15,16).

In this study knowledge of the participants regarding postpartum exercises (PPE) mainly (Kagle, Abdomen, Legs-feet andRelaxation exercises) was72%, almost same as study conducted in Selected Maternity Centres In Madurai in which the 74%of mothers had dequate knowledge regarding postnatal exercise(17). And better than what stated in the study post partum exercise among Negirian Women, that reveal 61% of women not aware that physical exercise enhance post partum health.(18) and only 20% mothers in other study had adequate knowledge regarding postnatal exercises (19) and two-thirds of the women were uninformed about postpartum exercises(20)

Knowledge regarding benefit of post partum exercise was 75.4%, this result was compatible with the Study which stated that women had basic understanding of the benefits of exercise during the postpartum period.(20)

It is widely known that Pelvic flour muscle exercise is a proven conservative therapy and it is the first line treatment for women who are suffering from Pelvic floor muscle disorder in this study women knowledge regarding benefit of kagle exercise was 46.8% but only 6 women performed it which consist with the study that mention knowledge score was good 51.2%but women practice scor was only10.7% (21)

Participant in this study illustrated that possible barriers to perform PPE, mainly ether they donot know,

aware of their health or occupied by the care of their children as mention by authors in other studies that: barriers of postpartum physical exercise mainly lack of assistance with childcare and insufficient time (22,23)

Majourty of women 91% in post partum period experience traditional methods as means for relaxation and suport, they used warm drink with Fenugreek or solenostemma argel to relief pain and comfortable 70% used Warm perneal care with warm water mixed by certain herbal (Garad (Acacia nilotica) or tea) twice aday for comfortable means which similar to what mention in study in india, that women used warm water to clean vulval area for the sam perpose. (24) And study in Thailand reveal that.postpartum women taking hot drink and hot bath (25).

This study show that 48% of participant not engage in any type of exercise which almost the same as what mention in study of Nigeria in which 47.8% of women not practiced PPE.(17) and more than what mention in the study conducted in China,in which only 3.8%of participant exercised regularly while 80%never participated in physical exercises.(26).and what stated In study conducted in Gauhati Medical College and Hospital 47% of mothers had inadequate practice of postnatal exercises.(18).while in other studies 22.4 % and19 % of participant performing exercises during the postpartum period respectively .(20,24)

Conclusion: women had more knowledge than practices

regarding postpartum exercises and majority experience and practices traditional methods as means of PPE

Recommendation: There is a need for the service to organised post partum exercise program that all women receive it before and during pregnancy, with the reminder following birth to prevent or relieve alotof problems.

In order to improve the knowledge and practice, good clinical practice guideline should be developed to train

and guide health providers and pamphlet on postpartum exercise for pregnant women.

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REFERENCE

- Clapp, Dr. James F. *Exercising Through Your Pregnancy*. Addicus Books: Omaha, Nebraska, 2002. 2; Mikeska, Erinn, CPT, and Dr. Christine Quatro, *Delivering Fitness*. Brown Books Publishing Group: Dallas, TX, 2004. 3-Troy, N. W. Is the significance of postpartum fatigue being overlooked in the lives of women? MCN: The American Journal of Maternal Child Nursing, 2003, 28 (4), 252–257. [www.appliednursingresearch.org/article/S0897-1897\(12\)00079-1/...](http://www.appliednursingresearch.org/article/S0897-1897(12)00079-1/...)
- Clapp, Dr. James F. III, MD. *Exercising Through Your Pregnancy*. Addicus Books: Omaha, Nebraska, 2002. 5. Brazil. Ministry of Health; Department of Health Policy Childbirth, Abortion and Puerperium : . Humanism assistance to the [Internet] woman. Brasilia ; 2001 [cited 2011 May 24] . Available in: http://bvsms.saude.gov.br/bvs/publicacoes/cd04_13.pdf .Links 6. A Morium A.linne Y.Lorence P.Diet or exercise or both for weight reduction in women after child birth (Review)Cochrane data base of systematic Reviews.2007;3:10-32. Doi:10.1002/14651858.cd005627.pub2.art.no.cd005627.(Pub Med) 7)5-D.C.Dutta, text book of obstetric 4thedition, J.P.publications 2004, page no 610-615 8. Yi-Li Ko,Chi-Li Yang,Li-Chi Chiang,Effects of Postpartum Exercise Program on Fatigue and Depression During "Doing-the-Month" Period, JNR 2008; 16(3):177-86. www.researchgate.net/profile/LiChiChiang/publication/23259089.DOI:10.1097/01.JNR.0000387304.88998.0b 9.HAY smith j,et al, physical therapy or prevention of urinary and fecal incontinence ,2007 [http://www.ncbi.nlm.nih.gov/pubmed/15384571](http://anser.yahoo.com/question/India/qid20080930122045AAVR6NO10-Larson-MegarDE.EffectofPostpartumexerciseonmotherandtheiroffspring:Areviewoftheliterature.OBES.Res.2002;10:841-853.(PubMed11)AnnammaJancob:ComprehensiveTextbookofmidwifery. Secondedition2008. 12) Marcia L.London , Patricia W.Ladewig , Jane W.Ball , Ruth C.Bindler :Maternalandchildnursingcare ,secondedition2005 . 13-Lovelady CA1. The impact of energy restriction and exercise in lactating women. Adv Exp Med Biol. 2004;554:115-20. <a href=) 14- Roy, Brad A.Postpartum Exercise ACSM'S Health & Fitness Journal:2014 Volume 18- Issue 6 - p 3-4 doi: 10.1249/FIT.0000000000000071 <http://journals.lww.com/acshhealthfitness/Fulltext/2014/11000/PostpartumExercise.3.aspx>. 15-American College of Obstetrics and Gynaecology (ACOG) Committee Opinion 2009: Exercise during Pregnancy and the Postpartum Period. 2009, <http://www.acog.org/Resources%20and%20Publications/Committee%20Opinions/Committee%20on%20Obstetric%20Practice/Exercise%20During%20Pregnancy%20and%20the%20Postpartum%20Period.aspx>. 16-Scott S. Exercise in the postpartum period. ACSM'S Health and Fitness Journal. 2006;10(4):40–41. Doi 10.15296/ijwhr.2015.18 www.ijwhr.net/pdf.php?id=10317-Darling B. Jiji1*And Bazil Alfred Benjamin2, Knowledge And Attitude Of Postnatal Mothers Regarding Self Care After Childbirth In Selected Maternity Centres In Madurai Darling B Jiji & Bazil Ab. / Journal Of Science / Vol 4 / Issue 1 / 2014 / 40-44. <http://Dx.Doi.Org/10.1590/S0080-62342012000600007> www.Journalofscience.Net 18-A. F. Adeniyi, O. O. Ogumike, and T. R. Bamikefa Postpartum Exercise among Nigerian Women: Issues Relating to Exercise Performance and Self-Efficacy ISRN Obstet Gynecol. 2013; 2013: 294518. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3697309/>- doi: 10.1155/2013/294518 19-Jharna Sarkar,Gitumoni Konwara, L. Kharbynngar Dasb. Assessment of knowledge and practice regarding postnatal exercises among mothers admitted in postnatal ward in Gauhati Medical College and Hospital, j of obstet gynecology barpeta, ,2013, 1(1)32 <http://www.journal.barpetaogs.co.in/pdfs/1152.pdf>. 20-Francis A. Frimpong & Kwadwo O. Appiah-Kubi. Knowledge, Attitudes, Beliefs And Practices Of Postpartum Women Towards Exercises In Accra Metropolis, Ghana, ghana journal of physiotherapy firstscientific congress of Gana physiotherapy association . 2012 <http://gjmedph.org/uploads/O3-Vo3No5.pdf> 25-Kaewsarnp, etal Traditional postpartum practices among thai women college of Nursing Suraburi,Thailand 2003. www.sh.mahidol.ac.th/hssp/theses/2005/.../kounng_lo.pd 26- NLin ,L Mao,XiSun , Li Liu,B Chen and Q Ding . Post partum practices of puerperal women and their influencing factors in three regions of Hubei, China BMCpublic Health 2006,6:274 Doi:10.1186/1471-2458-6-274 [HTTP://WWW.BIOMedcentral.com/1471-2458/6/274](http://WWW.BIOMedcentral.com/1471-2458/6/274)