

Original Article

Instructional Design "Postpartum Fitness" for Midwife Staff of Shemiranat (Tehran, Iran) Health Network

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Abstract

Background: One of the postpartum cares lives is supporting and encouraging them more to exercise after delivery and monitoring them. Health care workers, particularly midwives have a great role in the promotion of sport activity. Purpose of this study is Designed training for "postpartum fitness" by Roth well approach for midwives at health network in Shemiranat.

Materials and Methods: This research is kind of Instructional design. Sampling was done by using census method Data collection was done by multiple choice tests for knowledge and attitudes of questionnaire and practical assessment exercise was part. After assessment and instructional design and was done Roth well model and Ganyh strategies.

Results: Average response to questions in the cognitive domain was 49%. In this study 92% of the employees have positive attitude to importance and impact of the study. The result of the data related to the workplace of participants is health centers (53.3%). Most frequency is for who has less than 5 years' work experience (50%) and most frequency is for official staff (43.3%), most educational level related to bachelors (83.3%) and the highest age rate is between 30-40 years old (40%).

Conclusion: Positive attitude towards this issue and earn score below %80 indicates a need for staff to learn and raise awareness about the above topic. Create knowledge, training, counseling mothers about this issue are the midwife duties. This reflects a greater emphasis on design education.

Keywords: Instructional Design, Exercise after childbirth, Midwife, The postpartum period

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Introduction

Living without mobility is one of the most important potential risk factors for many diseases¹. Pregnancy and postpartum delivery to the normal course of life in certain parts of the life of women have significant psychological and emotional changes. The lack of awareness of these changes and how to deal with its potential problems can lead to injuries; sometimes

resulting in it can make the mother even years after childbirth is a discomfort or a problem that usually affects women during aging. Women during childbirth and postpartum period have physical symptoms that can affect their life expectancy. Significant changes in their physical and emotional health during the postpartum period lead to poor quality of life. The lives of women in this period are sensitive². Reducing the flexibility of the muscles in the body leads to poor

and unsightly stature, and this asymmetry causes pressure and back pain (back pain and other musculoskeletal pain). On the other hand, flexural relaxation during postpartum causes women who are more likely to be involved in home care and child care, especially when they are in a false position while doing work, are more likely to experience premature fatigue³. A postpartum care that seems to affect the health and quality of life of the mother supports her ability to move and perform postpartum exercises and take care of it. Lactation and exercise are the most important for maintaining and improving the health of the mother, and exercise during lactation has not had any negative effect on the weight, height, and growth of infants^{4, 5}. Regular exercise exercises, especially during postpartum period, will enable those who have regular physical activity to achieve a higher level of health and well-being⁶. Pelvic exercises in women with urinary incontinence can improve quality of life and reduce sexual problems⁷. Research results in 2010 showed that despite the knowledge of nursing mothers about the benefits of exercising in postpartum period, exercise in this period is very low and recommends considering the physical and mental benefits of exercise in improving the health of mothers and given that the cadre Health care, especially midwives, has the most encouraging role in conducting sports activities by pregnant women and after delivery, due to direct contact with mothers, and to design short-term health programs for postpartum health care for nursing mothers^{7, 8}. Given that members of the family health care team play an important role in maintaining the health of mothers and their families during postpartum period, one of the categories that should be promoted and trained to women is post-partum exercise⁹. In the results of other researches, it is recommended that due to the high frequency of maternal health problems in postpartum, changes in the nature of postpartum care, emphasis on postpartum care by health care providers, focus on research on this course, program design Long-term training for mothers and careers¹⁰. The problem of adolescent mothers' postpartum delivery is that, with the lack of exercise programs and lack of education, the current problem is that obesity remains unresolved. Health workers,

especially midwives working in health centers and networks, play an important role in the care of women during pregnancy and after maternity and one of the categories that should be discussed and encouraged by them, and taught to women, is to carry out appropriate exercises during pregnancy and after childbirth and this is not only due to the health of mothers due to the close relationship between mother's health and the health of the child and even the rest of the family. On the other hand, in the booklet designed by the Ministry of Health that was used in health care centers, there are several ways to exercise physical activity and exercise for mothers either in pregnancy and post-natal periods, and there are no classes in this regard, while teaching pregnant and post-natal sports is part of the midwives' job description. Various studies have suggested that midwives have not been educated about this and cannot be taught to mothers^{11, 12}. Moreover, the researchers emphasized the importance of holding such classes due to their beneficial effects by midwives who have had the most exposure to maternal afterbirth.

Methods

This study is a design based on Roth well educational design model for training midwifery staff of Shahid Beheshti University Hospitals and Health Centers. Educational design in this study, based on the educational planning cycle, consists of ten steps. First stage Learning Needs Assessment, second stage Characteristics Analysis of Learners, third stage three Environmental Analysis, fourth stage Job and Job Analysis, fifth stage, Formulation of Functional Objectives, sixth stage Performance Evaluation Evaluation, Seventh Step, Task Segmentation, Eighth Step Selection of Educational Strategies, Ninth Stage, Training Design and Stage Tenth Assessment Educational. Due to the fact that the topic is part of the duties of an obstetrician, the work analyst and occupation are not included. Also, due to the fact that the training design was provided for individuals within the organization, there was no need to evaluate the work environment.

In the first stage, in order to determine the educational needs of the target community, a test was conducted to assess the knowledge and attitudes of the researcher, whose questions were based on the Ministry of Health,

and medical education (regulations for post-natal midwives: birth certificates, training for post-rehabilitation exercises, postpartum education training, etc.), for midwives, in accordance with the methods of problem-solving and the educational design cycle, to determine the needs educational staff of midwives working in Shemiran Healthcare Network.

This bench test consisted of two parts: the first part was demographic information, and the second part contained 27 questions and one part, including the questions of the attitude and the next, related to their skill assessment questions. The reliability of this study by conducting a re-test of severity and correlation coefficient in this study was 97.1%. The reliability of the checklist was investigated through Inter Rater Reliability. Thus, two observers with a checklist observed and evaluated the exercise method in the midwifery who knew these exercises. The correlation coefficient of the check list was 86.7%.

According to the results of this test, the knowledge of midwives was estimated to be 49%. However, given that postpartum exercise education is a part of the duties of the midwife and the core curriculum, they should have the knowledge and skills required in this regard, so the design of training in this regard it is necessary.

The population of this study is midwifery staff working in the family health center and centers of the Shemiran Health Network (50 people) and midwifery staff employed in the network headquarters (10 people), a total of 60 people. The study environment in this study was the Family Health Unit and Centers of the Shemiran Health Network, and, of course, some of the headquarters staffed by the midwife. Because of the number of midwives (60 people), there was no need to undertake a placement process, and the total number of midwives employed in the family health unit was census-based.

It should be noted that during the evaluation of the skill of the midwives of the network for postpartum exercise, since after performing the practical test for 15 midwives, none of them could even complete one stage of exercise, with the discretion of the supervisor, it was not taken from the rest of the target group. The practical experiment was stopped.

Ethical considerations of the study were also

considered in three sections: respect for human dignity, responsibility for the interests of the community and the network, and respect for integrity and integrity.

To design the test, this research was based on the views and suggestions of a specialist, sports reference books, and specialized articles based on midwives' job descriptions. The tool used in this research is a self-made four-part test, which was approved by the supervisors and assistant professors in three stages.

The first part was about the individual characteristics of the participants in the research, and the second part, the discovery of the educational needs and the level of knowledge, and their knowledge of the subject of research, and the third part of their views and attitudes on the subject and the fourth part of their skill assessment. Each test was coded and the scores were entered into SPSS software and analyzed. Data were analyzed using Chi-square, T-test and Mean.

Results

The results of job data extraction, educational status, age, work experience, type of recruitment (Table 1) showed that the highest number of employees participating in this study was in the health care centers (83.3%) and the lowest in the headquarters (16.6%) had the most experience with experience less than 5 years (50%) and the lowest work experience of 6 to 10 years (18.3%), the highest number of employees participating in the survey was for official employees (48.3%). The highest degree of education was related to bachelor degree (83.3%) and the highest age group was 30-40 years old (40%) and the lowest age group was more than 40 years old (26.7%).

According to Table 2, the most positive attitudes toward the beneficial effects of achieving postpartum satisfaction in preventing cardiovascular disease, diabetes, hypertension, and so on. According to the findings of this study, the average employee awareness is 49%.

According to the findings of the study, the highest percentage of responding to cognitive questions was related to the necessary tests for postpartum exercise (98.3%) and the lowest percentage of responding to questions about postpartum respiration (0%) (Table 3 and 4) Also, there was not a significant relationship between the mean points of attitude and knowledge

Table 1: Frequency distribution of service place, degree, age, work experience and type of employment of health network staff.

		The number of midwives	Percent
Workplace	Health Care Center	50	83.33
	Headquarter	10	16.66
Educational status	Associate degree	9	15
	Bachelor Degree	50	83.3
	Master Degree	1	1.7
Age	20-30	20	33.3
	30-40	24	40
	More than 40	16	26.7
Work experience	Less than 5	30	50
	6-10	11	18.3
	More than 11	19	31.7
Type of recruitment	Trainee	14	23.33
	Contract staff	17	28.33
	Official staff	29	48.33

Table 2: Summary of Descriptive statistics answer to the attitude questionnaire by midwives working in the Shemiran Healthcare Network.

Completely Disagree		Disagree		No Idea		Agree		Completely agree		Question
P	N	P	N	P	N	P	N	P	N	
0	0	5	3	3.3	2	50	30	41.7	25	1
0	0	0	0	5	3	41.7	25	53.3	32	2
0	0	71.7	43	11.7	7	8.3	5	8.3	5	3
0	0	71.7	43	18.3	11	8.3	5	1.7	1	4
0	0	0	0	0	0	25	15	75	45	5
0	0	95	57	3.3	2	1.7	1	0	0	6
0	0	7.1	1	8.3	5	48.3	29	41.7	25	7

Table 3: Summary of how to respond to common questions for midwives working in Shemiran Healthcare Network.

P	N	How to answer all cognitive domain questions
11.11	3	Very good
14.81	4	Good
29.62	8	Medium
44.44	12	Weak

Table 4: Summary of how to respond to common questions for midwives working in Shemiran Healthcare Network.

How to answer all cognitive domain questions				Correct answer		Question
Week	Not Bad	Good	Excellent	P	N	
✓				8.3	5	The correct movement to put the uterus into its proper position
✓				21.7	13	Failure to increase abdominal pressure during exercise to strengthen pelvic muscle
✓				35	21	Time to resume exercise at a professional athlete's mother
	✓			55	33	Time to start exercising in mothers who have given birth naturally
		✓		71.7	43	Time to start exercising in mothers who have given birth by cesarean delivery
✓				48.3	29	The effect of inappropriate exercise on the quality of breast milk
✓				48.3	29	Define diastase
✓				96.7	26	Place of effect of relaxin hormone on pregnancy
			✓	96.7	58	Apply kegle exercises
✓				8.3	5	The duration and severity of postpartum exercise
	✓			61.7	37	The hormone is responsible for increasing blood flow during exercise
			✓	93.3	56	Effective exercise in the sense of repetitive urination in the first week after childbirth
			✓	98.3	59	Essential tests before starting postpartum exercise
✓				98.3	59	Significant complication due to lack of correction of abdominal diastase
✓				31.7	19	The correct position of the mother when performing pelvic floor muscle boost exercises
		✓		86.7	25	Advice to mothers who want to quickly get their abdomen down
	✓			53.3	32	Items that are not part of the effects of physical activity after childbirth
✓				46.7	28	The urgent need for immediate rectal prosthesis examination is required when the distance between these muscles is more than 2.5 centimeters
✓				0	0	Appropriate respiratory training after childbirth
		✓		78.3	47	Steps and duration of Kegel exercises

✓	65	39	Correct condition during rest after delivery
✓	55	33	Observe the right time to carry after delivery
✓	6.7	4	Pelvic tilt exercise usage
✓	76.7	46	The most effective prerequisites for postpartum fitness
✓	55	33	Exercise suitable for eliminating of lower dose of the waistband
✓	51.7	31	The most suitable exercise to eliminate abdominal fat
✓	56.7	34	Exercise suitable for strengthening muscle during exercise after childbirth

with demographic characteristics of individuals.

Discussion

The results of the test in their cognitive and attitudinal domains showed that the average percentage of correct answers to cognitive questions was 49%. In this regard, the results of some studies are not consistent with the findings of the present study, as these studies have reported an average percentage of correct response to cognitive questions above 80%, since in any study that is based on the knowledge and core curriculum of each field of study; the minimum required knowledge has been 80%¹³. Considering the goals of this study, it was first of all to determine the attitude and knowledge of midwifery staff in the Shemiran Healthcare Network regarding postpartum fitness and considering that addressing this issue is a description of the duties of the midwives and the key to them. After reviewing the necessity of performing the design of the training in this category and seeing to solve this problem. In this study, 92% of the staff did not have a positive attitude toward the importance and impact of this study, one percent had negative attitudes and 7% had no opinion. None of the midwives were able to perform exercise-related exercises in the functional area.

On the other hand, the findings of the present study showed that most of the cognitive domain responses did not have a significant relationship with the demographic characteristics of the subjects; therefore, it should be taught to all age groups of midwives, with a variety of work and education

levels, etc. The other results of the study showed that there was no relationship between the level of education of the individuals and their level of knowledge; therefore, all midwives' education was necessary¹⁴.

In the study of Paulin et al. (2006), most midwives were well aware of this issue. The problem was consistent with the results of this study. In the study of Khosrawi Nasab (2008), it was determined that by training one can raise the level of knowledge and expertise of individuals in order to better perform their duties¹⁴.

In the present study, the performance of midwives increased after the study package and their motivation increased. In the study of Sima Ghasemi et al. (2012), it has been emphasized that short-term sports classes should be held for mothers in health centers⁸. This emphasis is consistent with the need for this study. Gati Berazandeh et al. (2000) in their study aimed at mothers with postpartum exercise classes concluded that considering the fact that members of family health care staff play an important role in maintaining the health of mothers and their families during postpartum period One of the categories that should be discussed and encouraged by women is to educate women, Performing postpartum exercises and it is better to do so by conducting individual and group counseling in health centers to increase the level of knowledge and practice of women in this area, so that it can be an effective step to raise the level of maternal and child health⁹. Through its various care, educational, counseling and support roles, the midwife benefits from unique opportunities to promote maternal, child

and family health¹⁴. Midwives and gynecologists in health centers and public and private clinics, while stressing the benefits of sport, should encourage women to continue their sports activities during pregnancy and after childbirth by holding training sessions and counseling sessions¹⁵. Improving the quality of care is not possible without regard to the views and expectations of patients, and midwives play an important role in providing pre and post natal care and should be aware of the factors affecting the satisfaction of carers¹⁶. One of the most important duties of midwives is to educate mothers¹⁷. Providing midwives with adequate and sufficient knowledge and increasing their ability to make decisions will improve their performance. Continuing medical education should be tailored to the needs of the community health and educational needs of the staff. Midwifery managers and administrators should review, modify and develop existing policies and plans for mothers' health, and provide them with the necessary education and quality of service, which is the main objective of improving their quality of care. The training guide is based on summarizing and concluding expert opinions about treating a disease or providing recommendations for the treatment of that disease¹⁸. But today, in the design of the curriculum, in addition to the opinions of experts, systematic information and conclusions from valuable scientific documents are also used. In general, a useful educational guide provides useful and scientific decisions. In the other study, with a view to the simplicity and low cost of using the educational package and its relevance to health centers, midwives are in a good position to provide such services¹⁹. The recommendations of this study are also consistent with the use of the educational package and package that is the focus of this study.

Conclusion

The positive attitude of the staff towards the need for postpartum exercise training shows the need for employees to learn and raise awareness about the above topic. The creation of knowledge, education, counseling and guidance of mothers is part of the midwifery duties, which indicates more emphasis on the design of education. As the results of this study also show, the design of training and educational

content should be appropriate for staff in line with their educational needs. Regarding this, there is no research on the subject in Iran. It is suggested that after midwifery training, Fidbaki will take a look at increasing knowledge, attitude and practice of midwives. Also, the design training should be used in other health centers and networks. Also, this curriculum is presented as a compilation CD and presented to learners and, in the end, given that training of pregnancy exercises is institutionalized and trained in hospitals and health centers. Also, given the urgent need of mothers, sports after giving birth, they will also be trained.

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