Teach Back Based Self-Care Program: Impact on Postpartum Health-Related Quality of Life among Primiparous Women

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Abstract

Background and aim: Teach-back is a method of confirming what the patients know by using their own language. It is a communication approach as well as healthcare before providing any additional details, the professional provides the details and then encourages the individual in question to respond and confirm their understanding. **Aim:** It was to assess the impact of teach back based self-care program on postpartum health-related quality of life (QoL) among primiparous women. **Methods:** The current study was conducted using a quasi-experimental research methodology (Pre-Posttest). **Setting:** This research was applied at the post-natal follow-up clinics and the well-baby clinics of Maternal and Child Health Center in Shebin Elkoom, Menofyia Governorate **Sample:** Based on the sample calculation, a purposive sample of 60 women was selected. **Instruments:** For data collection, two instruments were used: (1) a structured interviewing questionnaire and (2) a health-related QoL questionnaire (WHOQOL-BREF). **Results:** There was a significant difference between pre and post intervention stages as regard to physical, psychological, personal and environment domains of studied women. Higher health-related QoL scores revealed significant changes between pre- and post-implementation of a teach back-based self-care program. **Conclusion:** The current study found a significant increase in postpartum health-related QoL after the application of teach-back based self-care program. The current findings allow the first study hypothesis to be accepted. **Recommendations:** Reinforce using teach-back based self-care program as a portion of routine postpartum care. Replication of the study with larger sample from different settings to advance testing different determinants of health related QoL.

Keywords: Health-Related Quality of Life, Primiparous, Self-Care Program & Teach Back.

Introduction

The postpartum phase starts soon after birth, lasts six to eight weeks, and concludes when the mother's body is almost back to how it was before she became pregnant (**Kalra et al., 2020**). The weeks immediately following delivery create the groundwork for both the mother and her child's long-term health and wellbeing. So, it's crucial to build a trustworthy postpartum period that should be built into ongoing, continuous, all-encompassing care. The first month following birth is when most mother and newborn deaths take place. To improve the short- and long-term health effects on the mother and the newborn, good postpartum care is therefore essential (**Haran et al., 2019**).

Women's happiness with their place of living, based on cultural standing, expectations, values, attitudes, ambitions, and means of subsistence, is referred to as "post birth health associated quality of life (QoL)." As a result, there is a need to focus on more particular aspects of QoL during the postnatal period (**Mokhtaryan-Gilani, 2022**).

In the field of maternal care, lower morbidity and death rates have paved the way for other objectives such as improving QOL (**Mortazavi et al., 2020**). In terms of QOL during labor and childcare, while health professionals are involved in prenatal care, postpartum maternal healthcare is underserved (**Torkan et al., 2019**).

According to a recent Egyptian study, more effort is needed for enhancing knowledge of women at their postpartum period; in turn improving their selfcare practice and quality of life thus reducing morbidity and mortality rate among mothers and their infant. Such issues help in achieving third and fourth sustainable development goals which are concerning with improving the quality of life and reducing morbidity and mortality for mothers and infant (**Omran et al., 2020**).

The World Health Organization (WHO) identifies six major components of health related QoL: physically, mentally, psychological and emotionally wellbeing state, degree of independence, social interactions, religious views, as well as biological circumstances. Heath-related QoL comprises happiness with physical health, family, education, employment, belongings, financial situation, environment, and religion, in addition to identifying

the good and bad aspects of life. Factors increasing the postpartum health related QoL include positive self-care practices which can be teached to women by multiple strategies **(Mokhtaryan-Gilani et al., 2022).**

Postpartum self-care is a growing trend in healthcare that can be utilized as a low-cost method for postpartum women's education. It is essential for the promotion of health as well as the prevention and management of illnesses. It consists of things women do to preserve and advance their well-being and health **(Ghodsbin et al., 2019).** The postpartum period is crucial for women and their families on a physical, emotional, and social basis since it is currently that most newborn fatalities as well as medical issues occur **(Hammoudeh et al., 2019).**

Postpartum self-care is encouraged through a variety of self-care teaching strategies, including the teach back method and the health belief model. The health belief model is frequently applied to postpartum treatment to encourage continued breastfeeding and postpartum exercise **(Tol et al., 2020).**

The teach back approach appears to be helpful and have a beneficial impact on the training of women, assessment of their learning, assurance of their thorough understanding of their situations, and assurance of their proficiency of abilities to manage themselves to be utilized at home but there are still some drawbacks it has not been implemented for these reasons. This paradigm is offered as a strategy for teaching women self-care that enhances their comprehension of their diseases and information retention. In this approach, the trainer gives information to women in a straightforward way without using any medical jargon, the woman is asked to repeat what she learnt at the end of the course so that her knowledge of the topic may be evaluated. A helpful technique for improving uneducated women's retention and comprehension of health-related knowledge is the teach back method **(Safarzade et al., 2021).**

Significance of the study

Seven out of 10 maternal fatalities occur in the postpartum period. Since the postpartum period has been highlighted as crucial for lowering maternal mortality, policies and activities must focus on enhancing health education, prenatal care service usage, and facility-level preparedness **(WHO, 2022)**. During the postpartum period, women must adjust to their new role as mothers, which entails primarily caring for themselves and their infant. Access to quality healthcare throughout pregnancy, labor, and postpartum has been demonstrated to drastically decrease maternal and newborn mortality,

as well as the amount of expensive and unneeded procedures. improving postpartum self-care behaviors reduces morbidity from illness, increases use of medical resources, improves coping mechanisms, improves job performance, increases women's independence in performing daily living activities, and boosts self-esteem, all of which improve health-related quality of life (QoL) **(Kim, 2019)**.

Teaching self-care appears to improve postpartum health-related QoL, but there are few studies evaluating the impact of adopting self-care teaching models on improving postpartum women's health-related QoL. Furthermore, there is a knowledge gap regarding the impact of adopting the teach-back model to teach self-care to postpartum women **(White et al., 2019)**. The researchers tried to fill in such knowledge gap by examining the impact of a teach-back-based self-care program on postpartum health-related QoL **(Troy, Dalgas-Pelish, 2018).**

Aim of the Study:

to assess the impact of teach back based self-care program on postpartum health related QoL among primiparous women.

Research Hypothesis:

Teach back based self-care program application will positively affect the postpartum health related QoL among primiparous women after the application as compared to before.

Teach back based self-care program application will negatively affect the postpartum health related QoL among primiparous women after the application as compared to before.

Methods:

Research Design:

A quasi-experimental research design (Pre-Posttest) (Polit, 2017)" was used to accomplish the aim of this study.

Research setting:

This research was applied at the post-natal follow-up clinics and the well-baby clinics of Maternal and Child Health Center (MCH) in Shebin Elkoom, Menofyia Governorate. Setting was chosen due to the high flow rate of the women visiting the aforementioned clinics as the center serves large area of governorate and offers a free and low-cost health care services to women. Moreover, the center's staff is well known for their cooperation and help, such issues always allow researchers conduct their studies easily.

Sample:

A purposive sample of 60 women were recruited based on the sample calculation. Women received routine care at the post-natal clinics in addition to the current study sessions. They were evaluated for

the health related QoL before and after applying the teach back based self-care program. Based on available data from (**Ghiasvand et al., 2017**) and using Epi Info (2000) program, with a 95% confidence interval, considering level of significance of 5%, and power of study of 80%, the sample size was estimated by:

$$n = \frac{(Z\alpha/2 + Z\beta)^2 \times 2(SD)^2}{d^2}$$

where, SD = standard deviation obtained from previous study; $Z_{\alpha/2}$, for 5% this is 1.96; Z_{β}, for 80% this is 0.84 and d, for the expected difference. Therefore,

$$n = \frac{(1.96 + 0.84)^2 \times 2(10.706)^2}{(5.48)^2} = 59.8$$

Accordingly, the estimated minimum sample size needed was 60 women.

The inclusion criteria were:

Women who met the following criteria at their first postpartum visit: agreed to participate; were primiparous; delivered by cesarean section; did not experience any postpartum psychological problems; received antenatal care; had a low-risk singleton gestation; delivered a healthy, term baby and did not receive teach-back health education during pregnancy.

Instruments of the study:

Data were collected using two instruments as follows

I: Structured Interviewing Questionnaire:

It was used to evaluate socio-demographic data of studied women. The researchers formulated this instrument after overviewing the relevant literature and submitting it to validity and reliability testing. The instrument included questions about personal data of the studied women as age, education level, occupation, husband occupation, neonate's gender, mother's satisfaction with the newborn's gender and place of receiving prenatal care.

II: The Health-Related QoL Questionnaire (WHOQOL-BREF):

This instrument was developed based on (**WHO, 1998**) by an international consortium of scholars known as "The WHOQOL Group" (Skevington et al., 2004). This group operated from field centers located in 15 countries to develop a survey that aimed to be cross-culturally relevant to health-related QoL. Researchers translated it into Arabic and evaluated its validity and reliability. It is a 26-item assessment tool and modified to 23 items by the researchers after the pilot study, items covering four domains: physical (seven items-asked about pain and discomfort; energy and fatigue; sleep and rest; reliance on medication; mobility; activities of daily living and working capacity), psychological (six items-asked about positive feelings; negative

feelings; self--esteem; thinking learning; memory and concentration; body image; spirituality, religion and personal beliefs), social (three items-personal relations; sex and practical social support) and environmental (five items) health. There were two more questions on general QoL and health.

Scoring system:

Each item was scored on a five-point Likert scale then the total score was summed, with lower scores suggesting lower HrQoL and higher scores indicating better HrQoL. The total HrQoL score was then converted to a 20-points scale and finally to a 100-point scale in accordance with WHO guidelines.

Validity of the Study Instruments:

validity of instrument II was previously assured by **Berlim et al., (2005)**. Due to using the instrument among different cohort, setting and after translation to Arabic it was submitted to validity test again.

Five professionals in the area of obstetrics and gynecological medicine, together with nursing faculty members, evaluated the content validity of both research instruments. They were requested to provide feedback on the instruments, as well as any recommendations for additions or omissions. According to the panel's assessment of the clarity of the sentences and suitability of the topic, modifications were made.

Reliability of the Study Instruments:

The test-retest approach was used to demonstrate instrument reliability, and the correlated coefficient value was 0.83. **Berlim et al. (2005)** had previously estimated the Cronbach's alpha value (internal consistency) of instrument II as 0.893.

Administrative and Ethical Design:

Menofyia University's Faculty of Nursing Research and Ethics Committee granted permission to perform the research. After describing the goal and methods of the study, written consent was acquired from the medical directors at the research site. After describing the goal and methods of the study to chosen women and informing them of their right to withdraw from the research at any time, oral informed consent was acquired to assure voluntary participation. Women were informed that their data would be kept totally secret, utilized exclusively for research purposes with no subsequent analysis, and given as numbers rather than names.

Pilot study:

The piloting was used on 10% of the participants (6 women) to test the feasibility of instruments, the duration required to apply them, the research process, the feasibility of fieldwork, the finding of a suitable location for conducting interviews with women, and the identification of potential challenges that might delay data collection. Instrument II was modified based on the findings of the pilot study.

Pilot study participants were omitted from the main research sample to avoid concerns to internal validity.

Fieldwork:

The research activities were carried out between the beginning of May 2022 and the final day of December 2022. Phases were as follows:

Phase I: Preparatory

A comprehensive evaluation of related literature, including digitized dissertations, available books, and papers, was conducted. In addition, a literature review was conducted to develop a knowledge base pertinent to the subject field. The required self-care program package for educating mothers was designed based on best available literature. The contents of the self-care program had many sections targeting improving the health related QoL: general health tips, physical, psychological, social and environmental domains.

Phase II: Interviewing schedule for the women

The researchers visited the MCH center twice a week from 9.00 a.m. to 1.00 p.m., till the study's sample size totaled 60 women. One researcher was collecting data at the post-natal clinic and other researchers at the well-baby clinic. The researchers introduced themselves to the women, gave simple overview about the study, its aim, benefits for participating took their oral informed consent and then interviewed each eligible woman using instrument I. The instrument took around 20 minutes to complete out during the course of the interview. Woman's phone number was recorded and added to a group of one social media application to facilitate communication and latter follow-up. The teach-back based self-care program as a portion of routine postpartum care sessions were scheduled to be done at the lecture hall of the MCH center during women's follow-up at their routine care and provided individually for each woman.

Phase III: Implementation

The study participants received routine care at the MCH center in addition to four sessions within postpartum self-care program context based on teach-back approach each lasted about 40 minutes. To encourage adherence to the provided self-care program instructions, a series of healthy tips messages were sent to women using the social media group.

The program sessions were provided at the lecture hall of the MCH center using a laptop computer and addressed the teach-back approach individually "for each woman alone", in a straightforward and understandable way devoid of medical terms, using aided photo and educational videos until at the conclusion of the training, women were required to demonstrate their mastery of the material by restating it in their own words, ensuring that they had a thorough grasp of the material.

The first session included ideas for enhancing the pain and suffering, power and tiredness, sleeping and rest, drug dependency; movement; everyday tasks and job skills. The second session concentrated on the psychological domain (a positive and adverse feelings, confidence, learning and cognitive abilities, memory and attention, appearance, faith, religion, as well as private beliefs). The third session concentrated on the social domain (personal connections, libido, and support from others). The fourth session concentrated on enhancing the environment (including the physical setting, availability of medical and social services, expertise and abilities, recreational activities, and domestic setting).

The health related QoL was assessed on the first session (pre-intervention) using instrument II.

The intended learning outcomes of the teaching session were:

Knowledge: a. Define health related QoL, b. Identify physical, psychological, social, and environmental components of the self-care program, c. Summarize the components of each educational session. **Skills:** Demonstrate steps of different postpartum exercises. **Competence**: Value the importance of adhering to the components of teach back based self-care program.

Phase IV: Evaluation

The evaluation was concentrated on examining the impact of a teach back based self-care program on postpartum health related QoL after two months of the intervention implementation by using instrument II.

Statistical Design

The latest version of SPSS for Windows "20" (SPSS, Chicago, IL) was used to conduct all the statistical analyses. Continuous data were shown as mean and standard deviation (SD) and had a distribution that was normal. The presentation of data that was categorical included percent and number. Categorical data comparisons were made using the Chi-square test.

The reliability (internal consistency) test for the study questionnaires was estimated. Statistical significance was set at $p < 0.05$.

Results:

Table (1): Distribution of the women according to their socio-demographic characteristics (n=60)

	n	%
Age		
25 to 30 years	20	33.3
31 to 35 years	15	25.0
36 to 40 years	10	16.7
41 to 45 years	15	25.0
Mean ±SD	34.4 ±6.4	
Education		
Illiterate	5	8.3
Primary	10	16.7
Secondary	20	33.3
Higher	10	16.7
Post graduate	15	25.0
Occupation		
Housewife	32	53.3
Employee	28	46.7
Husband Occupation		
Unemployed	9	15.0
Employee	28	46.7
Self-employed	23	38.3
Neonate's Gender		
Female	22	36.7
Male	38	63.3
Mother's satisfaction with the newborn's gender		
Yes	29	48.3
Doesn't differ	31	51.7
Place of receiving prenatal care		
Health Center	15	25.0
Private clinic	35	58.3
Both place	10	16.7

Table (2): Distribution of the women according to physical health domain at the pre and post intervention stages (n=60)

	Pre-Intervention		Post-Intervention		Chi-Square	
	N	%	N	%	X^2	P
To what extent do you feel that physical pain prevents you from doing what you need to do?						
An extreme amount	15	25.0	7	11.7		
Very much	20	33.3	13	21.7		
Moderate amount	15	25.0	18	30.0		
A little	5	8.3	12	20.0		
Not at all	5	8.3	10	16.7	9.216	0.056
How much do you need any medical treatment to function in your daily life?						
An extreme amount	5	8.3	0	0.0		
Very much	20	33.3	5	8.3		
Moderate amount	20	33.3	15	25.0		
A little	10	16.7	30	50.0		
Not at all	5	8.3	10	16.7	26.381	<0.001**
Do you have enough energy for everyday life?						
Not at all	15	25.0	7	11.7		
A little	10	16.7	3	5.0		
Moderately	20	33.3	15	25.0		
Mostly	10	16.7	20	33.3		
Completely	5	8.3	15	25.0	15.726	0.003*

	Pre-Intervention		Post-Intervention		Chi-Square	
	N	%	N	%	X^2	P
How well are you able to get around?						
Very poor	22	36.7	5	8.3		
Poor	15	25.0	10	16.7		
Neither poor nor good	10	16.7	15	25.0		
Good	10	16.7	15	25.0		
Very good	3	5.0	15	25.0	21.704	<0.001**
How satisfied are you with your sleep?						
Very dissatisfied	15	25.0	7	11.7		
Dissatisfied	10	16.7	3	5.0		
Neither satisfied nor dissatisfied	20	33.3	15	25.0		
Satisfied	10	16.7	25	41.7		
Very satisfied	5	8.3	10	16.7	15.488	0.004*
How satisfied are you with your ability to perform your daily living activities?						
Very dissatisfied	10	16.7	5	8.3		
Dissatisfied	15	25.0	10	16.7		
Neither satisfied nor dissatisfied	20	33.3	10	16.7		
Satisfied	10	16.7	20	33.3	14.333	0.006*
Very satisfied	5	8.3	15	25.0		
How satisfied are you with your capacity for work?						
Very dissatisfied	10	16.7	3	5.0		
Dissatisfied	15	25.0	7	11.7		
Neither satisfied nor dissatisfied	15	25.0	10	16.7		
Satisfied	12	20.0	22	36.7		
Very satisfied	8	13.3	18	30.0	14.466	0.006*

Table (3): Distribution of the women according to psychological health domains at pre and post intervention stages (n=60)

	Pre-Intervention		Post-Intervention		Chi-Square	
	N	%	N	%	X^2	P
How much do you enjoy life?						
An extreme amount	7	11.7	13	21.7		
Very much	8	13.3	12	20.0		
Moderate amount	10	16.7	15	25.0		
A little	17	28.3	11	18.3		
Not at all	18	30.0	9	15.0	7.886	0.096
To what extent do you feel your life to be meaningful?						
An extreme amount	12	20.0	26	43.3		
Very much	18	30.0	14	23.3		
Moderate amount	15	25.0	10	16.7		
A little	7	11.7	8	13.3		
Not at all	8	13.3	2	3.3	10.325	0.035*
How well are you able to concentrate?						
Not at all	10	16.7	2	3.3		
A little	18	30.0	8	13.3		
Moderate amount	22	36.7	24	40.0		
Very much	8	13.3	13	21.7		
Extremely	2	3.3	13	21.7	18.524	<0.001**
Are you able to accept your bodily appearance?						
Not at all	18	30.0	10	8.3		
A little	16	26.7	10	11.7		
Moderately	10	16.7	13	21.7		
Mostly	9	15.0	16	26.7		
Completely	7	11.7	11	31.7	8.896	0.034

	Pre-Intervention		Post-Intervention		Chi-Square	
	N	%	N	%	X^2	P
How satisfied are you with yourself?						
Very dissatisfied	18	30.0	5	8.3		
Dissatisfied	15	25.0	10	16.7		
Neither satisfied nor dissatisfied	10	16.7	15	25.0		
Satisfied	10	16.7	15	25.0		
Very satisfied	7	11.7	15	25.0	13.257	0.010*

Table (4): Distribution of the women according to personal relationships domains at pre and post intervention stages (n=60)

	Pre-Intervention		Post-Intervention		Chi-Square	
	n	%	N	%	X^2	P
How often do you have negative feelings such as blue mood, despair, anxiety, depression?						
Always	22	36.7	5	8.3		
Very often	15	25.0	10	16.7		
Quite often	10	16.7	15	25.0		
Seldom	10	16.7	15	25.0		
Never	3	5.0	15	25.0	21.704	<0.001**
How satisfied are you with your personal relationships						
Very dissatisfied	23	38.3	5	8.3		
Dissatisfied	16	26.7	7	11.7		
Neither satisfied nor dissatisfied	11	18.3	10	16.7		
Satisfied	7	11.7	17	28.3		
Very satisfied	3	5.0	21	35.0	32.807	<0.001**
How satisfied are you with your sex life?						
Very dissatisfied	23	38.3	4	6.7		
Dissatisfied	19	31.7	8	13.3		
Neither satisfied nor dissatisfied	13	21.7	10	16.7		
Satisfied	5	8.3	16	26.7		
Very satisfied	0	0.0	22	36.7	45.263	<0.001**

Table (5): Distribution of the women according to environment domain at pre and post intervention stages (n=60)

	Pre-Intervention		Post-Intervention		Chi-Square	
	N	%	N	%	X^2	P
How safe do you feel in your daily life?						
Not at all	12	20.0	5	8.3		
A little	18	30.0	9	15.0		
Moderate amount	15	25.0	11	18.3		
Very much	8	13.3	16	26.7		
Extremely	7	11.7	19	31.7	14.373	0.006*
How healthy is your physical environment?						
Not at all	22	36.7	5	8.3		
A little	15	25.0	10	16.7		
Moderate amount	10	16.7	15	25.0		
Very much	10	16.7	15	25.0		
Extremely	3	5.0	15	25.0	21.704	<0.001**
Have you enough money to meet your needs?						
Not at all	10	16.7	0	0.0		
A little	15	25.0	10	16.7		
Moderately	15	25.0	15	25.0		
Mostly	10	16.7	15	25.0		
Completely	10	16.7	20	33.3	15.333	0.004*
How available to you is the information that you need in your day-to-day life?						
Not at all	0	0.0	29	48.3		
A little	0	0.0	21	35.0		
Moderately	20	33.3	10	16.7		
Mostly	20	33.3	0	0.0		
Completely	20	33.3	0	0.0	93.333	<0.001**

	Pre-Intervention		Post-Intervention		Chi-Square	
	N	%	N	%	X²	P
How satisfied are you with the support you get?						
Very dissatisfied	22	36.7	5	8.3		
Dissatisfied	15	25.0	10	16.7		
Neither satisfied nor dissatisfied	10	16.7	15	25.0		
Satisfied	10	16.7	15	25.0		
Very satisfied	3	5.0	15	25.0	21.704	<0.001**
How satisfied are you with your access to health services?						
Very dissatisfied	15	25.0	5	8.3		
Dissatisfied	15	25.0	10	16.7		
Neither satisfied nor dissatisfied	10	16.7	15	25.0		
Satisfied	10	16.7	15	25.0		
Very satisfied	10	16.7	15	25.0	9.000	0.061

Table (6): Distribution of the women according to health- related quality-of-life domains at pre and post intervention stages (n=60)

	Pre-Intervention Mean ±SD	Post-Intervention Mean ±SD	Student's T-Test	
			T	P
Physical Health	20.0 ±4.0	22.9 ±4.1	3.880	<0.001**
Psychological Health	14.1 ±6.3	16.2 ±4.0	2.047	0.042*
Personal Relationships	6.9 ±2.8	10.3 ±3.8	5.579	<0.001**
Environment	19.3 ±8.6	22.5 ±8.0	2.138	0.035*
Total Health-Related QoL Score	60.2 ±22.4	71.9 ±21.6	2.912	0.004*

Table (7): Distribution of the women according to satisfaction level with different domains at the pre and post intervention stages (n=60)

	Pre-Intervention				Post-Intervention				Chi – Square	
	Unsatisfactory		Satisfactory		Unsatisfactory		Satisfactory			
	N	%	N	%	N	%	N	%	X²	P
Physical Health	45	75.0	15	25.0	25	41.7	35	58.3	13.714	<0.001**
Psychological Health	46	76.7	14	23.3	28	46.7	32	53.3	11.422	<0.001**
Personal Relationships	47	78.3	13	21.7	30	50.0	30	50.0	10.474	<0.001**
Environment	37	61.7	23	38.3	25	41.7	35	58.3	4.805	0.028*
Total Health-Related QoL Score	44	73.3	16	26.7	27	45.0	33	55.0	9.968	0.002*

Table (8): Association between the socio-demographic characteristics and health-related quality-of-life total score at post-intervention stage (n=60)

	Unsatisfactory (n=27)		Satisfactory (n=33)		Chi – Square	
	N	%	N	%	X²	P
Age						
25 to 30 years	20	74.1	0	0.0		
31 to 35 years	7	25.9	8	24.2		
36 to 40 years	0	0.0	10	30.3		
41 to 45 years	0	0.0	15	45.5	44.916	<0.001**
Education						
Illiterate	5	18.5	0	0.0		
Primary	10	37.0	0	0.0		
Secondary	12	44.4	8	24.2		
Higher	0	0.0	10	30.3		
Post graduate	0	0.0	15	45.5	40.606	<0.001**
Occupation						
Housewife	13	48.1	19	57.6		
Employee	14	51.9	14	42.4	0.530	0.466
Husband Occupation						
Unemployed	4	14.8	5	15.2		
Employee	14	51.9	14	42.4		
Self-employed	9	33.3	14	42.4	0.604	0.739

Neonate's Gender						
Female	7	25.9	15	45.5		
Male	20	74.1	18	54.5	2.439	0.118
Mother's satisfaction with the newborn's gender						
Yes	16	59.3	13	39.4		
Doesn't differ	11	40.7	20	60.6	2.347	0.126
Place of receiving prenatal care						
Health Center	15	55.6	0	0.0		
Private clinic	12	44.4	23	69.7		
Both place	0	0.0	10	30.3	28.139	<0.001**
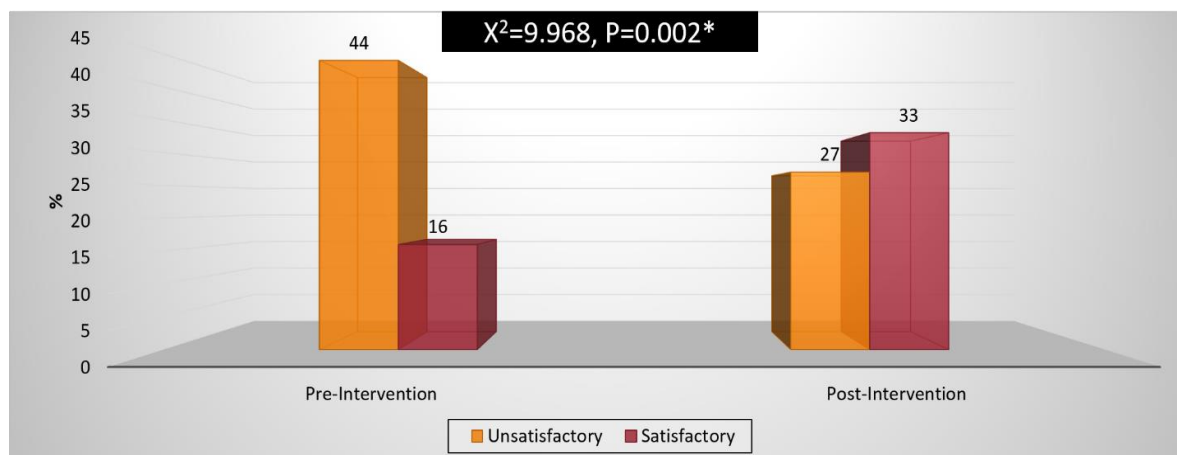
Clinic compared to others.

Figure (1): Distribution of the women according to health-related quality-of-life score at the pre and post intervention stages (n=60)

Table (1): The women's mean age was (34.4), nearly half was secondary educated, housewives, the majority of neonates were male, and the women were satisfied with the gender. Women received antenatal care at a private clinic.

Table (2): There was a significant difference between pre and post intervention stages related to how much did the studied sample need any medical treatment to function in their daily life and how well were they able to get around at (P-value <0.001). There was significant difference between pre and post intervention stages related to did the studied sample have enough energy for everyday life, how satisfied were with their sleep, their capability to perform their daily living activities and work (P-value 0.003,0.004,0.006,0.006) respectively.

Table (3): There was a significant difference between pre and post intervention stages related to how well were the studied sample able to concentrate (P-value <0.001). While there was a significant difference between pre and post intervention stages related to what extent did the studied sample feel their life to be meaningful and how satisfied were they with themselves (P-value 0.035 and 0.010) respectively.

Table (4): There was a significant difference between pre and post intervention stages related to

how often did the studied sample have negative feelings, how satisfied were they with their personal relationship and how satisfied they were with their sex life (P- value <0.001).

Table (5): There was a significant difference between pre and post intervention stages as regard to physical environment, how available to the studied sample was the information that they need in their day-to-day life and how satisfied were they with the support they got (P-value < 0.001). There was a significant difference regarding how they have enough money to meet their need (P-value 0.004). There was no significant difference as regard to how satisfied were the studied sample with their access to health services (P-value 0.061).

Table (6): The physical health and the personal relationships domains are significantly increased after intervention than before (P- value <0.001). Moreover, the psychological and environmental health domains significantly increased after the intervention than before (P- value 0.042 and 0.035) respectively. The total health related QoL score increased after the intervention (P-value 0.004).

Table (7): The results show a significant increase in satisfaction level at all domains after the intervention compared to before.

Table (8): There was an association between age, education, place of antenatal care and the satisfaction level after the intervention. There was a significant increase in satisfaction level of women aging (36:40, 41:45) compared to

Figure (1): Half of the sample was satisfied with their health related QoL after the intervention compared to before (n=33, n=16) respectively.

Based on results shown at tables 2 to 7 and figure 1; the first study hypothesis can be accepted and the second can be rejected as the teach back based self-care program positively affected the postpartum health related QoL among primiparous women after the application as compared to before

Discussion:

This study was conducted to assess the impact of teach back based self-care program on postpartum health-related QoL among primiparous women. The study findings can be successfully used to accept the first proposed hypothesis.

The results of the current study showed that there was a notable improvement in postpartum health-related quality of life after implementing the teach-back based self-care program. The physical health and the personal relationships domains are significantly increased after intervention than before. Moreover, the psychological and environmental health domains significantly increased after the intervention than before. The total health related QoL score increased after the intervention. There was an association between some variables and the satisfaction level about different domains after the intervention.

The findings in relation to the aim & hypothesis will be discussed in the following order:

Description of the studied sample, findings related to the physical, psychological, personal and environmental domains, the health-related QoL, factors influencing the participants' health-related QoL.

The studied sample was primiparous women delivered by cesarean section which were the main inclusion criteria, such selection help ensuring the efficacy of the teach-back based self-care program and establish the causal relationship. Similar sample was previously studied by **Ghiasvand et al., (2017)** who reported that utilizing the teach-back model for a self-care program seems to increase postpartum quality of life; consequently, it is suggested as an effective way for postpartum care. The same sample was also studied by **Ramadan & Farrag (2018)** at Fayoum university hospital and reported that self-care guidelines positively enhanced women's QoL after CS delivery. Recently, at Damietta governorate similar sample was studied by **El-Aty & Mostafa,**

(2022) who reported that implementing postoperative recommendations for caesarean birth women reduced postoperative discomfort, complications, and increased women's happiness.

As for the findings reflecting the efficacy of the teach-back based self-care program; first was the physical health domain. It showed a highly statistically significant difference at the post-intervention phase than the pre-intervention one. Parameters measured included pain, need for medication, energy level, sleep quality and capacity for work.

All parameters showed an improvement except for feeling of pain. This is seen to be expected result as post-partum cesarean section women feel pain from different sources that decrease with time other than any intervention. The finding is agreed on by **Ghiasvand et al., (2017)** who reported that there was a significant effect of the teach-back technique for enhancing the physical health in the trial group.

All parameters showed an improvement except for feeling of pain. This is seen to be expected result as post-partum cesarean section women feel pain from different sources that decrease with time other than any intervention. The finding is agreed on by **Ghiasvand et al., (2017)** who studied " The effect of a self-care program based on the teach back method on the postpartum quality of life" among postpartum women who had given birth at Iranian health centers and reported that there was a significant effect of the teach-back method on improving the physical health in the trial group.

The result was also in line with **Ibrahim & Abd El-Aty (2022)** who studied "effect of postpartum standardized care guidelines to caesarean section women on pain relief and satisfaction: comparative study" among caesarean section women and reported that women who received the standardized care guidelines following CS experience less postoperative pain and more satisfied than those who only received routine nursing care of the hospital.

The second main reflective finding was the psychological domain which was compared at the post intervention with the pre-intervention phase and found to be improved. The measured parameters were enjoying life, seeing life as meaningful, concentration ability, accepting appearance and being satisfied with self.

All parameters showed a noticeable improvement except for enjoying life. This may be a normal psychological process experienced by post-partum women in general and varies in duration until reaching the letting go phase.

The finding is supported by **Ramadan, Farrag (2018)** who studied "utilization of self-care guideline to promote quality of life among women undergoing

cesarean section" at postpartum unit of Maternity department in Fayoum university hospitals and found all evaluated domains had highly statistically significant difference between the groups.

The third reflective finding was the personal relationship domain. Measured domains were having negative feelings, satisfying personal relationship and satisfying sex life. All were found to be statistically significant different after applying the teach-back based self-care program compared to before.

The result was in contradiction with **Ghiasvand et al., (2017)** who studied " The effect of a self-care program based on the teach back method on the postpartum quality of life" among postpartum women who had given birth at Iranian health centers and reported that the mother's feelings toward sexual relations was a dimension in which no significant differences were observed after intervention. The contradiction in result is seen to be due to the difference in the sample at the pre-intervention phase as **Ghiasvand et al., (2017)** 72% of sample was described at the pre-intervention phase to have very dissatisfying sex life while for the current study's sample; 38% of the sample was experience the dissatisfaction.

In relation to the fourth indicative finding; the environmental domain, it was statistically significant different after applying the teach-back based self-care program compared to before. The measured domains included feeling safe, having healthy environment, having enough money, reaching needed information and having support and finally access to health services.

These results were in line with **Mohammed (2013)** who reported that the women who had continuous support of a caregiver as well as sufficient knowledge regarding their needs during postpartum period in the form of self-care guidelines, commonly report feelings of empowerment, they were also less likely to report negative feelings because they have more help during the postpartum period. Accordingly, they have less difficulty with the adjustment to new motherhood.

The finding was contradicted by **Ramadan & Farrag (2018)** who studied "utilization of self-care guideline to promote quality of life among women undergoing cesarean section" at postpartum unit of maternity department in Fayoum university hospital and found that large proportion of women was not satisfied with the item of "reaching enough information" as they reported receivng very brief information and they were not able to participate in the decision related to care of their babies along with the lack of advices and support.

As for the main study finding, the health-related quality of life, it was evaluated by measuring physical, psychological, personal and environmental domains. The health-related quality of life was statistically significant improved after intervention compared to before. The result was an indicator of the teach-back based self-care program effectiveness and a reason to accept the first study hypothesis.

This result was consistent with **Ghiasvand et al., (2017)** who studied the effect of a self-care program based on the teach back method on the postpartum quality of life among postpartum women at Iranian health centers and found that teaching back method had a significant positive effect on the postpartum quality of life as a significant improvement was observed in the trial group in three main dimensions after the intervention.

The finding is also supported by **Ramadan, Farrag (2018)** who studied "utilization of self-care guideline to promote quality of life among women undergoing cesarean section" at postpartum unit of maternity department in Fayoum university hospital and reported there was a difference between study and control groups at the fourteenth postpartum day regarding all domains of quality of life after the intervention.

The health-related quality of life of life of studied women was found to be affected by age, education and place of receiving prenatal care. The older the age, the higher the education, the more satisfying health related quality of life. Receiving antenatal care at a private clinic was linked to more satisfying health related quality of life. This result was supported by **Grullon & Grimes (2014)** who studied the post cesarean bio-physiological health parameters and quality of life among the most of CS women. They reported that studied women with similar age and educational level were having high score of health-related quality of life. These results were also in harmony with **Ramadan & Farrag (2018)** who studied utilization of self-care guideline to promote quality of life among women undergoing cesarean section at postpartum unit of maternity department in Fayoum university hospital and reported similar age range and level of education were positively affecting health-related quality of life.

Conclusion:

The results of the current study showed that there was a notable improvement in postpartum health-related quality of life after implementing the teach-back based self-care program.

The physical health and the personal relationships domains are significantly increased after intervention than before. Moreover, the

psychological and environmental health domains significantly increased after the intervention than before. The total health related QoL score increased after the intervention.

There was an association between age, education, place of antenatal care and the satisfaction level about different domains after the intervention

Based on the current findings, the first study hypothesis can be accepted and the second hypothesis can be rejected.

Recommendations:

Reinforce using teach-back based self-care program as a portion of routine postpartum care.

Since a better postpartum health-related QoL may contribute greatly to the family's health, it is advised that healthcare providers employ a teach-back based self-care program as part of normal postpartum care in combination with other maternal and neonatal care services.

Replication of the study with larger sample from different settings to advance testing different determinants of health related QoL.

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