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How does the knowledge level of physicians and nurses working at primary health centers affect their preference for oral contraceptives in an inland Turkish province?

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Abstract

Background Standardizing the knowledge of health care givers and eliminating their misconceptions would help to achieve optimal service for contraception. This study aims to evaluate the knowledge levels of physicians and nurses working at primary health care centers about the oral contraceptive pill (OCP) use.

Methods This is a cross-sectional review of 306 professional care givers (117 physicians and 189 nurses) who are working at primary health care centers.

Results Only 17.3% of health care givers recommend OCP as their first professional choice of contraception for their patients. Approximately 50.3% of these care givers do not feel qualified about the OCPs and 81.7% of them wish to have regular training about OCPs. There is a significantly higher number of male health care givers who claim that OCPs cause acne, sexual dysfunction, ectopic pregnancy, deep vein thrombosis, and liver cancer (respectively $p=0.040$, $p=0.028$, $p=0.001$, $p=0.001$, and $p=0.020$). When compared to nurses, there is a significantly higher number of physicians who state that OCPs cause acne, depression, sexual dysfunction, ectopic pregnancy, deep vein thrombosis, breast cancer and liver cancer.

Conclusion Physicians and nurses working at primary health centers in an inland Turkish province have relatively lower rates of recommendation for OCP use. These lower recommendation rates become significantly more obvious in male physicians with ≥ 14 years' experience. The concern about probable adverse effects, the lack of standardization in formal education, the absence of post-graduate training and the shortage of time and resources for counseling might have led to the limitation in OCP use.

Keywords Awareness, Contraception, Knowledge, Oral contraceptives

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Background

It has been estimated that the world population would rise from 7.9 billion in 2022 to 9.2 billion by 2050 [1]. Accordingly, it has been reported that there are 1.9 billion women at reproductive age worldwide and nearly an 874 million women have adopted a modern contraceptive method [1, 2]. Although there is a two-fold increase in the number of women benefiting from modern contraception, about 164 million women do not use any contraceptive method despite their intention for delaying or avoiding pregnancy [2].

The oral contraceptive pill (OCP) has become an effective and safe method for avoiding pregnancy as its advantages outweigh its hazards [3]. This pharmacological agent is frequently utilized for the treatment of dysmenorrhea, menorrhagia, iron deficiency anemia, pelvic inflammatory disease, and ovarian cysts [3–5]. It has been reported that long term OCP use prevents osteoporosis, endometrial cancer, and ovarian malignancy. However, OCP might also trigger the risk of thromboembolism, cardiovascular disease, stroke, and breast cancer [4, 5].

It is known that about 14% of the married women at childbearing age use OCP in developed countries. This prevalence abruptly decreases to 6% for married women aged between 15 and 49 years who live in developing countries [6, 7]. In accordance, Demographic and Health Survey data published in 2018 reveal that only 5% of the married women aged between 15 and 49 years use OCP in Türkiye [8]. It has been hypothesized that misconceptions about the benefits and risks of OCP pose a significant challenge to its use [9, 10]. The widespread myth about the relationship between OCP and infertility and the alleged need of their intermittent use for avoiding adverse effects might have also contributed to these misconceptions [9–12]. It has been assumed that these misconceptions occur because knowledge about the efficacy and safety of OCP varies extensively throughout health care givers [11, 12].

This study aims to evaluate the knowledge level of physicians and nurses working at primary health care centers about OCP use in an inland Western province of Türkiye.

Methods

This study was approved by the ethical committee of Afyonkarahisar Health Sciences University Hospital (grant no: 2022/8-375). All participants were informed about the study and written consent was obtained from each participant.

This is a cross-sectional review of 306 professional care givers (117 physicians and 189 nurses) who are working at primary health care centers located in Afyonkarahisar, an inland Western province of Turkey. Twelve care givers who are working at the primary health care centers and who refused to participate were excluded.

The participants were contacted by face-to-face interviews with a preconcerted and structured questionnaire which consisted of 24 questions. This questionnaire was specifically developed by two researchers who have been officially tasked with counseling for modern contraceptive methods as a family doctor (G.D.) and a gynecologist (M.K.P). The researchers drew the questions in the survey from their own experience and previously conducted studies in Türkiye [13, 14]. The questionnaire investigated the training, competency, and preference of physicians and nurses about OCP prescription. Additionally, this survey evaluated the knowledge of health care givers about the possible hazards of OCP use. In parallel, the misconceptions of physicians and nurses about the prescription of OCP were estimated. That's why, sentences regarding the "prescription of OCPs after the completion of blood tests", "intermittent use of OCPs for avoiding adverse effects" and "examination of OCPs every 6 months" were included in the survey. The response of the participants was recorded out of three options which were "yes", "no" or "I don't know".

Data related with the age, sex, profession, and duration of professional experience were also recorded for all participants during the face-to-face interviews. Subgroup analysis was performed with respect to sex (male or female), profession (physician or nurse), and duration of professional experience (<14 years or ≥14 years).

Statistical analysis

Collected data were analyzed by Statistical Package for Social Sciences version 22.0 (SPSS IBM, Armonk, NY, USA). To assess the normality of data distribution, Smirnov-Kolmogorov test was used. Continuous variables were expressed as mean±standard deviation while categorical data were denoted as numbers or percentages. Pearson's chi square test and Fisher's exact test were used for the comparisons. Two-tailed p values<0.05 were accepted as statistically significant. A post hoc analysis was carried out to determine that a cohort size of 306 health care givers had 77.6% power to detect a difference at the 0.05 significance level.

Results

The mean age of the participants was 37.9±9.6 years (range: 22–63 years) and their mean duration of professional experience was 15.1±9.2 years (range: 1–37 years). Ninety health care givers (29.4%) were male, and 216 professionals (70.6%) were female. There were 117 physicians (38.2%) and 189 nurses (61.8%) in this cohort.

Table 1 summarizes the knowledge of care givers about OCP use. Only 17.3% of health care givers recommend OCP as the first professional choice of contraception for

Table 1 Knowledge of health care givers about oral contraceptive pills

	Yes	No	Don't know
I had training on oral contraceptive pills (OCPs)	233 (76.1%)	73 (23.9%)	0 (0.0%)
I recommend OCPs as the first professional preference for my patients	53 (17.3%)	236 (77.1%)	17 (5.6%)
I recommend OCPs as the second professional preference for my patients	88 (28.8%)	190 (62.0%)	28 (9.2%)
I recommend OCPs as the third professional preference for my patients	87 (28.4%)	167 (54.6%)	52 (17.0%)
Oral contraceptives cause hirsutism	104 (34.0%)	160 (52.3%)	42 (13.7%)
Oral contraceptives cause acne	96 (31.3%)	155 (50.7%)	55 (18.0%)
Oral contraceptives cause infertility	21 (6.9%)	232 (75.8%)	53 (17.3%)
Oral contraceptives cause weight gain	159 (52.0%)	104 (34.0%)	43 (14.0%)
Oral contraceptives cause depression	70 (22.9%)	151 (49.3%)	85 (27.8%)
Oral contraceptives cause sexual dysfunction	31 (10.1%)	231 (75.5%)	44 (14.4%)
Oral contraceptives cause ectopic pregnancy	45 (14.7%)	173 (56.5%)	88 (28.8%)
Oral contraceptives cause deep vein thrombosis	167 (54.6%)	66 (21.6%)	73 (23.8%)
Oral contraceptives cause endometrial cancer	50 (16.3%)	256 (83.7%)	0 (0.0%)
Oral contraceptives cause ovarian cancer	45 (14.7%)	261 (85.3%)	0 (0.0%)
Oral contraceptives cause cervical cancer	43 (14.1%)	263 (85.9%)	0 (0.0%)
Oral contraceptives cause breast cancer	111 (36.3%)	195 (63.7%)	0 (0.0%)
Oral contraceptives cause colon cancer	5 (1.6%)	301 (98.4%)	0 (0.0%)
Oral contraceptives cause liver cancer	14 (4.6%)	292 (95.4%)	0 (0.0%)
Fertility returns as soon as OCPs are discontinued	176 (57.5%)	105 (34.3%)	25 (8.2%)
Laboratory tests should be made before OCPs are prescribed	213 (69.6%)	65 (21.2%)	28 (9.2%)
To avoid adverse effects, OCPs should be used intermittently	53 (17.3%)	191 (62.4%)	62 (20.3%)
Oral contraceptive users should be examined every 6 months	196 (64.1%)	72 (23.5%)	38 (12.4%)
I feel qualified about oral contraceptives	152 (49.7%)	154 (50.3%)	0 (0.0%)
I prefer to have regular training about oral contraceptives	250 (81.7%)	38 (12.4%)	18 (5.9%)

their patients while 28.8% and 28.4% of them offer OCP as the second and third professional choices of contraception for their patients, respectively. Approximately 50.3% of the health care givers do not feel qualified about OCPs and 81.7% of them wish to have regular training about this contraception method.

Table 2 shows the knowledge of health care givers about OCPs with respect to sex. When compared to female care givers, there is a significantly higher number of male care givers who claim that OCPs cause acne, sexual dysfunction, ectopic pregnancy, deep vein thrombosis, and liver cancer (respectively $p=0.040$, $p=0.028$, $p=0.001$, $p=0.001$, and $p=0.020$). In addition, male care givers significantly tend to state that OCPs should be prescribed after laboratory tests have been completed ($p=0.030$).

Table 3 demonstrates the knowledge of health care givers about OCPs with respect to profession. When compared to physicians, there is a significantly higher number of nurses who claim that OCPs cause hirsutism, infertility, and weight gain (respectively $p=0.007$, $p=0.001$ and $p=0.021$). Physicians are significantly more likely to signify that OCPs cause acne, depression, sexual dysfunction, ectopic pregnancy, deep vein thrombosis, breast cancer and liver cancer (respectively $p=0.001$, $p=0.018$, $p=0.001$, $p=0.001$, $p=0.001$, $p=0.001$ and $p=0.040$). There is also a significantly higher number of physicians who declare that fertility returns as soon as OCPs are discontinued ($p=0.017$), laboratory tests should be made before the prescription of OCPs ($p=0.005$) and OCPs should be used intermittently ($p=0.012$).

Table 4 displays the knowledge of health care givers about OCPs with respect to the duration of professional experience. The care givers with an experience of ≥14 years significantly tend to specify that OCPs cause acne, weight gain, and deep vein thrombosis (respectively $p=0.035$, $p=0.030$, and $p=0.001$). There is a significantly higher number of more experienced health care givers (≥14 years) who claim to have training on OCPs previously ($p=0.001$) and feel qualified about OCP use ($p=0.001$). The care givers with an experience of ≥14 years are significantly more likely to denote that OCPs should be used intermittently ($p=0.006$). These more experienced care givers are also significantly less likely to prefer undergoing regular training about OCP use ($p=0.001$) and highlight that OCPs cause cervical cancer ($p=0.029$).

Discussion

In Türkiye, physicians specializing in family medicine, obstetrics, and gynecology as well as nurses and midwives provide counseling for contraception [15]. It has been well established that educational background, training experience and working place of the care givers influence their clinical practices. Furthermore, the partiality of care givers related to the sociodemographic

Table 2 Knowledge of health care givers about oral contraceptive pills with respect to sex

	Male care givers ($n=90$)	Female care givers ($n=216$)	p
I had training on oral contraceptive pills (OCPs)	68 (75.6%)	165 (76.4%)	0.248
I recommend OCPs as the first professional preference for my patients	15 (16.7%)	38 (17.6%)	0.865
I recommend OCPs as the second professional preference for my patients	35 (38.9%)	53 (24.5%)	0.204
I recommend OCPs as the third professional preference for my patients	19 (21.1%)	68 (31.5%)	0.572
Oral contraceptives cause hirsutism	29 (32.2%)	75 (34.7%)	0.807
Oral contraceptives cause acne	36 (40.0%)	60 (27.8%)	0.040*
Oral contraceptives cause infertility	6 (6.7%)	15 (6.9%)	0.479
Oral contraceptives cause weight gain	42 (46.7%)	117 (54.2%)	0.134
Oral contraceptives cause depression	20 (22.2%)	50 (23.1%)	0.624
Oral contraceptives cause sexual dysfunction	15 (16.7%)	16 (7.4%)	0.028*
Oral contraceptives cause ectopic pregnancy	27 (30.0%)	18 (8.3%)	0.001*
Oral contraceptives cause deep vein thrombosis	60 (66.7%)	107 (49.5%)	0.001*
Oral contraceptives cause endometrial cancer	20 (22.2%)	30 (13.9%)	0.072
Oral contraceptives cause ovarian cancer	17 (18.9%)	28 (13.0%)	0.182
Oral contraceptives cause cervical cancer	15 (16.7%)	28 (13.0%)	0.396
Oral contraceptives cause breast cancer	33 (36.7%)	78 (36.1%)	0.927
Oral contraceptives cause colon cancer	2 (2.2%)	3 (1.4%)	0.600
Oral contraceptives cause liver cancer	8 (8.9%)	6 (2.8%)	0.020*
Fertility returns as soon as OCPs are discontinued	56 (62.2%)	120 (55.6%)	0.260
Laboratory tests should be made before OCPs are prescribed	71 (78.9%)	142 (65.7%)	0.030*
To avoid adverse effects, OCPs should be used intermittently	22 (24.4%)	31 (14.4%)	0.104
Oral contraceptive users should be examined every 6 months	64 (71.1%)	132 (61.1%)	0.252
I feel qualified about oral contraceptives	40 (44.4%)	112 (51.9%)	0.238
I prefer to have regular training about oral contraceptives	69 (76.7%)	181 (83.8%)	0.304

*$p<0.05$ was accepted to be statistically significant

characteristics of the patients (i.e., age, parity, and marital status) might affect their counseling about contraceptive methods [16, 17].

A considerable number of individuals require elaborate information from health care givers about contraceptive methods and place value and trust on such professional advice [18]. Thus, it would be important to specify how the knowledge and feelings of care givers form the basis for their preferences about contraception. Standardizing the knowledge of health care givers and eliminating their misconceptions would help to achieve optimal service for contraception [16–19]. Therefore, this study aims has been held to understand the knowledge levels of care givers working at primary health care centers about OCP use in a Turkish city. The studies related with this topic in English literature is limited in number and to the best of our knowledge, this is the first study to perform a quantitative examination about the awareness of Turkish physicians and nurses working at primary care centers about OCP use and prescription.

The present study revealed that only 17.3% of the care givers working at primary health centers recommend OCP as their first professional choice for contraception. This finding complied with that of an online survey study which reported that 20% of the health care givers preferred OCPs for their own reproductive health [20]. However, a review of 551 care givers including primary care physicians, gynecologists, and nurses showed that 87.4% of them thought that extended OCP use should be recommended routinely and 81% of them prescribed extended OCP use in their own clinical practice [21]. Another study demonstrated that 97% of the gynecologists offered extended OCP use to their patients, which contrasted with their personal experience and choice as users. That is, only 37.2% of the gynecologists preferred extended OCP use for themselves [22].

The discrepancy about the recommendation rate of OCP use by health care givers suggest that the personal choice of care givers for their own reproductive health might affect their professional decisions for contraception. Accordingly, 90% of the gynecologists assessed by a cross-sectional study described the counseling for contraception as a bilateral process which involves the women and their physicians equally [23]. Therefore, the relatively higher recommendation rate for OCP use in some studies might be due to the popularity and awareness about this pharmacological agent [21, 22]. A qualitative study of general practitioners addressed OCP as the most commonly recommended contraceptive method because it was the most well-known and, thus, most frequently requested method [24]. Similarly, a Turkish study determined that 79.3% of the women heard about OCPs

Table 3 Knowledge of health care givers about oral contraceptives with respect to profession

	Physician (*n* = 117)	Nurse (*n* = 189)	*p*
I had training on oral contraceptive pills (OCPs)	93 (79.5%)	140 (74.1%)	0.177
I recommend OCPs as the first professional preference for my patients	24 (20.5%)	29 (15.3%)	0.807
I recommend OCPs as the second professional preference for my patients	41 (35.0%)	47 (24.9%)	0.505
I recommend OCPs as the third professional preference for my patients	26 (22.2%)	61 (32.3%)	0.348
Oral contraceptives cause hirsutism	33 (28.2%)	71 (37.6%)	0.007*
Oral contraceptives cause acne	41 (35.0%)	55 (29.1%)	0.001*
Oral contraceptives cause infertility	5 (4.3%)	16 (8.5%)	0.001*
Oral contraceptives cause weight gain	58 (49.6%)	101 (53.4%)	0.021*
Oral contraceptives cause depression	29 (24.8%)	41 (21.7%)	0.018*
Oral contraceptives cause sexual dysfunction	28 (23.9%)	19 (10.1%)	0.001*
Oral contraceptives cause ectopic pregnancy	25 (21.4%)	20 (10.6%)	0.001*
Oral contraceptives cause deep vein thrombosis	90 (76.9%)	77 (40.7%)	0.001*
Oral contraceptives cause endometrial cancer	23 (19.7%)	27 (14.3%)	0.217
Oral contraceptives cause ovarian cancer	14 (12.0%)	31 (16.4%)	0.287
Oral contraceptives cause cervical cancer	15 (12.8%)	28 (14.8%)	0.626
Oral contraceptives cause breast cancer	57 (48.7%)	54 (28.6%)	0.001*
Oral contraceptives cause colon cancer	2 (1.7%)	3 (1.6%)	0.935
Oral contraceptives cause liver cancer	9 (7.7%)	5 (2.6%)	0.040*
Fertility returns as soon as OCPs are discontinued	77 (65.8%)	99 (52.4%)	0.017*
Laboratory tests should be made before OCPs are prescribed	90 (76.9%)	123 (65.1%)	0.005*
To avoid adverse effects, OCPs should be used intermittently	19 (16.2%)	34 (18.0%)	0.051
Oral contraceptive users should be examined every 6 months	87 (74.4%)	109 (57.7%)	0.012*
I feel qualified about oral contraceptives	54 (46.2%)	98 (51.9%)	0.333
I prefer to have regular training about oral contraceptives	95 (82.1%)	154 (81.5%)	0.584

*$p < 0.05$ was accepted to be statistically significant

as a method for avoiding unwanted pregnancies and 38% of them used OCP at least once [25]. The relatively lower recommendation rate of OCP by the care givers in this study can be attributed to their concern for probable adverse effects and misconceptions about the necessity of laboratory tests before OCPs could be prescribed and their intermittent use [26].

The reasons underlying the preference of health care givers for OCP use have been highlighted as age, profession, familial conditions, and geographical location [20]. In parallel, there is a significantly higher number of male health professionals who claim that OCPs cause acne, sexual dysfunction, ectopic pregnancy, deep vein thrombosis, and liver cancer. Moreover, physicians significantly tend to state that OCPs cause acne, depression, sexual dysfunction, ectopic pregnancy, breast cancer and liver cancer. Health care givers with an experience of ≥14 years are significantly more likely to claim that OCPs cause acne and weight gain.

A review of Swiss gynecologists and general practitioners have indicated that physicians look for have specific criteria before they recommend against OCP use. These specific criteria comprise age over 35, body mass index over ≥25 kg/m^2, smoking, menstrual irregularity, headache, acne, and family history of venous thromboembolism [27]. In this study, there is a significantly higher number of male physicians who signify that laboratory tests should be made before OCPs could be prescribed. There is also a significantly higher number of more experienced health care givers (≥14 years) who claim that OCPs should be used intermittently. The contradictory finding about the more experienced health care givers (≥14 years) is that they are significantly more likely to specify their previous training on OCPs and current competency about OCP use. Thereto, these more experienced care givers are also significantly less likely to prefer undergoing regular training about OCP use.

Gynecologists and nurses who specialized in obstetrics and gynecology significantly tended to offer extended use of OCPs in their clinical practice [21]. A Canadian study of family medicine specialists and gynecologists found that older and female family physicians were more likely to recommend natural family planning rather than modern contraceptive methods [28]. Another Canadian review comparing residents and practicing physicians concluded that physicians were more likely to advise OCP users that they should switch to barrier methods or intrauterine devices. The rationale for these findings was the significantly higher perception of physicians about the side effects of OCPs. Based on their personal experience with their patients, actively working doctors believed that the rates of mood swing and sexual

Table 4 Knowledge of health care givers about oral contraceptives with respect to experience

	< 14 years (*n* = 152)	≥ 14 years (*n* = 154)	*p*
I had training on oral contraceptive pills (OCPs)	101 (66.4%)	132 (85.7%)	0.001*
I recommend OCPs as the first professional preference for my patients	31 (20.4%)	22 (14.3%)	0.227
I recommend OCPs as the second professional preference for my patients	48 (31.6%)	40 (26.0%)	0.169
I recommend OCPs as the third professional preferenee for my patients	36 (23.7%)	51 (33.1%)	0.567
Oral contraceptives cause hirsutism	51 (33.6%)	53 (34.4%)	0.776
Oral contraceptives cause acne	45 (29.6%)	51 (33.1%)	0.035*
Oral contraceptives cause infertility	12 (7.9%)	9 (5.8%)	0.149
Oral contraceptives cause weight gain	71 (46.7%)	88 (57.1%)	0.030*
Oral contraceptives cause depression	31 (20.4%)	39 (25.3%)	0.078
Oral contraceptives cause sexual dysfunction	17 (11.2%)	14 (9.1%)	0.292
Oral contraceptives cause ectopic pregnancy	24 (15.8%)	21 (13.6%)	0.388
Oral contraceptives cause deep vein thrombosis	71 (46.7%)	96 (62.3%)	0.001*
Oral contraceptives cause endometrial cancer	28 (18.4%)	22 (14.3%)	0.328
Oral contraceptives cause ovarian cancer	24 (15.8%)	21 (13.6%)	0.595
Oral contraceptives cause cervical cancer	28 (18.4%)	15 (9.7%)	0.029*
Oral contraceptives cause breast cancer	51 (33.6%)	60 (39.0%)	0.325
Oral contraceptives cause colon cancer	3 (2.0%)	2 (1.3%)	0.641
Oral contraceptives cause liver cancer	5 (3.3%)	9 (5.8%)	0.285
Fertility returns as soon as OCPs are discontinued	80 (52.6%)	96 (62.3%)	0.085
Laboratory tests should be made before OCPs are prescribed	105 (69.1%)	108 (70.1%)	0.911
To avoid adverse effects, OCPs should be used intermittently	25 (16.4%)	28 (18.2%)	0.006*
Oral contraceptive users should be examined every 6 months	99 (65.1%)	97 (63.0%)	0.892
I feel qualified about oral contraceptives	58 (38.2%)	94 (61.0%)	0.001*
I prefer to have regular training about oral contraceptives	132 (86.8%)	118 (76.6%)	0.001*

*$p < 0.05$ was accepted to be statistically significant

dysfunction were higher than 1% determined by the manufacturer's guidelines [29].

Conclusion

To the best of our knowledge, this is the first study to perform a quantitative examination about the awareness of Turkish physicians and nurses working at primary care centers about OCP use and prescription. This study shows that the recommendation rate of OCPs by health care givers working at primary health centers in an inland Turkish province is relatively low. This relatively low rate appears to result from the concern for probable adverse effects and misconceptions about the necessity of laboratory tests before OCPs could be prescribed and their intermittent use. Despite the care givers' claim about receiving education about OCPs, they have limited knowledge and awareness about the prescription and use. This deficiency becomes significantly more obvious in male physicians who have an experience of ≥ 14 years.

The concern about probable adverse effects, the lack of standardization in formal education, the absence of postgraduate training and the shortage of time and resources for counseling might have led to the limitation in OCP use. Another factor might be the inability to overcome the subjective biases that care givers may hold against particular individuals.

The findings of the present study should be interpreted carefully as their power is limited by the small cohort size, cross-sectional study design, and lack of longitudinal data. The absence of data related to the personal preference of health care givers about contraception can also be observed as a limiting factor. The specifically developed questionnaire in this study has not been tested for validity and reliability and this can be considered as a power-limiting factor. Moreover, this questionnaire failed to distinguish between OCPs and progestin-only pills, which possess completely different efficacy and safety profiles, and this might be also defined as a power-limiting factor.

Further research should be undertaken to clarify the role of care givers working at primary health care centers in counseling for OCP use.

Abbreviations

OCP Oral contraceptive pill

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12875-024-02700-1.

Supplementary Material 1

Author contributions
GD: Protocol/project development, Data collection or management, Manuscript writing, analysis, AM: Protocol/project development, Data collection or management, RD: Protocol/project development, Data collection or management, M K P: Protocol/project development, Manuscript writing, Manuscript editing, Analysis.

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Data availability
The dataset used and analysed during the current study are available from the corresponding aothor on reasonable request.

Declarations

Ethics approval and consent to participate
This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Afyonkarahisar Health Science University (approval no: 2022/8-375). All participants were informed about the study and written consent was obtained from each participant.

Competing interests
The authors declare no competing interests.

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