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D Bhuvaneshwari
Professor and Principal,
Rathnamma School and
College of Nursing, Gudur,
Andhra Pradesh, India

A Vimala
Professor and Principal,
Venkateswara College of
Nursing, SVU, Chennai, Tamil
Nadu, India

Kantha Katari
Professor, Department of
CHN, Narayana College of
Nursing, Nellore, Andhra
Pradesh, India

Dr. Gopinath Subramanian
Principal, Mythili College of
Nursing, MIMS, Gudur,
Andhra Pradesh, India

Corresponding Author:
D Bhuvaneshwari
Professor, Principal,
Rathnamma School and
College of Nursing, Gudur,
Andhra Pradesh, India

Impact of pelvic rocking exercise (PRE) with breathing ball on - endorphin levels in third trimester pregnant women in selected Tertiary Hospital, Tamil Nadu, India

D Bhuvaneshwari, A Vimala, Kantha Katari and Dr. Gopinath Subramanian

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Abstract

One of the distresses in pregnancy is back torment, and it will increment alongside the expanding of gestational age. Pelvic shaking practices utilizing birth balls can extend pelvic muscles, oversee agony, and increment solace; consequently they can loosen up the body and increment beta-endorphin levels. The review meant to dissect the distinctions of pelvic shaking activities of right-to-left, back-forward, and turning developments utilizing a birth ball against beta-endorphin levels. This review utilized a semi exploratory strategy with a pre-posttest plan. The examining strategy utilized coincidental testing with an all-out example of 30 examples. Respondents were separated into three gatherings utilizing a basic irregular strategy. Bunch 1 got the option to-left pelvic shaking works out, bunch 2 was given the back-forward pelvic shaking activities, and gathering 3 was relegated the turning pelvic shaking practices utilizing a birth ball with a term of 30 minutes for eight gatherings. Investigation utilizing matched tests, one-way test, and covariance examination test with a worth: 5%. There was no distinction in pelvic shaking activities of right-to-left, back-forward, and turning developments utilizing the birth ball to β -endorphin levels. Pelvic shaking activities of right-to-left, back-forward and turning developments utilizing a birth ball couldn't increment beta-endorphin levels in pregnant ladies.

Keywords: Pregnant women, pelvic rocking, birth ball, beta- endorphin

Introduction

Pregnancy can be characterized as a change of life when birth. It was considered as a time of going through the course of readiness both genuinely and mentally. The consistence of pregnancy was the amplification of the stomach, physical changes, and hormonal changes. It could affect on low back torment, enlarging, and squeezes in the legs. Inconvenience can cause rest unsettling influences of the mother and influence the embryo.

Over half of pregnant ladies experience uneasiness, one of which is low back torment during pregnancy. Back agony will increment alongside the increment of gestational age and can make extreme inconvenience cause sleep deprivation, engine incapacity, upset everyday exercises, and will bring on some issues while really focusing on children after birth. Consequently, on the off chance that it isn't dealt with right away, it will have an adverse consequence, like long haul back torment and expanded torment during work.

This aggravation will increment alongside the expanding of gestational age. At the point when the uterus extends during pregnancy, the focal point of gravity will push ahead so that all loads rely upon muscle strength and joint unwinding. Ill-advised stance can stifle extending and cause weakness in the body, particularly in the spinal string, which will cause low back torment in pregnant ladies. Low back torment is a mind boggling issue, which can bring about framework harm. Also, can cause nervousness and dread, subsequently expanding pressure and physiological changes both in the physical position and because of the neurotic cycle. Back torment is in many cases felt by pregnant ladies during the second trimester of pregnancy, at about 22 weeks of gestational. In view of a Starter Study directed in the Primary health center, Thandalam, Kanchipuram City, 49 pregnant ladies experienced back torment in the third trimester of pregnancy.

Both pharmacologically and non-pharmacologically endeavors to decrease or beat back torment have been made in different ways. Pharmacological strategies, in particular the utilization of pain relieving drugs, while non-pharmacological strategies incorporate pregnancy work out, pregnancy yoga, rub, unwinding methods, and lessen torment discernment. This technique can likewise expand the solaces during pregnancy to conveyance on the grounds that the mothers have some control over back agony and tension and dread.

Pelvic shaking practices are a method for keeping up with snugness in the pelvic muscles and can ease back torment. Pelvic shaking exercise is a pelvic movement preparing toward revolution by shaking the pelvis to the right-left, to and fro, and turning. This action can loosen up the body. Subsequently it can deliver endorphin chemicals during pelvic shaking practices regularly and consistently.

Such activity can be in danger of causing knee and wrist joints to end up being sore, so utilizing a base is suggested. To play out these developments, pregnant ladies can utilize helps like a birthing ball. The birthing ball is one of the guides that intend to control, diminish torment, and lessen uneasiness.

The strategy for evaluating torment is utilizing the Visual Simple Scale (VAS) or utilizing the Numeric Rating Scale (NRS), this technique can decide the degree of agony despite everything center around the patient's agony power and is as yet emotional. Likewise, this technique actually has an illness, i.e., specialists need more exact estimations to give an appraisal, patients should be available at the hour of estimation, and outwardly and intellectually ready to take estimations. So it is important to gauge torment utilizing a more precise method.

In view of the foundation, it is important to additional review the viability of pelvic shaking works out (PRE) developments from right to left, this way and that, and pivot with the birthing ball to lessen back torment in third-trimester pregnant ladies. Hence, the review was intended to dissect the distinctions of pelvic shaking activities of right-to-left, back-forward, and pivoting developments utilizing a birth ball against beta-endorphin levels.

Methods and Materials: This examination was a semi exploratory review utilizing a pre-post-test research plan. The examples were chosen by utilizing the coincidental inspecting procedure on the exploration subject. The quantity of tests in this review was 30 examples, isolated into three gatherings by basic irregular examining. Each gathering comprised of 10 respondents.

The intercession bunch was gotten the option to-left development, bunch 2 was back positive headway, and gathering 3 was pivoting development. The consequences of β -endorphin levels were done when the intercession multiple times utilizing research center tests at the Primary Health Center. This study utilizing a few instruments to gauge the factors: birth ball, needle, ETD tubes, hands-on, and so on.

Results

Characteristics of Respondents: Table 1 showed that most of respondents are 20-35 years of age either in the gathering of right-to-left development, back forward, and pivoting. In the equality of respondents, a large portion of the primigravida in the gathering of right-to-left development and back forward. While, in the pivoting bunch, the larger

part is multigravida. In the training level, the vast majority of the respondents had senior secondary school instruction at each gathering, and at work status, a large portion of the respondents had occupations in all gatherings (see table 1).

Table 1: Characteristics of respondents

Variable	Group						p-value
	Right-to-left		Back forward		rotating		
	n	%	n	%	n	%	
Age							
< 20 years	1	10	0	0	1	10	
20-35 years	7	70	10	100	7	70	0,831*
>35 years	2	20	0	0	2	20	
Total	10	100	10	100	10	100	
Parity							
Primigravida	7	70	6	60	4	40	
Multigravida	3	30	4	40	6	60	0,913*
Total	10	100	10	100	10	100	
Education							
Elementary	1	10	0	0	0	0	
Junior High School	2	20	1	10	1	10	
Senior High School	6	60	6	60	6	60	0,502*
Bachelor	1	10	3	30	3	30	
Total	10	100	10	100	10	100	
Occupation							
Unemployment	2	20	5	50	4	40	
Working	8	80	5	50	6	60	0,133*
Total	10	100	10	100	10	100	

Distribution of β -endorphin levels in the pelvic rocking exercises (PRE) movement with the birthing ball

Table 2 showed that the degrees of β -endorphin in the gathering of right-to-left development, the majority of the β -endorphin levels expanded so a lot (12.87%). in the back positive progress bunch, β -endorphin levels diminished so a lot (2.94%), and in the pivoting bunch, for the most part encountered a reduction in β -endorphin levels with a worth (9.15%).

Table 2: Frequency of Cleanliness of Home Environment

Variable	Group					
	Right-to-Left		Back Forward		Rotating	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
β -endorphin level	0,8	7,8	4,0	9,0	11,8	14,8
	8,2	15,8	4,2	12,0	15,2	24,3
	8,6	17,2	15,2	15,1	15,7	24,7
	11,4	17,7	15,3	17,8	20,6	25,0
	12,5	26,8	26,8	19,5	28,7	25,7
	18,7	29,9	33,6	22,5	32,1	35,4
	24,5	40,5	39,6	24,5	62,6	41,8
	28,9	50,0	40,1	35,0	70,4	42,0
	36,0	63,8	47,1	46,8	74,2	47,6
	58,4	67,2	59,5	53,5	119,0	78,3

Mean difference of β -endorphin levels before and after the pelvic rocking exercises (PRE) on right-to-left movement with the birthing ball

Table 3 showed that the normal β -endorphin level prior to being given intercession is 20.80, and in the wake of being given mediation, the typical degree of β -endorphin is expanded to 33.67. In view of measurable outcomes utilizing matched example t-test on β -endorphin levels, p -esteem 0.097 acquired in the mediation gathering of pelvic shaking practices with right-to-left development. These

outcomes demonstrate that measurably, there is no huge contrast in the degrees of β -endorphin when being given a mediation as a result of the worth of ρ -esteem <0.05 . Hence, it tends to be reasoned that there is no impact of pelvic shaking works out (PRE) developments from right to left with the birthing ball against β -endorphin levels in pregnant ladies who experience back torment in the third trimester.

Table 3: Mean difference of β -endorphin levels before and after the pelvic rocking exercises (PRE) on right-to-left movement with the birthing ball

Variable		Mean \pm SD	ρ -value
β -endorphin level	Pretest	20, 80 \pm 16, 97	0, 097
β -endorphin level	Posttest	33, 67 \pm 20, 87	

Mean difference of the β -endorphin level before and after the pelvic rocking exercises (PRE) on back-forward movement with the birthing ball

Table 4 showed that the normal β -endorphin level prior to being given mediation is 28.54, and subsequent to being given intercession, the typical degree of β -endorphin is diminished by 25.60. In view of measurable outcomes utilizing matched example t-test on β -endorphin levels, ρ -esteem 0.502 was acquired in the mediation gathering of forward-in reverse pelvic shaking works out. These outcomes show that measurably, there is no massive contrast in the degrees of β -endorphin when being given a mediation on account of the worth of ρ -esteem <0.05 . Hence, it very well may be reasoned that there is no impact of the back-positive progress of pelvic shaking works out (PRE) with the birthing ball against β -endorphin levels in pregnant ladies who experience back torment in the third trimester.

Table 4: Mean difference of the β -endorphin level before and after the pelvic rocking exercises (PRE) on back-forward movement with the birthing ball

Variable		Mean \pm SD	ρ -value
β -endorphin level	Pretest	28,54 \pm 18,66	0.502
β -endorphin level	Posttest	25,60 \pm 14,58	

The difference before and after the pelvic rocking exercises (PRE) on rotating movement with the birthing ball on the β -endorphin level

Table 5 showed that the typical degree of β -endorphin before given intercession is 45.11, and after the given mediation, the typical degree of β -endorphin diminishes 35, 96. In view of factual outcomes utilizing matched example test est at β -endorphin levels acquired ρ -esteem 0.442 in the pelvic shaking practices turning mediation bunch. These outcomes show that measurably, there is no huge contrast in the degrees of β -endorphin when being given a mediation as a result of the worth of ρ -esteem <0.05 . In this way, there is no impact of pivoting development of pelvic shaking works out (PRE) with the birthing ball on β -endorphin levels in pregnant ladies who experience back torment in the third trimester.

Table 5: The difference before and after the pelvic rocking exercises (PRE) on rotating movement with birthing ball on the β -endorphin level

Variable		Mean \pm SD	ρ -value
β -endorphin level	Pretest	45,11 \pm 35,40	0,442
β -endorphin level	Posttest	35,96 \pm 18,05	

Discussion

In light of this review, there were no tremendous contrasts both when being given mediation on β -endorphin levels, many elements influence β -endorphin levels like pressure, grimness, tension, and dread. Be that as it may, in this review, the analysts didn't talk about these variables. β -endorphin will increment in the event that the body is loose and not encountering pressure or dread.

In this review, pregnant ladies experienced dread while taking blood tests, and respondents felt that this was the sort of thing that was not used to, so there was as yet tense and not loosened up feeling. Practice is one of the elements to increment β -endorphin levels assuming that it is done ceaselessly, and respondents are feeling good or loose. Every individual has each body's reaction. In this way it can influence the consequences of β -endorphin levels.

Low back torment is affected by many variables, including expanding gestational age and weighty work or movement. During pregnancy, the relax in chemical will increment and in a roundabout way will make joints debilitate. Broadening of the uterus in pregnant ladies can bring about loss of muscle strength and abs extending because of gravity inclining forward. Accordingly, consequently pregnant ladies attempt to further develop pose by moving the body towards the back.

It was predictable with a past report that detailed that activity during pregnancy doesn't influence the pervasiveness of lumbopelvic torment. Ladies who are offered ordinary activity courses appear to be ready to adapt better to the issue. As per Hau (2012), the examination showed that the birth ball could influence work torment. Nonetheless, it isn't huge and contends that the impact of the birth ball is like different techniques.

This is a result of the respondents of third-trimester pregnant ladies encountering low back torment; the vast majority of them were encountering an expansion in liquid body volume (hypervolemia) where the condition has started to happen toward the finish of the subsequent trimester. Diminished degrees of β -endorphin are additionally brought about by pressure during pregnancy and significant active work. The job of β -endorphin delivered by the body through the cerebrum (Nerve center) has diminished because of the presence of torment synapses, accordingly it doesn't obstruct the aggravation which brings about respondents are not being loose or quiet.

Conclusion

There is no contrast between pelvic shaking works out (PRE) left, one after the other and pivoting developments with the birthing ball to levels of β -endorphin in trimester III pregnant ladies. There is no distinction when the option to-left development of pelvic shaking works out (PRE) with the birthing ball on β -endorphin levels in third-trimester pregnant ladies. There is no distinction when the back-positive headway of pelvic shaking works out (PRE) with the birthing ball on β -endorphin levels in third-trimester pregnant ladies. There is no distinction when the alternating development of pelvic shaking works out (PRE) with the birthing ball on β -endorphin levels in third-trimester pregnant ladies.

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