# **Original Research**

# Vaginal health: insights, views, and attitudes (VIVA). Results from a survey in South Korea

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#### **Summary**

Purpose: This study investigated the awareness and attitude on the subject of vaginal atrophy in postmenopausal women in South Korea. Materials and Methods: After the translation of the questionnaire used in the international Vaginal Health: Insights, Views & Attitudes (VIVA) survey into the Korean version, a total of 500 postmenopausal Korean women were given a personal interview survey to complete a structured questionnaire. Results: Forty-four percent of the women experienced vaginal symptoms after menopause, but only 14% of the women considered vaginal symptoms to originate from vaginal atrophy. More than two-thirds of the women believed that sufficient information about the symptoms and treatment options of vaginal discomfort were available and 77% of Korean women indicated their gynaecologists or other doctors as the main source of information regarding vaginal health. However, 46% and 64% of women who had vaginal discomfort had never consulted a healthcare professional or never received any treatment; 57% and 70% of the women in this survey replied respectively that if they had been aware of hormone therapy and topical hormone medicine for treatment of vaginal symptoms, they would have taken it. Conclusions: Korean postmenopausal women suffered more severely for shorter duration from their symptoms than those in international VIVA survey, and they tended not to have treatment or to consult with a healthcare professional. Many Korean postmenopausal women dismiss symptoms of vaginal atrophy due to a lack of awareness and being ashamed and considered a taboo to mention their vaginal condition as well as sexual life.

Key words: Vaginal atrophy; Postmenopausal women; VIVA survey.

## Introduction

Vulvovaginal atrophy manifests gradually with the onset of menopause showing symptoms such as vaginal dryness, soreness, itching, discharge, and dyspareunia [1]. According to a survey of 570 South Korean postmenopausal women, 49% had experienced vulvovaginal symptoms [2]. Vulvovaginal atrophy has adverse physical and emotional impacts including sexual dysfunction, lower urinary dysfunction, negative self-esteem, and reduced intimacy between postmenopausal women and their partners [3, 4]. Nevertheless, many social and cultural factors make it difficult for women to talk about vaginal discomfort and sexual issues to their healthcare practitioners. Women have been ashamed and considered taboo to mention about vagina and vaginal health especially in Asia. Furthermore, there is a lack of awareness of available treatments for these issues [5]. Such atmosphere resulted in less than 25 % of women talking counsel from their healthcare practitioners about vaginal symptoms [6, 7]. Additionally, even the women who consulted doctors about vaginal atrophy felt that their concerns were dismissed as a normal part of aging therefore. Therefore, many were not given information on treatment options such as low dose oestrogen therapy [4, 7].

Vaginal atrophy can be managed successfully: the quality of life and the sexual health of postmenopausal women can be significantly improved by educating women about its diagnosis and appropriate therapeutic options [8].

The international Vaginal health: Insight, Views & Attitudes (VIVA) survey is one of the studies that has assessed knowledge of vaginal atrophy among women using a structured online questionnaire in the UK, USA, Canada, Sweden, Denmark, Finland, and Norway [9]. While there have been many studies globally analysing the attitudes of women toward vaginal atrophy and emphasizing the importance of the knowledge of the condition, there are no studies in South Korea that have examined the awareness of vaginal health in postmenopausal women. Thus, this study was to investigate the awareness and attitude on the subject of vaginal atrophy in postmenopausal women in South Korea as one of the VIVA studies.

# **Materials and Methods**

VIVA is a large-scale international online survey conducted in

Table 1. — Demographics of the women (n=500).

Variables	%
Time since menopause	
1-3 years	13
4-5 years	12
> 5 years	75
Residence	
Seoul	6
Bucheon	62
Incheon	28
Others	4
Education	
More than college	13
High school or less	87
Monthly household income	
< 3 million won	43
≥ 3 million won	57
Chronic disease	
Absence	65
Presence	35

2010 throughout the United Kingdom, the United States, Canada, Sweden, Denmark, Finland, and Norway. Survey participants were women between the ages of 55 and 65 years who reached menopause and ceased menstruation for more than 12 months. Each country surveyed 500 postmenopausal women (except 520 women in the case of Norway), and a total of 3,520 women have been questioned on symptoms of vaginal discomfort, information sources and advice, and treatment. Symptoms of vaginal discomfort included vaginal dryness, itching, burning, soreness in vagina, and pain during sexual intercourse [9].

The Korean version of the VIVA questionnaire was developed through translation, harmonization, and a pilot test. Two bilingual researchers translated English questions into Korean taking into consideration the definitions and origins of the words, and possible underlying meanings. Five gynaecologists and researchers identified some awkward and inappropriate words in the translation and presented alternatives. The Korean pilot version of the VIVA questionnaire was pretested to solicit opinions concerning its comprehensibility. The final version was completed with several comments having been taken into account. The survey was conducted on 500 Korean postmenopausal women resident in South Korea who were aged 55-69 years, had reached menopause and ceased menstruation for 12 months or more.

Target subjects were gynaecological out-patients from a university medical multi-centre source (Seoul, Bucheon, Cheonan, and Gumi) and women taking a monthly health education about menopause designed for the general public. Each woman provided informed consent with regards to participating in the study, which had been previously approved by the local ethics committee and the Institutional Review Board. If a woman met the criteria for this research, she was given a personal interview survey - either individually or as a group - instead of an online questionnaire to complete a structured questionnaire. This allowed better communication as the women were able to ask the researchers about the survey questions, thus providing more accurate results. The content of the questionnaire used in this study was exactly the same as the content of the international VIVA survey. After a technical summary of the survey results of 500 Korean postmenopausal women, the characteristics of symptoms and knowledge about vaginal atrophy in Korean postmenopausal women were analysed.

Table 2. — Aspects of life negatively impacted by vaginal discomfort (n=500).

Overall quality of life	66
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Feeling healthy	27
Sexual intimacy	23
Feeling attractive	17
Do not know	16
Traveling	16
Loving relationship with a partner	15
Exercising	15
Playing a prominent role in my community	14
Participating in outdoor activities	13

<sup>&</sup>lt;sup>a</sup> Respondents could choose more than one option.

#### Results

The demographics of the subjects surveyed are presented in Table 1. The majority of the women had been in a state of menopause for over five years. Thirteen percent of the women were college graduates and 57% earned a monthly household income of three million Korean Won. A total of 35% of the women had chronic diseases, with hypertension as the most common condition affecting 21% of the women, 12% had diabetes, and 4% had cancer or other diseases (Table 1).

The most common symptoms found in Korean postmenopausal women were hot flashes (65%), night sweats (36%), depression (31%), and irritability (30%). A total of 44% of women (222 women) reported experiencing vaginal symptoms after menopause. Among these vaginal symptoms, 59% experienced vaginal dryness, 41% had dyspareunia, 39% had itching, 24% had soreness, 21% had urinary incontinence, and 10% experienced increased leucorrhea (Figure 1).

Most women answered that they believed their vaginal discomforts were due to menopause, vaginal infection, or cystitis, but some did not understand the origin of their symptoms. Only 14% of Korean postmenopausal women believed that these symptoms originated from vaginal atrophy. A total of 24% of women with vaginal discomfort answered that their symptoms were mild and 76% assessed their symptoms to be moderate or severe. More than half of the women (59%) who experienced vaginal discomfort stated that they had had their symptoms for less than a year and 41% reported symptoms for more than year. A total of 53% of women indicated that they were concerned about the symptoms of vaginal discomfort and 52% recognized the discomfort as a chronic disease requiring treatment of the underlying cause. Overall, 86% of Korean women considered that vaginal discomfort had an adverse impact on their lives. Areas considered to be negatively affected included quality of life (66%), feeling healthy (27%), sexual intimacy (23%), and feeling attractive (17%) (Table 2).

In this Korean survey, more than two-thirds of the

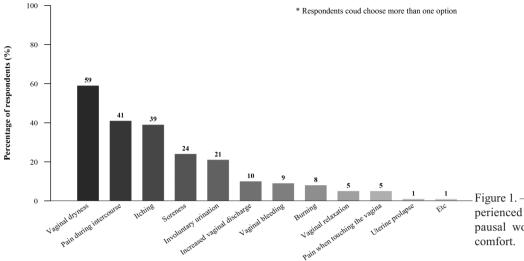


Figure 1. — Specific symptoms experienced by Korean postmenopausal women with vaginal dis-

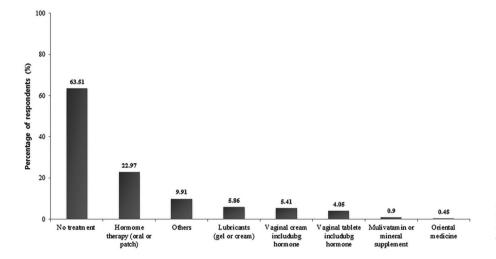


Figure 2. — Treatment used by Korean postmenopausal women with vaginal discomfort.

women (76%) believed that sufficient information about the symptoms and treatment options of vaginal discomfort were available. When asked about the main source of information regarding vaginal discomfort and treatment options, Korean postmenopausal women responded in the following order: from other doctors (55%), from gynecologists (22%), from the internet (20%), from family members or friends (6%), from books or magazines (1%), and from TV and media (1%).

When asked how they would feel about consulting their doctors on the matter of vaginal discomfort, only 40% of the women reported that they would feel comfortable. A total of 41% of the women reported that they would not mention or would hesitate to mention vaginal discomfort to their doctors. A total of 69% of the women had not been asked by their doctors about the issues of vaginal health after menopause. From the women who had experienced vaginal discomfort, almost half (46%) replied that they had never consulted a healthcare professional on the matter of

vaginal issue. Among the women who did consult a health-care professional (n=121), 20% had sought the help of a healthcare professional after suffering from symptoms for six months to a year, 10% did so after a year, and 29% waited for more than two years. Gynecologists were the most commonly visited professional by women who consulted medical experts.

Over half (64%) of the 222 postmenopausal women who had experienced vaginal discomfort did not receive any treatment. Twenty-three percent of the 222 postmenopausal women used menopausal hormonal therapy (oral tablets or patches), 6% used vaginal lubricants (gels or creams), 5% used vaginal hormone creams, 4% used vaginal hormone tablets, 1% used mineral/vitamin supplements, and 0.5% used Chinese medicine from oriental medical clinics (Figure 2). A total of 57% of women who took part in the survey replied that if they had been aware that menopausal hormone therapy (oral tablet or patch) was available and effective for vaginal symptoms, they would have taken it. In

addition, 70% of postmenopausal women answered similarly when replying to a question on topical hormone medicine (vaginal hormone tablets, vaginal hormone creams, etc.). The majority of surveyed women (88%) agreed with the statement 'I am not expecting to return to the vagina of my youth; however, I would welcome greater comfort' and 86% of the women agreed with the statement 'I want the freedom to be the woman I want to be regardless of my age'.

#### Discussion

A total of 44% of Korean postmenopausal women experienced vaginal symptoms such as dryness, burning, pain, and this prevalence is similar to the 45% yielded in the international VIVA study. Regarding symptoms of the condition, other surveys such as the Women's Voice in the Menopause [10] and the REVIVE survey [11] have reported prevalence rates of 39% and 38%, respectively. In the Clarifying Vaginal Atrophy's Impact on Sex and Relationships (CLOSER) survey, 73% of women in Northern Europe and 73% of women in Southern Europe were said to be affected by vaginal dryness [4]. These results demonstrate that the prevalence of symptoms of vaginal atrophy varies according to different surveys.

In this survey, 76% of Korean postmenopausal women with vaginal discomfort said their symptoms were moderate or severe. This result is higher than that of the international VIVA study [11] in which 62% of women stated that they had moderate or severe symptoms. In the Women's Voice in the Menopause survey [10], 55% of women with vaginal discomfort stated that they had moderate to severe symptoms. While 55% of women in international VIVA study stated that their symptoms continued for more than three years, only 10% of Korean women stated that it continued for more than three years. Moreover, 59% of Korean women who had experienced vaginal discomfort described that they had had vaginal symptoms for less than a year. It seems that Korean postmenopausal women experience symptoms of vaginal atrophy more severely for a shorter duration.

Korean postmenopausal women felt more negatively about vaginal discomfort than women in the international study (86% vs. 75%). The most negatively affected areas of women's life by vaginal discomfort were quality of life (66%), feeling healthy (27%), sexual intimacy (23%), and feeling attractive (17%). The international study results were 64% for the category of sex intimacy and 32% for loving relationship. More than 70% of women from the UK, the USA, Canada, and Sweden stated that their sex lives had been considerably affected. Korean postmenopausal women showed the lowest percentage with regard to their sex lives having been negatively impacted. It might be due to the traditional Confucian ethics in Korea that the women have been ashamed and considered taboo to discuss their private sexual life and vaginal condition with other people.

Only 36% (compared to 78% of international VIVA study) of postmenopausal women who had experienced vaginal discomfort had ever received treatment for vaginal atrophy. A total of 57% and 70% of the women who took in this survey replied that if they had been aware that menopausal hormone therapy or topical hormone medicine (vaginal hormonal tablets, vaginal hormonal creams, etc.) were available and effective for vaginal atrophy, they would have taken it. For the same questions, the international study showed rates of 36% and 49%, respectively. These results demonstrated that although awareness of treatment option is much lower in Korean women than those in international VIVA study, Korean postmenopausal women were more open to treatment if they were aware of the effectiveness of menopausal hormone therapy.

Recent guidelines suggested that if doctors, especially gynaecologists, were to mention the subject of vaginal symptoms with all postmenopausal women at every visit, women's awareness of vaginal atrophy would significantly improve [12-14]. This type of proactive attitude from healthcare professionals would help to educate women about the fact that the symptoms of vaginal discomfort are caused by estrogen deficiency and there are many treatment options available. Subsequently, this awareness would increase the rate of women obtaining proper treatment for vaginal atrophy.

As a VIVA survey for postmenopausal women in South Korea, this is the first of its kind to shed light on the subjective awareness of vaginal atrophy in Korea. Information about knowledge of postmenopausal vaginal atrophy in Korean women will be valuable in helping healthcare professionals to better understand prevailing situations and attitudes.

These results highlight the need for a change of mind-set in Korea so that women can benefit from treatment that alleviates the symptoms of vaginal atrophy significantly. Proactive asking of symptoms of vaginal atrophy to postmenopausal women at their visits could initiate a conversation on the vaginal condition. This conversation would be able to educate women to make it clear that vaginal atrophy is not simply part of aging but, rather, a treatable condition with a variety of treatment options. As this study limited the number of participants to 500 postmenopausal women, the results are not representative of all Korean postmenopausal women. However, as countries participating in the international VIVA study also limited their participants to 500 women, it was deemed appropriate to maintain the same parameters in this study.

# Conclusion

Korean postmenopausal women suffered more severely for shorter duration from their symptoms than their international counterparts, and they tended not to have treatment or to consult with a healthcare professional. Many postmenopausal women dismiss symptoms of vaginal atrophy due to a lack of awareness and being ashamed and considered taboo to mention their vaginal condition as well as sexual life. As a result, a large number of postmenopausal women with vaginal discomfort are prevented from obtaining appropriate treatment.

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