

Original Research Article

Symptoms and Practices of Reproductive-Age Women Living in a City in the Northeastern Turkey Concerning Reproductive Health Morbidities

Özlem AŞCI¹, Fulya GÖKDEMİR²

¹Assistant Professor, Artvin Çoruh University Health Sciences Faculty, Turkey.

²Instructor, Artvin Çoruh University Health Sciences Faculty, Turkey.

Corresponding Author: Özlem AŞCI

ABSTRACT

Background: Women's health and quality of life are severely affected by reproductive morbidities such as reproductive tract infections (RTIs) and pelvic organ prolapse (POP). Women's statuses of performing the practices to maintain their reproductive health significantly affected early diagnosis and treatment success of the reproductive health problems.

Methods: The aim of this study was to determine the self-reported symptoms and practices of reproductive-age women concerning reproductive morbidities. This descriptive study was conducted in a healthcare institution in Artvin province. The sample involved 549 women who were reached by convenience sampling method and reported that they were not pregnant or did not go through the menopause. The data were collected using the questionnaire prepared by the researchers.

Results: 52.3% of the women were single and 47.7% were married. 92.3% of the women were complaining at least one symptom associated with premenstrual syndrome (PMS), 73% with RTIs, 28% with dyspareunia, 13.8% with urinary incontinence (UI), 9.3% with infertility and 6.9% with POP. In any reproductive morbidity, the rate of women seeking medical help was 70.1%, the rate of going regular gynecology was 11.1%, the rate of having Pap test was 24.7%, the rate of self-breast examination was 27.3%, and the rate of doing Kegel exercise was 13.3%. The reported symptoms and practices showed some differences in terms of marital status ($p < 0.05$).

Conclusions: Women's rate of complaining about the symptoms related to reproductive morbidities was high. About three out of every ten women did not receive medical aid in their reproductive morbidities. Although many women reported that they received medical aid, few women reported that they performed the practices for protecting their reproductive health. The tendency of both seeking medical aid and performing the practices for protecting the reproductive health was lower in single women than the married ones.

Keywords: Woman's Health, Reproductive Health, Sexual Health, Morbidity, Gynecologic Diseases Symptoms, Health Practice.

INTRODUCTION

Reproductive-age (15-49 years) is a period when women are more likely to encounter reproductive health problems and their needs for health services are higher. [1-4] In this period, reproductive health of women is often affected by problems such as the pregnancy and birth-related problems, inadequately met contraceptive needs,

unintended pregnancies and voluntary abortions, infertility, menstrual problems, reproductive tract infections (RTIs) including Sexually Transmitted Diseases (STDs), sexual function disorder (SFD), reproductive organ cancers, violence based on gender inequality, abuse, etc. as well as other health problems (such as obesity, systemic illness, mental problems, mental

problems, alcohol addiction, smoking addiction and etc.).^[1-5]

Women's health policy of many countries including Turkey are intended to improving women's and community health through the regulation of fertility, provision of safe motherhood, and promotion of maternal and infant health.^[5-8] The scope of reproductive health services offered to women also focuses on having children after a sexual life often experienced in the marriage and on the fertility-related conditions.^[9,10] The reduction of mortality rates has frequently been considered as a priority issue, resulting in significant improvements in antenatal and postnatal health services (such as reduced maternal and infant mortality). Reproductive health problems of non-pregnant women are often neglected by researchers and policy makers.^[5-7] However, women's health is also affected by reproductive system morbidities (premenstrual and menstrual problems, RTIs, pelvic organ prolapse, dyspareunia, and infertility) that are not related to pregnancy or childbirth.^[4,11] In the literature, reproductive health morbidities are associated with pregnancy and birth-related problems, marital and social life problems, mental problems such as depression and anxiety, reduced quality of life, low body image and self-esteem as well as time, money and labor loss.^[1,5,6,12-15] It is stated that some untreated conditions such as RTIs are associated with infertility, chronic pelvic pain, pregnancy-related problems and congenital infections and increase the risk of STIs significantly.^[6,15]

It is hard to say that women also perceive the reproductive morbidities as a serious health problem. Women tend to get healthcare service when they have severe complaints or they become pregnant.^[10] The studies reveal that women do not pay enough attention to their own health and their knowledge and practices for protecting their reproductive health is inadequate (regular gynecological visits, breast self-examination, having papanicolaou test, etc.).^[10,13,16] In addition, many women cannot

benefit from the reproductive health services due to the reasons like lack of education, low social status, gender discrimination, inability to make decisions on health issues alone, inadequate awareness and so on.^[6,10,13,17] In addition, it is known that conservative women are also afraid of going to the gynecological examination, report symptoms and delay in receiving health services for various reasons (not wanting male physician, lack of information, lack of social support, religious beliefs, embarrassment, fear of protecting virginity, fear of punishment, and stigmatization etc.).^[13,15] These problems are even more common in adolescents, young adults, or single women.^[9,10,15] In the literature, reproductive health morbidities are defined as a condition in which women suffer in silence and it is stated that the treatment of many women is delayed and the reproductive morbidity cases in the society are increasing day by day.^[6,18,19]

There is no national study indicating how many of the women living in Turkey are affected by reproductive morbidities. In regional studies, only one study was found focusing on morbidities.^[20] What is known about the reproductive health morbidities in Turkish women can be asserted to be based on the studies conducted by focusing on the most common symptoms (eg. Vaginal discharge symptom of RTIs) of some morbidities or also including the subjects concerning the reproductive organs in the context of women's health problems.^[2,3,17,20-22] This makes it difficult to clearly understand the women's status of being affected by reproductive morbidities and their needs for health services. In addition, there are results in the current studies indicating that reproductive health morbidities may be common among women and there are more women who complain about morbidity symptoms and do not receive medical treatment. In addition, it is also remarkable that this situation shows regional differences.^[2,3,17]

This study was designed due to inadequacy of information about the

universality and importance of women's reproductive health and reproductive morbidities. The primary objective of this study is to determine the symptoms of the self-reported reproductive health morbidities of 18-49 year-old women in Artvin province. The secondary purpose of the study is to determine the reproductive health practices of women.

MATERIALS AND METHODS

This descriptive and cross-sectional study was conducted in a hospital in the province of Artvin between 31.12.2015 and 15.07.2016. Artvin is a city located in the northeastern Turkey with the population of 168.370 people. [23] Artvin is disorganized in terms of settlement of districts and villages and has relatively limited conditions in terms of qualified health services. The hospital was selected for the study due to its convenience and density of the transportation offered to the people living in the districts and villages. This study was completed with 549 women who were reached by using convenience sampling method. The inclusion criteria of the study were being aged between 18-49 years, being voluntary to participate in the study, and being in the hospital due to any reason (patient visit, accompaniment, searching health due to reasons apart from emergency or serious illnesses). The exclusion criteria of the study are that the women reported that she was pregnant or went through the menopause and she could not complete the interview for any reason (time constraint, examination order, etc.). The data of the study were collected once with face-to-face interview technique using a semi-structured questionnaire prepared by the researchers in accordance with the literature.

In the study, the presence of one or more disturbing emotional or somatic symptoms within previous week of the menstruation was evaluated as a PMS, the presence of a pain that affects daily living during the menstruation was evaluated as dysmenorrhea, vaginal bleeding in the intervals of <21 days and >35 days was

evaluated as irregular menstruation, menstrual bleeding lasting for <2 days was evaluated as shortened, and menstrual bleeding lasting for >7 days was evaluated as prolonged menstrual bleeding. [20,24] The presence of symptoms of RTIs was directly questioned (such as 'Do you have itching of the genital area / vulva or vagina?'). [25] In the evaluation of abnormal vaginal discharge complaint, the pathological discharge characteristics (color, texture, odor, cyclicity) that can be caused by common vaginal infection types (Bacterial vaginosis, *Trichomonas vaginalis* and *Candida spp.*) and by the RTIs related reasons were taken into consideration. [17,20,26,27] In the study, history of not getting pregnant for at least one year despite the regular sexual intercourse without contraceptive use was evaluated as infertility, the presence of any pain in the vagina or genital area during or after sexual intercourse was evaluated as dyspareunia, sagging or fullness in the reproductive organs or the presence of incontinence was evaluated as POP and all kind of involuntary incontinence complaints was evaluated as UI. [19,20,24] The data of the study were analyzed by using the SPSS 16.00 program in the computer environment. The data were evaluated by descriptive statistical methods (number, percentage distribution, mean and standard deviation). Comparisons of categorical variables in the study were carried out by using Chi-square significance test, while the comparison of numerical variables were made by using Student t test. In the evaluation of the results, $p < 0.05$ was considered as statistically significant. The resolution of the Ethics Committee of Artvin Çoruh University, written permission from the institution where the study was conducted and verbal consent of the participants were received for this study.

RESULTS

This study was completed with 549 women and 52.3% of them were single and 47.7% were married. The mean age of the

single women ($p=0.000$) and their monthly income were lower compared to the married ones ($p=0.001$). Among the women, the rate of being in age group of 18-24 years and receiving high school and higher education were higher in single women compared to married ones ($p=0.000$), the rates of working ($p=0.005$), perceiving the economic status as high ($p=0.035$), and having social security ($p=0.013$) were significantly lower (Table 1).

It was stated that 50.1% of the women participating in the study experienced sexual intercourse before. This rate was 4.5% among single women. 48.8% of the women stated that they had sexual partner during the study. Among the single women, the rate of those who had sexual partners was 2.1%. 18.3% of the women with sexual partner reported that they had sexual intercourse less than once a week,

19.8% had the intercourse once a week, 34.0% had twice a week, and 28% had three times or more a week. 57.5% of the women thought that their sexual life was good, 36.2% moderate and 3% bad. 3.4% of the women did not answer this question. 41% of the women who were sexually active reported that they had burning sensation during or after the sexual intercourse, 27.6% sexual anorexia, 27.6% vaginal dryness, 14.1% failure to have an orgasm, and 10.8% had difficulties in making vaginal sex for reasons like fear, contraction etc. It was found that 41.7% of the women in the study reported that they conceived before. The average of the first gestational age of these women was 22.99 ± 4.16 , total mean number of pregnancies was 1.96 ± 1.43 and the average number of alive children was 1.61 ± 1.16 .

Table 1. Socio-demographic characteristics of married and single women in the study

	Married (n=262)	Single (n=287)		Total (n=549)
	Mean \pm SD	Mean \pm SD	p	Mean \pm SD
Age	32.51 \pm 7.01	22.54 \pm 4.06	.000	27.27 \pm 7.54
Monthly income	2814.27 \pm 1716.81	2227.34 \pm 1309.48	.001	2530.52 \pm 1539.11
	n (%)	n (%)		n (%)
Age group				
18-24	28 (10.76)	226 (78.74)	.000	254 (46.4)
25-29	73 (28.07)	40 (13.93)		113 (20.7)
30-34	68 (26.15)	16 (5.57)		84 (15.4)
35-39	39 (15.0)	3 (1.04)		42 (7.7)
40-49	52 (19.9)	2 (0.68)		54 (9.9)
Place of residence				
Province	152 (58.0)	144 (50.2)	.119	296 (53.9)
District	66 (25.2)	94 (32.8)		160 (29.1)
Village	44 (16.8)	49 (17.1)		93 (16.9)
Family type				
Nuclear	213 (81.3)	228 (79.4)	.585	441 (80.3)
Extended	49 (18.7)	59 (20.6)		108 (19.7)
Educational level				
Primary school and below	66 (25.2)	11 (3.8)	.000	77 (14.0)
Secondary school	46 (17.6)	21 (7.3)		67 (12.2)
High school	86 (32.8)	160 (55.7)		246 (44.8)
University and higher	64 (24.4)	95 (33.1)		159 (29.0)
Economic situation perception				
High	82 (31.3)	73 (25.4)	.035	155 (28.2)
Moderate	174 (66.4)	196 (68.3)		370 (67.4)
Low	6 (2.3)	18 (6.3)		24 (4.4)
Social Security				
No	30 (11.5)	55 (19.2)	.013	85 (15.5)
Yes	232 (88.5)	232 (80.8)		464 (84.5)
Working status				
No	166 (63.4)	214 (74.6)	.005	380 (69.1)
Yes	96 (36.6)	73 (25.4)		169 (30.9)

At least one PMS symptom was detected in 92.3% of the women in the

study. The mean PMS symptom reported by the women was 2.90 ± 1.89 . Mean PMS

symptom of the married women (2.69 ± 1.93) was significantly lower than single women (3.09 ± 1.83) ($p=0.015$). The three most common PMS symptoms reported by the women were abdominal pain and bloating (60.5%), irritability (51.7%), and pain in the breast (45.5%). The rate of reporting headache symptoms was higher in married women comparing to the single ones ($p=0.036$); whereas, the rate of reporting the depressive thoughts (pessimism, sadness, want to cry etc.) ($p=0.000$) and change in the sleeping habit ($p=0.013$) symptom was lower (Table 2).

When assessing in terms of menstrual disorders, one menstrual disorder was determined in 51.6% of women, two in 46% and three menstrual disorders in 2.4%. These rates were 56.7%, 40.4% and 3% in married women and 46.6%, 51.5% and 1.9% in single women, respectively. The

difference was not statistically significant ($p=0.076$). The most common menstrual disorder in the study was dysmenorrhea (47.7%). Dysmenorrhea rates were higher in single women than married women (Table 2).

It was determined that 73% of the women in the study had at least one RTI symptom, 9.3% infertility, 28% had dyspareunia, 13.8% UI and 6.9% POP. Abnormal vaginal discharge (62.5%), itching of the genital area / vulva or vagina (31.3%) and lower abdominal pain (30.2%) were the first three most commonly reported RTI symptoms. The frequency of abnormal vaginal discharge symptom was significantly higher in single women than married women ($p=0.002$). Prevalence of UI was significantly higher in married women than single ones (Table 2).

Table 2. Self-reported symptoms of married and single women concerning some reproductive health morbidities (n=549)

Morbidities	Symptoms	Married		Single		Total		p
		Yes	No	Yes	No	Yes	No	
PMS	Abdominal pain and bloating	152(58.0)	110(42.0)	180(62.7)	107(37.3)	332(60.5)	217(39.5)	0.294
	Irritability / tension / unrest	126(48.1)	136(51.9)	158(55.1)	129(44.9)	284(51.7)	265(48.3)	0.105
	Breast pain	110(42.0)	152(58.0)	140(48.8)	147(51.2)	250(45.5)	299(54.5)	0.123
	Fatigue/weakness	106(40.5)	156(59.5)	118(41.1)	169(58.9)	224(40.8)	325(59.2)	0.931
	Headache	81(30.9)	181(69.1)	66(23.0)	221(77.0)	147(26.8)	402(73.2)	0.036
	Depressive thought	29(11.1)	233(88.9)	73(25.4)	214(74.6)	102(18.6)	447(81.4)	0.000
	Changes in appetite	36(13.8)	226(86.2)	54(18.9)	232(81.1)	90 (16.4)	458(83.6)	0.108
	Changes in sleeping habits	22(8.4)	240(91.6)	44(15.3)	243(84.7)	66 (12.0)	483(88.0)	0.013
	Changes in skin (acne, adiposity etc.)	8(3.1)	254(96.9)	2(0.7)	285(99.3)	10 (1.8)	539(98.2)	0.054
	Menstrual disorders							
	Dysmenorrhea	106(40.5)	156(59.5)	156(54.4)	131(45.6)	262(47.7)	287(52.3)	0.000
	Irregular menstruation	57(21.8)	205(78.2)	78(27.1)	209(72.9)	135(26.7)	414(73.3)	0.090
	Prolonged or shortened menstrual bleeding	15(5.7)	247(94.3)	9(3.1)	278(96.9)	24(4.6)	525(95.4)	0.145
RTIs	Abnormal vaginal discharge	142(54.2)	120(45.8)	201(70.0)	86(30.0)	343(62.5)	206(37.5)	0.002
	Itching of the genital area/vulva or vagina	75(28.6)	187(71.4)	97(33.8)	190(66.2)	172(31.3)	377(68.7)	0.192
	Irritation of the genital area/vulva or vagina	47(17.9)	215(82.1)	39(13.6)	248(86.4)	86 (15.7)	463(84.3)	0.161
	Lower abdominal pain	88(33.6)	174(66.4)	78(27.2)	209(72.8)	166(30.2)	383(69.8)	0.102
	Genital ulcers, sores or blisters	9(3.4)	254(96.6)	19(6.6)	267(93.4)	28 (5.1)	521(94.9)	0.073
	Swelling in the genital area	20(7.6)	242(92.4)	15(5.2)	268(94.8)	35 (6.4)	514(93.6)	0.249
	Postcoital bleeding*	33(12.6)	229(87.4)	2 (12.0)	4 (88.0)	35 (13.0)	233(87.0)	0.561
Infertility**	Unable to get pregnant for at least one year despite unprotected and regular sexual intercourse	24(9.2)	238(90.8)	1 (6.0)	5(94.0)	25 (9.3)	243(90.7)	1.000
Dyspareunia	Painful sexual intercourse	71(27.1)	191(72.9)	4(88.0)	2(12.0)	75 (28.0)	193(72.0)	1.000
POP	Sagging, fullness or incontinence in the reproductive organs	19(7.3)	243(92.7)	-	13(100)	19 (6.9)	256(93.1)	0.609
UI	Involuntary urination	49(18.7)	213(81.3)	27(9.4)	260(90.6)	76 (13.8)	473(86.2)	0.001

* Women with previous sexual experience were assessed (n=275), **Women with sexual partners during the study were evaluated (n=268). Number of women who have sexual partners in the single group=6

In the study, the rate of receiving medical aid in any reproductive morbidity

for women was 70.1%. Among the women, the rate of going to gynecological control

regularly was 11.1%, the rate of having Pap test was 24.7%, the rate of doing BSE was 27.3% and the rate of doing regular Kegel exercise was 13.3%. the rates of receiving

medical aid, going to regular gynecological control and having a Pap test were significantly lower among single women compared to the married ones (Table 3).

Table 3. Reproductive Health Practices of Women in the Study

	Single (n=287)	Married (n=262)		Total (n=549)
	n(%)	n(%)	p	n(%)
Receiving medical aid in any reproductive health morbidity				
No	97(33.8)	67(25.6)	0.040	164(29.9)
Yes	190(66.2)	195(74.4)		385(70.1)
Going to the regular gynecological control				
No	272(94.8)	216(82.4)	0.000	488(88.9)
Yes	15(5.2)	46(17.6)		61(11.1)
Having a Pap test before				
No	13(100)	194(74.0)	0.043	207(75.3)
Yes	-	68(26.0)		68(24.7)
Doing monthly breast self-examination				
No	217(75.6)	182(69.5)	0.125	399(72.7)
Yes	70(24.4)	80(30.5)		150(27.3)
Doing regular Kegel exercise				
No	253(86.7)	223(85.1)	0.316	476(86.7)
Yes	34(11.8)	39(7.1)		73(13.3)

DISCUSSION

In the evaluation of the symptoms of women associated with the reproductive health morbidities in the study, their self-reports were taken as a basis. Question-based information about the reproductive health can be useful in places where laboratory tests and examination facilities are limited. [20] Especially researchers, considering the cost of the tests that are accepted as gold standard for the diagnosis of RTIs or the unwillingness of women in conservative societies to get gynecological examination, frequently take the self-reports of women in order to determine the frequency of problems concerning the reproductive organs. In addition, most of the healthcare personnel other than specialists in Turkey do not have the authority to request laboratory tests. [4,6,7,15,26,27] Nevertheless, it is known that evaluating problems such as RTIs in the absence of laboratory facilities or inadequate resources in terms of common symptoms and easily diagnosed examination findings is effective in increasing early diagnosis and treatment. [25-27]

When previous studies are examined, it is seen that menstrual disorders are a common reproductive morbidity among women. [4,6,7,28,29] It was determined

in the present study that 51.6% of the women had at least one menstrual disorder, and dysmenorrhea (47.7%) was the most common menstrual complaint, which was compatible with the literature. [3,18,20-22,30] At least one PMS symptom was detected in 92.3% of the women participating in the study, regardless of the severity of the complaint. The most common PMS symptoms reported by the women are abdominal pain, swelling, irritability, breast pain, and fatigue in parallel with the previous studies. [21,30] Daşıkan et al., [30] found at least one premenstrual symptom in all women participating in their study, and they stated that 70-90% of fertile-age women could experience premenstrual and menstrual complaints, but these complaints were severe enough to affect physical and psychological capacity in 20-40% of women. When the literature is examined it is seen that the prevalence of PMS in reproductive-age women is 30-40% and this prevalence varies based on the countries. [12,31] While the lowest prevalence of PMS among women is in Switzerland with 10%, the highest prevalence is in Iran with 98%. [31] The prevalence of premenstrual complaints in Turkish women ranges from 3.3% to 88%. [21,30] It is stated that PMS is more common in women living in Asian

countries compared to European countries, PMS prevalence is higher in the studies with low sample and many factors such as age, exercise, nutrition etc. are effective on this prevalence. [21,31] The high number of women complaining of PMS symptoms in this study may be associated with differences in data collection methods and sample characteristics, as many authors suggest. [12,21,30,31]

In the literature, the results of the studies on whether or not marital status is an effective variable to increase premenstrual and menstrual disorder risk or complaints of symptoms are inconsistent. It was determined in a population based study that the marital status was not a determinant in increasing dysmenorrhea risk in Turkish women. [22] In another study, menstrual complaints were found to be significantly higher in women who were single and nulliparous. [30] In a study examining the reproductive morbidity of young women in India (14-21 years), reproductive morbidities were found to be very high in both married and single women, and menstrual problems were reported to be more prominent in single women than married ones. [15] In another population-based study, menstrual problems were significantly higher in women under 30 years of age. [4] Some researchers indicate that premenstrual complaints actually begin in adolescence and youth ages but the symptoms are not too severe to require treatment and that complaints become intense with increasing age. [21,30] In this study, the fact that the single group reported relatively more premenstrual and menstrual symptoms may be associated with their younger ages than married ones and their tendency to seek less medical aid.

The most common symptom of lower RTIs (cervicitis and vaginitis) is abnormal vaginal discharge. [26] It was determined in a study previously conducted in national scale that 71.3% of the women in Turkey had abnormal vaginal discharge complaints and 88.5% of women who had such complaint were in the reproductive

age. [2] It has been reported in the local studies that the prevalence of lower RTIs varied between 30%-71% in Turkish women. [17,27] In a study conducted in Egypt, RTI was detected in 52% of the women by clinical examination. [11] In a study conducted in Iran, RTIs were found in 37.6% of the women based on self-report and clinical examination. [29] RTIs prevalence in India was found between 25.2%-70.5% in the studies in which clinical examinations and laboratory tests were used to diagnose, [7,28] and between 22%-24.6% in the studies based on self-report. [4,6] In parallel, RTI was a commonly problem for women in this study (73%) and abnormal vaginal discharge (62.5%) was the most frequently reported RTI symptom, which was consistent with the literature. [6,17,20,26,27] In addition, single women in the study were complaining more about the vaginal discharge symptoms than married women; whereas, their complaints about other RTIs symptoms were at similar rates. In parallel to this study result, in their study, Gosalia et al., [6] found that single and uneducated women experienced more frequent discharge complaints. Contrary to this study, there are also studies reporting that married women have more infectious problems or marital status is not associated with any reproductive health morbidity. [4,15] In order to understand the correlation between abnormal vaginal discharge and marital status, there is a need for a higher number of studies in particular on single or sexually inactive women.

It was found in this study that 9.3% of the women had infertility and 28% had dyspareunia. The frequency of infertility detected in the study was compatible with the literature. [7,24,29] The rate of dyspareunia determined in the study was parallel to the local studies conducted in Turkey. [32] It is stated in the literature that while the highest dyspareunia frequency is in the United States with 45%, the lowest prevalence is in Northern European with 1.8%, and when only high quality studies are analyzed, it is stated that the prevalence varies from 8% to

21.8%.^[33] Sexuality is an unspoken subject that cannot be asked easily in Turkey due to the effect of social, cultural, social factors and religious beliefs.^[10,32] This situation also negatively affects sexual life. SFD defined as the inability of an individual to have the sexual intercourse he/she desires is an important women's health issue that needs to be solved and experienced at a considerable rate in Turkey.^[1,34] Some symptoms indicating that women had dissatisfaction with sexual life and they experienced SFD were determined in the study. Complaints such as thinking that their sexual life is not good, the frequency of sexual intercourse less than once a week, vaginal dryness, inability to make vaginal sex due to the reasons like fear, contractions etc. and failure to have an orgasm were among these symptoms. In addition to the need for research in this matter, support for women in expressing complaints about sexual life by healthcare professionals as a requirement of a holistic approach to reproductive health may contribute to the early diagnosis and treatment of symptomatic reproductive health morbidities and SFD associated with sexual intercourse.

In this study, symptoms likely associated with UI in 13.8% of women and POP in 6.9% were determined. Symptoms of both morbidities were higher in married women than single women. In a population-based study in Egypt, genital prolapse was detected in 56% of the women by clinical examination.^[11] In another study, conducted in Iran, POP was determined in 41.4% of women based on self-report, clinical and ultrasonographic evaluation.^[29] In an evaluation based on self-report in Turkey, prolapse were determined in 7% of women; whereas prolapse and UI were determined in 17% of women.^[20] In India, POP was detected in 15.7% of women and stress UI was detected in 5.87% based on clinical examination and uterine prolapse was determined in 0.04% of women based on self-report.^[6,7] The UI prevalence in different societies ranges between 10% and

50%.^[35] The prevalence of UI in women over the age of 15 in national statistics in Turkey is reported to be 3.3%.^[36] However, in studies where UI is assessed with valid and reliable tools, the prevalence reported by researchers is often over 50% and it is stated that as the age increases, this rate increases to 70.3%.^[35] Age, giving birth, and increased BMI have been reported as important determinants of increased risk of UI and POP.^[24,35] In addition, it is emphasized in the studies that with the advancing age, the urethral muscle structure deteriorates and the UI frequency increases due to the decrease of the number of striated muscle fibers in the anterior wall of the urethra.^[14,35] The higher rates of UI and POP in the married group in this study can be explained by their birth histories, their older ages than married ones and their higher BMI rates. Concerning the subject, Kegel exercise, a pelvic floor exercise, was included among the reproductive health practices in this study. This is because this exercise strengthens the muscle tonus of the pelvic floor and it can be helpful to prevent UI in women and to improve sexual function.^[24,37] Besides, a great majority of women intend to do pelvic floor exercises during pregnancy and postpartum periods. However, very few women know that these exercises should be practiced for lifetime.^[37] It was also determined in the present study that only 13.3% of women do this exercise regularly.

The rate of seeking medical aid in any reproductive health morbidity among women in this study was 70.1%. The practices women do for seeking health in the subjects related to reproductive organs can be influenced by many factors. These factors may include women's socio-demographic characteristics such as age, educational level and income level as well as habits in health-disease, perceptions and beliefs, traditions and customs, effect of media and social environment, health policies and service delivery of their country.^[4,10,13,17,21] It was determined in Mishra et al.'s study^[15] that when other

socio-demographic characteristics were controlled, the educational level was a significant determinant of seeking treatment in reproductive morbidities. In this study, the rates of the women to seek medical aid in reproductive morbidities was relatively higher than the literature [4,28] which may be associated with the higher education level of the sample group.

Reproductive-age women are recommended to go to the annual gynecological examination even if they do not have any complaints, and to have a Pap test at an appropriate frequency for the risk group for the early diagnosis of cervical cancers. [10] Pap test is done free of charge within the scope of national cancer screening programs in Turkey. However, having Pap test among Turkish women is still not a common reproductive health practice. [10] The Pap test rates in Turkey are far behind the developed countries. [10,13] The result of this study supports the Pap test rate (22.1%) reported for general population of Turkey. [36] It was reported in a study conducted at national level in Turkey that 48.83% of women aged between 15-65 years never went to a gynecological examination before. [2] Daşıkan et al., [10] stated that there was a significant correlation between going to gynecological examination and doing Pap test and all women who are either sexually active or single or regardless of any complaint should have regular gynecological examination. Sexually active single women in this study did never this test before. The rate of the women to have regular gynecological examination in the study was (11.1%) and it was very low. Future studies may focus on what are the effective interventions to reduce the barrier perceptions of women about gynecological examination or performing Pap test.

In this study, significant differences were also determined in the reproductive health practices of sexually active women in terms of marital status. The rates of seeking medical aid in reproductive morbidities, going regular gynecological examinations

and having smear was lower in single women compared to the married ones. These results are consistent with the studies reporting that single women tend to seek less medical aid in gynecological complaints. [9,10,17] Mishra et al., [15] found in their study that older adolescents and young adults were more likely to seek treatment aid in reproductive morbidities compared to younger adolescents, and this was associated with the fact that older adolescents and young adults were mostly married. Giray and Kılıç [9] reported that single women had many barriers (such as the attitude of the service providers, the laws, the lack of appropriate services), especially cultural reasons to benefit from the reproductive health service compared to the married ones. In this study, the majority of the women who did not seek medical aid were not married. The majority of women with low economic status and no social security in the present study were also not married. Social security and economic status can be factors that negatively affect seeking medical aid. However, further studies are needed to determine the barriers to the use of services by single women in the region.

Despite inconsistencies in efficiency, BSE, which is strongly recommended by healthcare professionals, especially for high-risk groups, is a simple and cost-effective method and does not require high-tech devices in early screening practice. [13,38] However, in this study, it was determined that the behavior of doing BSE in married and single women was not widespread among women regardless of the difference. Only 27.3% of the women did regular BSE. It was determined in a study that 78.7% of Turkish women aged between 20-60 years did BSE but the rate of doing regular BSE was 15.2%. [38] In another study, the rate of doing regular BSE was found as 6.8%. [3] Brotto et al., [13] determined the rate of doing BSE in women as 32.6% for India, 58.6% for Indo-Canadian, 57.3% for East Asian-Canadian, and 75.2% for Euro-Canadian. In Malaysia, the rate of doing regular BSE is reported to

be 28.5% for reproductive-age women, and married and higher educated women have been stated to do BSE more. [16] In addition, there are studies in literature reporting that BSE practice did not show any difference in married and single groups parallel to the result of this study. [38]

The results of this study are limited to the self-report of women participating in the study. Since the study was conducted in a single city and hospital environment in Turkey, it may not represent the general population. Population-based studies are needed to determine the prevalence of reproductive morbidities. The fact that women aged between 15-17 years were not included in the study despite the fact that they are in the age of reproductive age because of cultural difficulties on obtaining permission of legal guardian, and the study did not include women who had an obstacle of access to the hospital for any reason can be regarded about the limitations of this study.

CONCLUSIONS

The rates of complaining about the symptoms which are related to reproductive health morbidities of women were very high in the study. There were dissatisfaction and SFD related symptoms in a significant proportion of sexually active women about sexual life. Married women complained more about UI and POP while single women complained about PMS, dysmenorrhea and vaginal discharge. A great majority of the women were in the tendency of seeking medical aid related to reproductive health morbidities but about three out of every ten women did not seek medical aid. Although most women reported that they received medical aid, a small number of women implemented practices to protect their reproductive health. Single women had tendency to seek less medical aid and to do less practices for their reproductive health compared to the married women. In line with these results, it is recommended to;

- Investigate the prevalence of reproductive health morbidity in societies and the socio-demographic factors influencing this prevalence
- Reveal the reasons for women not seeking medical aid for symptoms related to reproductive morbidities
- Support women to express sexual intercourse related problems and investigate their sexual life problems
- Convert every contact to be made with women who apply health institution to seek help for reproductive morbidity into an opportunity for bringing preventive practices for reproductive health and for performing screening for early diagnosis.
- Plan trainings for improving the practices of married and single reproductive-age women to protect their reproductive health and investigate the situations that inhibit women from doing these practices.

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