

REASONS, SATISFACTION AND IMPACT OF VAGINAL REJUVENATION AMONG WOMAN IN THE KINGDOM OF SAUDI ARABIA

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Abstract

Background: Vaginal rejuvenation is a surgical procedure that lifts and strengthens the vaginal wall to restore the normal structure and support of the vagina. This procedure requires further scientific evidence of safety and efficiency to enhance the treatment. Moreover, healthcare providers need to increase their knowledge of this procedure and better educate their clients about its potential risks. Aim: The study aimed to identify factors influencing women to undergo vaginal rejuvenation and to determine its impact on women's health in the Kingdom of Saudi Arabia. Design: A quantitative, descriptive, cross-sectional design using an online questionnaire was used. Methods: A questionnaire was used to collect the data by inviting purposive sampling via social media. Results: The main reasons for choosing vaginal rejuvenation were vaginal area enlargement (57.4%), vaginal laxity (26.1%), and vaginal prolapse (3.5%). Nearly half (47.8%) of the study participants chose vaginal rejuvenation based on their own opinions, followed by encouragement by their doctor. The majority (91.3%) of the women felt positive effects after receiving vaginal rejuvenation surgery. Conclusion: The vaginal rejuvenation procedure generally has a positive impact on women's health. Most participants were satisfied with the procedure because they gained more self-confidence. Healthcare providers need to educate these women with regard to the advantages and disadvantages of the surgery and to support them in selecting the right informed choice of treatment for their health. Further research should be done to investigate the impact of vaginal repair in the wider population.

Keywords: Vaginal Rejuvenation, Vaginal Repair, Vaginal Tightening, Women's Health.

INTRODUCTION

Vaginal rejuvenation is a general female cosmetic surgical procedure also known as vaginal tightening. It is considered one of the most controversial genital cosmetic surgical procedures worldwide. This surgery, conducted by medical specialists, such as gynecologists or plastic surgeons, aims to reduce the average diameter of the vagina by lifting and strengthening the walls of the vagina to restore its normal support [1]. It is performed under general anesthesia in the operation room and takes approximately 30–60 minutes.

The reasons for conducting this surgery are either medical, or cosmetic, or both [2]. Nowadays, especially given the current obsession with youth and beauty, it is becoming increasingly popular among women to improve genital appearance and/or enhance sexual functioning [1,2]. For instance, some studies have shown an increase in the rate of vaginal rejuvenation and other vaginal repair procedures [3, 4].

Various factors influence vaginal rejuvenation decisions, including medical and sociocultural factors. Some women need vaginal rejuvenation surgery for medical purposes, while others may be enticed by marketing to undergo an unnecessary repair

procedure [2]. It can be recommended by doctors for women who complain of vaginal widening due to frequent vaginal delivery or aging [5]. In addition, sociocultural factors have a strong influence on vaginal rejuvenation, as society views women with narrow vaginal size as being desirable while classifying women with wide vaginas as promiscuous [6].

A study reported that the main benefits of vaginal repair include female reproductive organs with a better appearance, a tighter vagina for enhanced sexual pleasure, improved sexual experience for the woman's partner, and increased confidence and self-satisfaction for the woman [7]. Additionally, it helps to treat some medical issues, such as mild pelvic organ prolapse (POP), a common condition that negatively affects the woman's quality of life. On the other hand, there are many possible complications that may occur as a result of vaginal repair, such as dyspareunia, vaginal dryness, vaginal and perineal restriction, and rectovaginal fistula [7].

As with any surgery, vaginal repair has some associated risks, including urinary infection, urinary retention, urinary frequency, vaginal bleeding, postoperative pain, and pain with intercourse [8]. Reported serious adverse effects of vaginal repair include damage to the bladder or urinary tract leading to excessive bleeding, continuing bladder problems, pelvic abscesses, failure to achieve desired cosmetic results, recurrence of prolapse, deep venous thrombosis, and pulmonary embolism [9].

Studies investigating the prevalence and impact of vaginal tightening in the Kingdom of Saudi Arabia (KSA) are limited. The KSA is well known as an Arab Muslim country with conservative social values, particularly in relation to women and sexual issues. The improvement of women's health is a very important aspirational goal. Indeed, the World Health Organization (WHO) emphasizes how countries need to provide adequate health care to women to maintain their health [10]. In general, any surgical procedure can put women's health at risk. Conducting research on such a sensitive topic will help healthcare providers to identify factors that can lead women to undertake vaginal repair, thus enabling them to provide appropriate health care to enhance their health. Hence, this study aimed to identify factors influencing women to undertake vaginal rejuvenation and to determine its impact on women's health in the KSA.

MATERIAL AND METHODS

A quantitative, descriptive design, cross-sectional approach was used in this study. Quantitative methods are suitable for collecting information to answer the current research questions. Data were collected via an online survey. Specifically, an online questionnaire was widely distributed through Twitter, WhatsApp, and Facebook social media and emails from March 2021 until April 2021.

The online questionnaire helped to maximize the spread of the questionnaire to reach the target participants. In addition, it offered better access and ensured protection for the population during the COVID-19 pandemic. Online was also preferred because it enabled privacy and confidentiality, as the research topic is sensitive in Saudi society.

Sampling

Data were collected using purposive sampling, a type of non-probability sampling considered most effective when a researcher needs to study a certain cultural domain with knowledgeable experts and when the participants are selected based on the

purpose of the study sample.[11] The inclusion criteria were married, or previously married, Saudi and non-Saudi women who had undergone vaginal rejuvenation surgery. The link to the questionnaire was shared online via social media. The inclusion criteria for the participants were set at the start to guarantee the inclusion of the target subjects. A total of 115 women from the target population participated in the study.

Study Tool

The data were collected using an online self-administered questionnaire. Using a questionnaire in a research study has many advantages. Most researchers tend to use questionnaires for data collection because they are easy to distribute, structure, and analyze.[11] The questionnaire in this study was developed based on the related literature and then reviewed by a faculty member in the Nursing Faculty at King Abdulaziz University (KAU), who was an expert in the field of women's health. The questionnaire, developed in Arabic and then translated into English, contained three parts. The first part comprised sociodemographic data, including primary data, such as age, nationality, and marital status. The second part comprised questions on the history of medical and reproductive health, such as previous surgeries, number of children, number of pregnancies, number of abortions, and type of births. The third part concentrated on vaginal rejuvenation surgery, including reasons for conducting the surgery and the impact of the surgery. The time required to fill out the questionnaire ranged from 10 to 15 minutes.

Data Analysis

The questionnaire was analyzed with cross-sectional statistics using SPSS (version 23) statistical software (SPSS, Chicago, IL). The frequencies, percentage, mean, and standard deviation were computed for the items of the scale and sociodemographic factors. The relationship between the variables was tested based on the data, so Alpha Cronbach's test, Pearson correlation coefficient, Spearman-Brown's stability equation, and multiple linear regression were conducted; p-values of 0.01 and 0.05 were considered statistically significant.

The internal consistency of the questionnaire paragraphs was calculated on the study sample size of 115 women by calculating the correlation coefficients between each paragraph and the total score of the questionnaire. The researchers conducted the steps of stability on the same sample using the half-hash coefficient (Pearson) and the Alpha Cronbach coefficient to ensure that the answer would be approximately the same if it was applied repeatedly to the same people at different times.

Ethical Considerations

Prior to the study, approval was obtained from the Research Ethics Committee in the Faculty of Nursing at KAU (NREC Serial No: Ref No 2B. 69). It was clearly stated in the invitation part of the survey that participation was optional and voluntary. The researchers provided information for the aim of the study through the invitation part in the survey. It was stated that all information would remain confidential and would be used only for the purpose of the study. In addition, informed consent was obtained from the study participants prior to study commencement. Anonymity was assured and maintained throughout the data collection and analysis processes. The researchers were dedicated to fulfilling the ethical obligation of preserving the knowledge and confidentiality of all study participants.

RESULTS

Participant's Sociodemographic Data

Table 1 shows the characteristics of the 115 women who participated in this study. A total of 90.4% of the participants were Saudi, while 9.6% were non-Saudi. The 36–40 year age group constituted the largest group (26.1% of the total), while those aged 25 years and less represented the smallest age group (1.7% of the total). The majority (84.3%) of the participants in the study sample were married.

Table 1: Participants' Sociodemographic Data

Sociodemographic Data	N	(%)	Mean	Median	Mode
Age (years)					
Less than 25	2	1.7	3.8	4	4
25–30	19	16.5			
31–35	28	24.3			
36–40	30	26.1			
41–46	24	20.9			
47–50	4	3.5			
Over 50	8	7%			
Nationality			1.1	1	1
Saudi	104	90.4			
Non-Saudi	11	9.6			
Marital status			1.2	1	1
Married	97	84.3			
Divorced	17	14.8			
Widowed	1	0.9			

Participant's Obstetric History

Table 2 shows that the majority (47%) of the study participants had 4–6 children, 4–6 pregnancies (45.2%), and had never had a miscarriage (58.3%). The majority had normal births (70.4%).

Table 2: Participants' Obstetric Histories

Obstetric Histories	N	(%)	Mean	Median	Mode
Number of children			2.6	3	3
None	3	2.6			
1–3	51	44.3			
4–6	5	47			
Over 6	7	6.1			
Number of pregnancies			2.7	3	3
None	3	2.6			
1–3	46	40			
4–6	52	45.2			
Over 6	14	12.2			
Number of abortions			1.5	1	1
None	67	58.3			
1–3	44	38.3			
4–6	4	3.5			
Type of births			1.4	1	1
Never given birth	2	1.7			
All births were normal	81	70.4			
All deliveries were by caesarean section	26	22.6			
Some were natural and some were by caesarian section	6	5.2			

Participants' Medical Histories

Table 3 shows the medical histories of the study participants. The majority (57.4%) of the participants had no medical history, while 25.2% had gestational diabetes, 6.1% had hypertension, and 11.3% had other health issues. The majority (58.3%) of the participants had urinary incontinence, which was associated with laughter (30.4%) and sports or sneezing (14.8%).

Table 3: Participants' Medical Histories

Medical Histories	N	(%)
Do you have health problems?		
No	66	57.4
Gestational diabetes	29	25.2
Hypertension	7	6.1
Others	13	11.3
Do you have urine incontinence?		
No	48	41.7
Yes	67	58.3
Associated with laughter	35	30.4
Continuous incontinence	8	7
Associated with sports or sneezing	17	14.8
Associated with sexual intercourse	7	6.1

Conducting Vaginal Rejuvenation

Table 4 shows that the majority of study participants conducted vaginal surgery at private hospitals (47.8%). The reasons for conducting vaginal rejuvenation were vaginal area enlargement (57.4%), vaginal laxity (26.1%), vaginal prolapse (3.5%), and other (16.6%). Nearly half of the study participants conducted vaginal rejuvenation based on their own opinion (47.8%), while smaller proportions were encouraged by their doctors and their husbands (26.1% and 11.3%, respectively). Nearly half of the study participants gained their information about vaginal repair from social media (49.6%), followed by doctors (37.4%), family members (8.7%), books (4.3%), and nurses (0.9%).

Table 4: Hospital, reasons and information

Hospital, reasons and information	N	(%)
Type of hospital where you had vaginal rejuvenation		
Government	29	25.2
Private	86	74.8
Main reasons for conducting vaginal rejuvenation		
Vaginal enlargement	66	57.4
Vaginal laxity	30	26.1
Vaginal prolapse	4	3.5
Other	15	16.6
Who encouraged you to do the vaginal rejuvenation?		
Myself	55	47.8
Friends	11	9.6
Doctors	30	26.1
Husband	13	11.3
Family members	5	4.3
Nurses	1	0.9
Your main source of information about vaginal rejuvenation		
Doctors	43	37.4
Social media	57	49.6
Family members	10	8.7
Other	5	4.3

After Vaginal Rejuvenation

Table 5 shows that 40.9% of the study participants had no complications after conducting vaginal rejuvenation surgery, while 32.2% of the participants complained of pain during intimate relations, followed by infection after operation and then pain at the place of surgery by 13.9% and 13.0%, respectively.

In addition, the results revealed that more than half of the study participants (56.5%) reported that the recovery time after the operation was weeks, 32.2% reported several months, and 10.4% stated days. A total of 53.9% of the women reported that sexual relations began with their husbands after 1 month following vaginal rejuvenation surgery while 33% stated after several months, 8.7% reported after 2 weeks, and 4.4% did not resume sexual relations at all.

Table 5: Complication, recovery and sex resumption

Complication, recovery and sex resumption	N	(%)
Complications		
Pain during intimate relations	37	32.2
Infection after operation	16	13.9
Nothing	47	40.9
Pain at the site of surgery	15	13
Recovery time		
Weeks	65	56.5
Days	12	10.4
Months	37	32.2
I cannot remember	1	0.9
Intimate relations started after surgery		
After 2 weeks	10	8.7
After 1 month	62	53.9
After several months	38	33
It did not happen	5	4.4

Satisfaction Following Vaginal Rejuvenation

Table 6 below indicates that majority of the study participants (91.3%) were satisfied and experienced positive effects from the vaginal rejuvenation. The women reported various reasons behind their satisfaction: 50.4% felt more confident, 28.7% stated their intimate relationship improved and 5.2% had stated that vaginal rejuvenation satisfied their husband.

Table 6: Participants' Satisfaction with Vaginal Rejuvenation

Satisfaction with Vaginal Rejuvenation	N	(%)	Mean	Median	Mode
Are you satisfied with the vaginal rejuvenation?					
Yes	105	91.3	1.1	1	1
No	10	8.7			
What is the reason for your satisfaction?					
Intimate relationship is better than before	33	28.7	2.3	2	2
Feeling more confident	51	50.4			
Satisfied my husband	6	5.2			
Other	18	15.7			
What is the effect of vaginal rejuvenation on you?					
Positive effect	105	91.3	1.1	1	1
Negative effect	10	8.7			

DISCUSSION

The current study is similar to previous studies in terms of determining the effect of vaginal rejuvenation on women's health [12–15]. Similarly, it used descriptive methods and a questionnaire as the research tool. Moreover, the majority of participants in the current study were positive about the surgery and recommended it for others, as also reported in other studies [16].

Women in the current study who underwent selective vaginal tightening were of childbearing age, complained of vaginal enlargement and laxity, and were dissatisfied with their sexual relationships. Many studies have also reported these reasons for women choosing to undertake surgery [17]. A study emphasized that vaginal laxity was self-reported by 38% of women and was significantly associated with parity, symptoms of prolapse, stress urinary incontinence, overactive bladder, reduced vaginal sensation during intercourse, and a generally worse sex life [13].

The majority of women in the current study suffered from vaginal enlargement and laxity. Hence, for the sake of women's health, it is of paramount importance for such sensitive health issues to be identified and appropriately managed. These findings will help to inform healthcare providers about the magnitude of this problem. The current study revealed that women who undergo vaginal repair do so in order to feel sexual satisfaction and self-confidence. Women's satisfaction and sexual function after vaginal cosmetic and functional cosmetic procedures indicated beneficial results. This result is similar to another study conducted in Turkey aiming to evaluate postoperative self-esteem, sexual satisfaction, coping with stress, and defense mechanisms in married Turkish women who underwent vaginoplasty surgery. They reported that the mean Coopersmith Self-Esteem Inventory score was significantly higher in the vaginoplasty group than in the controls [17].

In line with this result, another study reported that there was a significant personal enhancement in the sexual performance of both women and their sexual partners, especially in patients undergoing vaginal narrowing procedures [18]. The quality of a woman's sex life reportedly has an important role and impact [19]. Therefore, it is worth mentioning that based on Islamic laws, male Muslims are allowed to marry four wives, which can put women in a competitive situation of pleasing their husbands either to prevent another marriage, or if does happen, to ensure they are sexually attractive. Hence, a reason for undergoing vaginal surgery.

The majority of the current study participants complain of urinary incontinence. A Saudi study aimed to identify the prevalence of urinary incontinence and associated risk factors among Saudi women in the Asir Region of Saudi Arabia reported that urinary incontinence is common among Saudi females due to multiparity [20]. Therefore, it can be argued that these health issues may be underlying factors behind the women feeling confident after undergoing vaginal rejuvenation surgery.

However, in another study, most women underwent vaginal repair procedures to improve genital appearance and not for a functional reason, such as urinary incontinence [17]. They found that a main (69.8%) motivation to perform the surgery was for cosmetic reasons. A total of 62.3% of the women reported physical or practical causes, while 54.7% reported emotional causes, and 17% reported health reasons.

Limitations

This study has some limitations. Due to the Covid-19 pandemic, the data collection method of the study was through an online survey; therefore, the researcher could not control the study participants since it was an online survey. The research had a time limit as well, which constrained the research project timeframe. In addition, the online survey may not have reached all targeted women during these hard times, and not all women had access to certain social media websites such as WhatsApp, Twitter, and Facebook. Therefore this study cannot generalize the data due to its small sample size (only 115). Another limitation of this study may have been respondent bias because those who completed the survey were interested in participating in a research study about such a sensitive personal topic.

CONCLUSIONS

The purpose of the current study was to identify factors influencing women to undertake vaginal rejuvenation, to assess their satisfaction following the surgery and to determine its impact on women's health in the KSA. This surgery is highly prevalent and significantly impacts a woman's sexual health and quality of life. The main results of this study indicate that vaginal rejuvenation procedures have a positive impact on women's health. This study has shown various reasons for women's satisfaction with vaginal rejuvenation. Further research in different geographical area and with a larger sample size is required to better verify the impact of vaginal rejuvenation surgery on women's health.

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