

Determination of Women and Reproductive Health Awareness in Emergency Department: A Descriptive Cross-Sectional Study

Acil Serviste Kadın ve Üreme Sağlığı Farkındalığının Değerlendirilmesi: Tanımlayıcı Kesitsel Bir Çalışma

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ABSTRACT

Aim: Emergency departments (EDs) are units in which acute management of traumatic and medical emergencies are provided; but also guidance on public health is provided as well as ensuring personal health and awareness. In this study, it was aimed to determine the level of knowledge about women's and reproductive health and possible disease symptoms in female patients aged 18 years and older who applied to the emergency department, regardless of the complaint of admission. We also aimed to determine the role of EDs in contributing to the correct referral of these patients.

Material and Methods: This was a descriptive cross-sectional study which took place in a tertiary care center. Women aged 18 years and older who applied to the emergency department with any complaint were assessed with a structured questionnaire consisting of 18 questions and multiple-choice options about women's health. Participants' sociodemographic characteristics, fertility, menstrual cycle and contraception patterns, their knowledge about cancer prevention, gynecological and urological complaints were asked. It was also asked whether the ED physician gave any guidance on issues related to women's health, before discharge from ED.

Results: Totally 523 women were included in the study. The mean age was 38.89±14.32 years. Most of them (91.6%) were lived in city center, 63.3% were married and 60% were high school and university graduates. The ratio of not using any contraceptive method and total number of pregnancies were higher at the lower education levels (p=0.003 and 0.004, respectively). The knowledge of women about cancer screening was low and 42.4% of them did not have information about screening issues. In comparison according to educational status, it was seen that the ratio of screening awareness, breast self-examination, HPV test, and mammography were higher and statistically significant in university graduates (p=0.000). ED physicians conducted appropriate outpatient clinic referral for screening and follow-up in 53.6% of 114 patients with gynecological complaints.

Conclusion: The level of knowledge about women's health is still not at the desired level. Although there are a wide variety of effective and modern methods available, not to use a contraceptive method is still common. With the increase, dissemination and continuity of reproductive health education and consultancy services, the lack of information on this subject will be eliminated to a large extent and wrong practices will be prevented. Emergency departments are places for preventing public health, besides managing acute conditions.

Keywords: Reproductive health, contraception, cancer screening, emergency department

ÖZ

Amaç: Acil servisler (AS), travmatik ve tıbbi acil durumların akut yönetiminin sağlandığı birimler olmanın yanı sıra, kişisel sağlık ve farkındalığın sağlanması ve halk sağlığı konusunda da rehberlik sağlanan alanlardır. Bu çalışmada acil servise herhangi bir şikâyetle başvuran 18 yaş ve üstü kadın hastaların kadın ve üreme sağlığı ile olası hastalık belirtileri hakkındaki bilgi düzeylerinin belirlenmesi ve acil servislerin bu hastaların doğru yönlendirilmesine katkı sağlamadaki rolünü belirlemek amaçlanmıştır.

Gereç ve Yöntemler: Bu çalışma üçüncü basamak bir hastanede tanımlayıcı kesitsel bir çalışma olarak yapıldı. Acil servise herhangi bir şikâyetle başvuran 18 yaş ve üstü kadınlar, kadın sağlığı ile ilgili 18 sorudan ve çoktan seçmeli seçeneklerden oluşan yapılandırılmış bir anket ile değerlendirildi. Katılımcıların sosyodemografik özellikleri, doğurganlık bilgileri, adet döngüleri ve korunma şekilleri, kanserden korunma, jinekolojik ve ürolojik şikâyetleri hakkındaki bilgileri soruldu. Ayrıca acil servis doktorunun acil servisten taburcu olmadan önce kadın sağlığı ile ilgili konularda yönlendirme yapıp yapmadığı da değerlendirildi.

Bulgular: Çalışmaya yaş ortalaması 38,89±14,32 olan toplam 523 kadın alındı. Çalışma popülasyonunun çoğunluğu (%91,6) il merkezinde ikamet etmekte olup, %63,3'ü evli, %60'ı lise ve üniversite mezunu idi. Gebeliği önleyici yöntem kullanmayanların ve toplam gebelik sayısının oranı alt eğitim kademelerinde daha yüksekti (sırasıyla, p=0,003 ve 0,004). Kadınların kanser taraması konusundaki bilgileri düşüktü ve %42,4'ünün tarama konuları hakkında bilgisi yoktu. Eğitim durumuna göre karşılaştırıldığında üniversite mezunlarında tarama farkındalığı, kendi kendine meme muayenesi, HPV testi ve mamografi yaptırma oranlarının daha yüksek ve istatistiksel olarak anlamlı olduğu görüldü (p=0,000). Jinekolojik şikâyetleri olan 114 hastanın %53,6'sında acil servis hekimleri tarama ve takip için uygun poliklinik yönlendirmesi yapıldı.

Sonuç: Kadın sağlığı konusundaki bilgi düzeyi halen istenilen seviyede değildir. Çok çeşitli, etkili ve modern yöntemler mevcut olmasına rağmen, doğum kontrol yöntemi kullanılmaması hala yaygındır. Üreme sağlığı eğitim ve danışmanlık hizmetlerinin artması, yaygınlaşması ve sürekliliği ile bu konudaki bilgi eksikliği büyük ölçüde giderilecek ve yanlış uygulamaların önüne geçilecektir. Acil servisler, akut durumları yönetmenin yanı sıra halk sağlığının korunması için de çalışan birimlerdir.

Anahtar Kelimeler: Üreme sağlığı, kontrasepsiyon, kanser taraması, acil servis

Received: December 7, 2022

Accepted: December 21, 2022

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Atif için/Cited as: Saral R, Yigit O, Ibze S, Gormeci GO. Determination of Women and Reproductive Health Awareness in Emergency Department: A Descriptive Cross-Sectional Study. Anatolian J Emerg Med 2023;6(1):32-36. <https://doi.org/10.54996/anatolianem.1215717>

Introduction

Patients of all ages and sex apply to emergency departments (ED) with various complaints. In the real world, EDs are not only places in which acute management of traumatic and medical emergencies are provided; but also units where guidance on public health is provided and ensuring personal health and awareness. Increasing the awareness of patients about their health conditions, managing their follow-up visits, and directing them to appropriate healthcare facilities for further evaluation and screening is essential and routinely applied part of the daily practice of ED doctors.

Routine follow-up visits are required to ensure appropriate women's health and reproductive health issues. The World Health Organization (WHO) describes reproductive health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and its functions and processes. Reproductive health implies that people can have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so (1). Comprehensive education and information about preventing and controlling sexually transmitted infections, contraception, and fertility are all involved in women's health care (2). There are several contraception methods, such as intrauterine devices, hormonal methods, barrier methods, and sterilization. In our country, intrauterine devices, condoms, and oral hormonal pills are the most known methods. According to a study in 2018, 48.9% of women use a modern contraception method (mostly intrauterine devices), besides 20.9% of them use traditional methods (3).

Cancer screening means checking people for cancer before they have symptoms. Getting screening tests regularly may find breast, cervical, and colorectal (colon) cancers early. Early cancer detection when treatment is likely to work best is essential for reducing mortality. Cancer is the second reason for death from illnesses in most parts of the world and Turkey (4). Primary prevention is still the most cost-effective and long-term strategy in cancer control with four topics; primary prevention, early diagnosis, treatment, and palliative care (5). In Turkey, the National Cancer Control Program is carried out for cancer control, and Cancer Early Diagnosis, Screening, and Training Centers (KETEM) are opened by the Ministry of Health in every city of the country (6). However, public awareness of KETEM and the effectiveness of utilizing its services is skeptical.

This study aimed to determine the level of knowledge about women's and reproductive health and possible disease symptoms in female patients aged 18 years and older who applied to the emergency department, regardless of the admission complaint. Further, a questionnaire administered to all female patients regarding their awareness of women's health will determine whether physicians who evaluate the patient in the emergency department offer appropriate referrals for screening and follow-up visits. It is aimed to assess the role of emergency departments in contributing to the correct referral of these patients.

Material and Methods

This study was conducted as a descriptive cross-sectional study between January and March 2021 in the ED of Antalya

Akdeniz University Hospital, a tertiary care center. Before starting the study, ethics committee approval was obtained from the Clinical Research Ethics Committee of Akdeniz University Faculty of Medicine with the decision number KAEK-914 dated 09.12.2020.

Study design

The study group was selected among women aged 18 years and older who applied to the emergency department with any complaint. A structured questionnaire consisting of 18 questions and multiple-choice options was used for the patients included in the study by face-to-face interview technique. Patients aged 18 and over, literate and cognitively competent to answer the questions, and who agreed to participate in the study were included.

The prepared questionnaire included participants' sociodemographic characteristics (age, marital status, place of residence, occupation), fertility characteristics (pregnancy/birth/living/miscarriage), menstrual status and patterns, gynecological and urological complaints (bleeding, discharge, painful intercourse, burning urine, bloody urine, frequent urination), questions about the birth control methods they used.

Participants were also asked questions measuring their level of knowledge about cervical and breast cancer screenings. While being discharged from the emergency room, it was also asked whether the physician who evaluated the ED gave any guidance on issues related to women's health.

The survey form is presented in Appendix (Figure 1).

Statistical analysis

The data collected in the study was analyzed using the statistical software package SPSS 20 (Statistical Package for the Social Sciences – IBM®). Study data were expressed as mean±standard deviation (SD) for continuous variables and percent (%) for categorical variables. The chi-square test was used in the analysis of categorical variables. A P value of <0.05 was considered statistically significant.

Results

A total of 523 women who filled out the questionnaire were included in the study. Eleven participants' data remained incomplete because they did not answer some questions. However, these patients were also included in the statistical analysis. The mean age of the participants was 38.89±14.32 (median:36, min. 18 - max. 85) years. The socio-demographic characteristics of the study population are presented in Table 1.

Contraceptive methods used by participants are shown in Table 2. The distribution of the contraceptive methods used was 4.6%, 4.2%, and 11.1% for IUD, OCS, and condoms, respectively. When we compared the education level with the contraceptive method preference, it was determined that primary, secondary, and high school graduates preferred withdrawal, condoms, and IUD at a similar rate, while university graduates preferred to use condoms more ($p=0.003$). The rate of women who did not use any contraceptive method was higher at the lower education levels.

When we asked about the total number of pregnancies they experienced, 12,5% of the participants had five and more pregnancies, and the median of the total pregnancies was 2 in all study groups.

Educational Status (n=523)	
Illiterate	29 (5.5)
Literate	9 (1.7)
Primary school	116 (22.2)
Secondary School	55 (10.5)
High School	131 (25)
University	183 (35)
Place of Residence (n=523)	
Urban	479 (91.6)
Rural	44 (8.4)
Occupation (n=523)	
Housewife	215 (41.1)
Public worker	75 (14.3)
Employee	70 (13.4)
Student	41 (7.8)
Office worker	54 (10.3)
Others *	68 (13.1)
Marital Status (n=523)	
Married	331 (63.3)
Single	162 (31)
Divorced	30 (5.7)

* others: retired, engineer, employer, farmers and out of a job

Table 1. Characteristics of participants

The number of total pregnancies was significantly lower in women who had an occupation (p=0.004).

The knowledge of women about cancer screening and KETEM was questioned, and 42.4% of the women participating in the study did not have information about the services offered by KETEM. Of the participants, 33.7% had a Pap-smear HPV test, 28.5% never had a Pap-smear, 20.8% had a breast examination in a health institution, 15.7% had mammography, and 42.4% did breast self-examination at home (Table 3).

Method	Number (n=512)	Percentage (%)
Not protected	197	37.7
Not sexually active	114	21.8
Coitus interruptus	38	9.4
Condoms	58	14.6
Tube ligation	33	8.3
Intrauterin device	24	6
Oral contraceptives	22	5.5
Monthly injections	4	1
Calender method	3	0.7
Spermicide	1	0.2
Postcoital method	1	0.2
Multiple methods	17	4.2

*The percentage of contraceptive methods used by women was calculated for only sexually active women

Table 2: Contraceptive methods used by women

In comparison according to educational status, it was seen that the rate of KETEM awareness, breast self-examination, HPV test, and mammography were higher and statistically significant in university graduates (p=0.000).

	Number (n)	Percentage (%)
HPV Test		
Tested	176	33,7
Not Tested	149	28,5
Out of Age Range*	187	35,8
Breast Self-examination		
Doing	222	42,4
Not Doing	265	50,7
Out of Age Range*	25	4,8
Examination in a medical institution		
Examined	109	20,8
Not Examined	378	72,3
Out of Age Range*	25	4,8
Got mammography		
Yes	82	15,7
No	123	23,5
Out of Age Range*	307	58,7

* Breast cancer scanning starts at 40 and ends at 69, cervix cancer scanning starts at 30 and ends at 65. The ages younger or older than these ranges were classified as 'out of age range'

Table 3. Awareness of protective and preventive interventions

Of women who applied to the ED with any complaint, 33.8% had a concomitant urological complaint, while 22.2% had a gynecological complaint. Vaginal discharge (15,7%) and pollakiuria (21,6%) were the most common complaints. The other complaints mentioned by the participants were vaginal bleeding (5.7%), dyspareunia (5.9%), dysuria (17.4%), hematuria (3.4%), and urgency (11.9%). When women were asked about menstrual cycles, 62.1% were aware of the last time of their cycle, 53.2% reported that they had a regular menstrual period, 28.3% were in menopause, and 9.6% did not know the date of their last menstruation.

Emergency physicians conducted appropriate outpatient clinic referrals for screening and follow-up in 53.6% of 114 patients with gynecological complaints. The referral was done mostly by describing where she can apply for her complaints. Women without any obstetric or gynecological complaints got less referral for women's health and screening (p=0.01) Table 4.

Complaint	No referral	Referred to obstetrician	Referred to family medicine /KETEM	Total	P
YES	247	118	33	398	0.01
NO	53	46	15	114	
Total	300	164	48	512	

Table 4. Referral by emergency medicine physician

Discussion

In our study, a questionnaire was applied to all female patients regardless of their complaints, evaluating their knowledge level about women's health and reproductive health. It was observed that the patient population mostly consisted of women of childbearing age, and more than half had high school and university education. In comparisons according to educational status, it has been determined that the number of pregnancies is less in university graduates, an active contraceptive method is used more for pregnancy control, the rate of KETEM awareness, breast self-examination, HPV test, mammography is higher and statistically significant.

According to the 2018 data from the Turkey Demographic and Health Survey (TNSA), 29% of women aged between 15 and 49 living in cities are primary school graduates, while 41% are high school or higher graduates (7). The educational status was higher in our study population. Many studies in the literature also support the relationship between education and the use of preventative health care. According to TNSA data, one out of three women still do not use a contraception method despite knowing at least one method. Çakmak et al. reported that being not literate increased not using a method by 7.7 times (8). We have found similar results in our study, 37,7% of participants who have active sexual life did not use any contraception method, and usage was higher in higher educated groups. Also, the number of total pregnancies and children they have were lesser in the women with higher education and working in a job. It can be inferred that women's work not only contributes to the economy but also enables them to decide on planned pregnancies and having children as much as they can care for.

Both breast and cervical cancer are malignancies in which mortality is considerably reduced if detected early, and the effectiveness of the screening program was proven. Breast cancer scanning starts at the age of 40 and ends at the age of 69, and cervix cancer scanning begins after age 30 and ends at the age of 65 (9). The Pap-Smear test looks for precancer cell changes on the cervix that might become cervical cancer if not treated appropriately. HPV-DNA tests detect HPV (human papillomavirus), which can cause these cell changes. A Pap-smear and HPV test are done on all women between 30 to 65 years old; if both are normal, the patient is told to wait five years until the next screening test. For many women, mammograms are the best way to find breast cancer early. Providing breast self-exam and being familiar with own normal shape and look can help to notice symptoms such as lumps, pain, or changes in size. Breast self-exam is advised to perform every month. A clinical breast exam is done by a healthcare professional by using hands and is suggested to be done every two years for ages 20 to 39 and every year for ages 40 to 69. The guidelines recommend that women 40 to 69 years old get a mammogram every two years. Breast ultrasonography is also done along with mammography (10). Screening for breast, cervical and colorectal cancer is applied in KETEM in our country. Women aged between 30 and 65 years are suggested to perform PAP-smear and HPV tests every five years by their family physicians.

However, according to Turkey Health Survey (2008) data, more than three-quarters of women aged 35-44, 45-54, and 55-64 in Turkey (78.3%, 75.7%, and 79.4%, respectively) have never had a smear test in their lifetime. While 71.1% of women aged 55-64 and 80.4% of women aged 65-74 have never had a mammogram in their lifetime (11). Other studies from different regions of our country revealed similar results (12, 13). Although the rates in our study seem to be higher than previous ones, the findings indicate that screening programs for breast and cervical cancers are not yet at the desired level. Tests were performed for the early diagnosis of cervical cancer (33.7%) and breast cancer (15.7%) only in a small portion of the study population. 42.4% of the women participating in the study stated that they did not have knowledge about the services offered by KETEM. According to educational status, the rate of KETEM awareness, breast self-examination, HPV test, and mammography was higher and statistically significant in university graduates. This was proven by Dubikaytis et al. in their study published in 2010 (14).

In our study, women who participated in the survey were also asked whether they had ongoing urological and gynecological complaints regardless of the applying complaint. It was determined that 33.8% of the women had a concomitant urological complaint, while 22.2% had a gynecological complaint. When the participants were asked whether they were referred for the treatment and follow-up of gynecological complaints, it was determined that appropriate outpatient referral was made by the ED physician for only %53 of patients. This data shows that emergency physicians' knowledge and referral about women's health is not well, and some additional education in the residency program will work better. In addition to the evaluation and management of acute real-life threatening emergencies in daily practice, EDs also are the centers where appropriate referral is made for patients who do not require acute intervention or treatment at that time. Emergency medicine specialty is a population-based program for public health. Proper follow-up and management of chronic diseases and arranging later revisits for acute, but non-life-threatening conditions will reduce the possibility of encountering unexpected acute problems and indirectly prevent emergency room crowding and unnecessary emergency department applications. Therefore, the appropriate patient referral is an important component of emergency medicine daily practice. The fact that more referrals were made in our study, especially in patients with gynecological complaints, is an indicator that emergency departments are among the centers that can be effective in raising awareness about women's health. It would also be appropriate to increase training on providing appropriate information and guidance for all female patients, not just those with complaints, and to raise the awareness of emergency medicine residents on this issue.

Limitations

One of the limitations of the study is that it is a descriptive type, and there is no representativeness of the research. The relationship between cause and effect couldn't be determined. Due to the study being carried out during the

COVID pandemic period, the number of the study population was low.

Conclusion

The knowledge about women's health, reproductive health, and family planning consultancy and implementation services such as KETEM are still not at the desired level. Although there are a wide variety of effective and modern methods available, today, not using a contraceptive method is still common. With the increase, dissemination, and continuity of reproductive health education and consultancy services, the lack of information on this subject will be eliminated to a large extent, and wrong practices will be prevented. Thus, women's health, reproductive health, and public health will be able to be carried to a higher level. Emergency departments are places for preventing public health besides managing acute conditions.

Conflict of Interest: The authors declare no conflict of interest regarding this study.

Financial Disclosure: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Authors' Contribution: All authors contributed equally to the preparation of this article.

Ethical Statement: Approval was obtained from the Clinical Research Ethics Committee of Akdeniz University Faculty of Medicine with the decision number KAEK-914 dated 09.12.2020. All authors declared that they follow the rules of Research and Publication Ethics.

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