



## The sexual health approach in postmenopause: The five-minutes study



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### ABSTRACT

**Objectives:** To determine whether actively addressing sexuality in a gynaecological consultation with menopausal patients improves the diagnosis of sexual problems.

**Study design:** A multi-centre analytical cross-sectional study was conducted at 12 Spanish hospitals. In gynaecological consultations the usual medical histories were taken, except that, initially, issues relating to sexuality were omitted, unless the patients raised them. Then, after 5 min, gynaecologists offered the possibility of talking about sexuality and asked about possible sexual problems. Main outcome measures Observed prevalence of sexual problems.

**Results:** A total of 256 postmenopausal women participated in the study. Of them, 12.1% reported a sexual problem during the first 5 minutes of the interview. The prevalence of patients with a sexual problem increased by 35.9% (from 12.1% to 48.0%) when they were asked about sexuality after 5 min ( $p < 0.0001$ ). The main factors associated with having a sexual problem were genitourinary syndrome of menopause (GSM) and having a stable sexual partner.

**Conclusions:** Asking postmenopausal women about sexuality in gynaecological consultations is an important tool that increases the number of diagnoses of sexual problems. Gynaecologists should routinely ask about sexuality.

### 1. Introduction

Sexuality is a key aspect of women's health. The advances made in the study of sexual dysfunctions and their treatments mean that there is a greater demand for assistance; however, patients are often reluctant to request this help from their doctors for fear of being rejected or ashamed [1].

It has been estimated that between a third and a half of women experience some form of sexual disorder, such as low desire, poor lubrication, dyspareunia, lack of pleasure, or the inability to reach orgasm [2–5]. It is known that the prevalence of sexual dysfunction increases with menopause. The prevalence of sexual dysfunction peaks among middle-aged women [6]. In Spain, a study using the Female Sexual Function Index-6 (FSFI-6) showed that 36.9% of postmenopausal patients had scores compatible with sexual dysfunction [7]. Many such

sexual problems (and even some sexually transmitted diseases) do not present with overt physical symptoms, and so good physician–patient communication is therefore of great importance.

Gynaecologists, because of their specialisation in the female genital tract and reproductive health, have good opportunities to talk openly about sexuality with patients; in fact, several studies report that gynaecologists are the doctors who most frequently deal with their patients' sexual problems [8–10]. Gynaecologists have to know the difference between sexual symptoms and sexual dysfunctions, to offer the best treatments available or refer the patients to a sexologist. One of the most important criteria for the diagnosis of sexual dysfunction is that it must have created distress and interpersonal difficulty [6,11].

In 2016, our group sent a survey via mail to 600 members of the Spanish Menopause Society (SMS) based on the survey conducted in 2011 in the USA by Sobbecki et al. [12]. This questionnaire asked

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whether they routinely addressed sexuality with their patients, and only 53.3% of respondents indicated that they did so, despite sexuality being included in the SMS clinical guidelines as an item of the basic menopause history [13].

The purpose of our study was to evaluate whether actively addressing sexuality in a gynaecological consultation with postmenopausal patients improves the diagnosis of sexual problems.

## 2. Material and methods

This multi-centre, analytical cross-sectional study was conducted in the gynaecology departments of 12 Spanish hospitals. The 12 investigators were members of the SMS young experts group, and the study was designed as part of the European Menopause and Andropause Society (EMAS) Junior Mentorship Programme (JuMP). Ethical clearance was obtained from the institutional ethics committee (PI 159/2016).

Eligible patients were seen at normal gynaecological consultations. They all gave informed consent, after it had been explained to them that one of the areas of the usual medical history was going to be postponed for 5 min unless the patient requested information about it, in which case the consultation would be carried out in the usual way.

The usual medical history was taken with the exception of items concerning sexuality unless the patients raised such issues. For the patients who did not request sexual information or refer to sexual problems in the first 5 min, the gynaecologists then offered the possibility to talk about sexuality and asked about possible sexual problems (as it would have been done in the usual anamnesis). Afterwards, a complete sexual history was performed. Sexual problems were recorded using the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) criteria.

The inclusion criteria were: patients were postmenopausal (at least one year without a menstrual period); patients were older than 45 years; patients had not been to a gynaecologist in the previous 3 months; patients were not being followed due to any gynaecological disease.

The sample size was calculated using the results of a pilot study with 20 menopausal patients in our centre. Only three of these patients requested information or asked about sexual problems if we did not initially include this topic in the anamnesis (15%). The prevalence of sexual problems after menopause in Spain has been reported to be around 36% (5). Using an alpha value of 0.05 and a power (1–beta) of 80% to demonstrate a difference of at least 15% (based on a possible 15% of patients who would ask questions or request information directly about sexual problems if they were not asked and assuming a possible 15% loss), the required sample size would be 112 patients. We decided to continue the recruitment of 250 patients to account for secondary variable analysis.

The clinical and demographic data recorded included: the treatments performed at menopause; if they had been previously asked by another gynaecologist about sexuality; if they had a stable sexual partner; if they were religious; the time since the last sexual event, including masturbation; the frequency of sexual events, including masturbation (divided into 4 categories: sexual events more than once a week, sexual events more than once a month but less than once a week, sexual events more than once a year but less than once a month and sexual events less than once a year); the gender of the investigator; whether the patients came alone or with a companion; and whether there were signs of the genitourinary syndrome of menopause (GSM).

## 3. Statistical analysis

The distribution of variables was verified using the Kolmogorov–Smirnov test and histograms. As all numeric variables were normally distributed, they were displayed as means and standard deviations. Between-group comparisons were performed using a

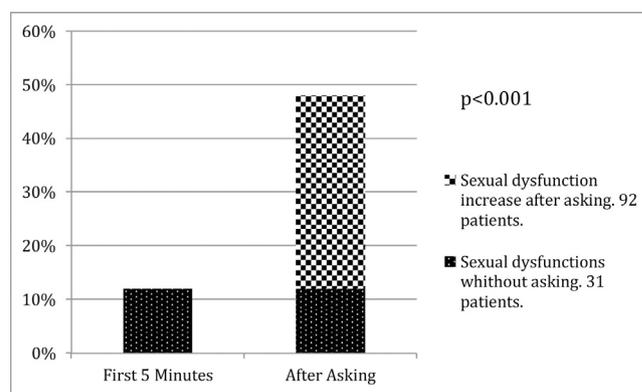


Fig. 1. Increase in the observed prevalence of sexual problems after asking about sexuality.

Student's *t*-test, Pearson's chi-squared test, or Fisher's exact test, as appropriate. Binary logistic regression was used to obtain the factors that increased the odds of diagnosing a sexual problem. The level of significance was set at 95% ( $p < 0.05$ ). All analyses were performed in SPSS version 22.0 (SPSS Inc, Chicago, Ill).

## 4. Results

Between February 2017 and June 2017, 256 eligible women participated in the study. No patient refused to participate in the study, and there were no patient losses. Of all patients, 12.1% (31 patients) reported sexual problems during the first 5 min (without being asked about sexuality). The reported prevalence of patients with a sexual problem increased by 35.9 percentage points (an extra 92 patients) when they were asked about sexuality after 5 min. Thus the prevalence rose from 12.1% (95% confidence interval 8.37%–16.74%) to 48.0% (95% confidence interval 41.80%–54.40%) (Fig. 1).

Reporting a sexual problem (in the first 5 min or after being asked) was not statistically related to the researcher's gender, whether the patient was accompanied or not during the consultation, whether she had been previously asked about her sexuality or not, or whether she was religious. The patients with sexual problems were younger and had more recently gone through menopause. Fifty-three women (20.7% of patients) reported having a sexual event less than once a year. Out of these 53 women, 16 (30.2%) reported a sexual problem, whereas 107 (52.7%) of those who reported having a sexual event more than once a year reported a sexual problem ( $p = 0.003$ ) (Table 1).

Women who had used hormone replacement therapy (HRT) or any treatment for GSM were statistically significant more likely to have talked spontaneously about a sexual problem in the first five minutes (Table 2).

Binary logistic regression showed that the most important factors increasing the odds of diagnosing a sexual problem were having GSM (OR: 6.778; 95% confidence interval 3.916–11.734) and having a stable sexual partner (OR: 6.293; 95% confidence interval 2.345–16.890). The time since menopause was negatively related to the odds of diagnosing a sexual problem (OR: 0.951; 95% confidence interval 0.917–0.986). Time since menopause, having GSM, and having a stable sexual partner were the only factors independently related to the probability of diagnosing a sexual problem.

Only 21.9% (56/256) of the patients in the study had been previously asked by a gynaecologist about sex. Sexual problems were not more common among these patients (32 out of 56 versus 91 out of 200;  $p = 0.123$ ), and those with a sexual problem that had been previously asked by a gynaecologist did not talk more about sexuality without being asked (10 out of 32 versus 21 out of 91;  $p = 0.360$ ).

Patients who had a stable sexual partner were more likely to be diagnosed with a sexual problem (118 out of 223 versus 5 out of 23;

**Table 1**  
Demographic data. All patients.

	No sexual problem (n = 133)	Sexual problem (n = 123)	p	Total n = 256
Age	60.61 ( ± 7.79)	58.20 ( ± 6.49)	0.008	59.45 ( ± 7.28)
Age at Menopause	49.29 ( ± 3.57)	49.33 ( ± 4.30)	0.924	49.31 ( ± 3.93)
Years since Menopause	11.32 ( ± 7.69)	8.86 ( ± 6.29)	0.006	10.14 ( ± 7.15)
BMI (kg/m <sup>2</sup> )	26.75 ( ± 5.34)	26.03 ( ± 4.64)	0.256	26.40 ( ± 5.02)
Menopausal Symptoms	70 (52.6%)	82 (66.7%)	0.022	152 (59.4%)
Used or uses HRT	29 (21.8%)	26 (21.1%)	0.897	55 (21.5%)
Any treatment for Menopausal Symptoms	48 (36.1%)	45 (36.6%)	0.934	93 (36.3%)
Signs of GSM	33 (24.8%)	85 (69.1%)	< 0.0001	118 (46.1%)
Any treatment for GSM	21 (15.8%)	51 (41.5%)	< 0.0001	72 (28.1%)
Male investigator	77 (57.9%)	62 (50.4%)	0.229	139 (54.3%)
Female investigator	56 (42.1%)	61 (49.6%)	0.229	117 (45.7%)
Comes alone	105 (78.9%)	100 (81.3%)	0.638	205 (80.1%)
Previously asked about sex	24 (18%)	32 (26%)	0.123	56 (21.9%)
Stable sexual partner	105 (78.9%)	118 (95.9%)	< 0.0001	223 (87.1%)
Religious	108 (81.2%)	104 (84.6%)	0.478	212 (82.8%)
Sexual events more than once a week	31 (25.3%)	30 (24.4%)	0.839	61 (23.8%)
Sexual events more than once a month, less than once a week	48 (36.1%)	51 (41.5%)	0.378	99 (38.7%)
Sexual events more than once a year, less than once a month	17 (12.8%)	26 (21.1%)	0.074	43 (16.8%)
Sexual events less than once a year	37 (27.8%)	16 (13.0%)	0.003	53 (20.7%)

**Table 2**  
Demographic data. Patients with a sexual dysfunction.

	Sexual problem first 5 min (n = 31)	Sexual problem after being asked (n = 92)	p
Age	56.94 ( ± 6.71)	58.62 ( ± 6.39)	0.213
Age at Menopause	48.55 ( ± 3.78)	49.60 ( ± 4.45)	0.241
Years since Menopause	8.39 ( ± 5.47)	9.02 ( ± 6.56)	0.382
BMI (kg/m <sup>2</sup> )	26.96 ( ± 4.88)	26.72 ( ± 4.54)	0.199
Menopausal Symptoms	20 (64.5%)	62 (67.4%)	0.769
Used or uses HRT	12 (38.7%)	14 (15.2%)	0.006
Any treatment for Menopausal Symptoms	14 (45.2%)	31 (33.7%)	0.252
Signs of GSM	23 (74.2%)	62 (67.4%)	0.478
Any treatment for GSM	20 (64.5%)	31 (33.7%)	0.003
Male investigator	14 (45.2%)	48 (52.2%)	0.499
Female investigator	17 (54.8%)	44 (47.8%)	0.499
Comes alone	27 (87.1%)	73 (79.3%)	0.339
Previously asked about sex	10 (32.3%)	22 (23.9%)	0.360
Stable sexual partner	30 (96.8%)	88 (95.6%)	1.000
Religious	26 (83.9%)	78 (84.8%)	0.903
Sexual events more than once a week	9 (29%)	21 (22.8%)	0.229
Sexual events more than once a month, less than once a week	10 (32.3%)	41 (44.6%)	0.486
Sexual events more than once a year, less than once a month	8 (25.8%)	18 (19.6%)	0.462
Sexual events less than once a year	4 (12.9%)	12 (13.0%)	0.984

p = < 0.0001). Patients with a stable sexual partner had a higher frequency of sexual events (p < 0.0001), were younger (p < 0.0001), and had more recently gone through menopause (p < 0.0001).

Regarding treatments used for GSM, local estrogens were more frequently used in the group without sexual problems, while moisturizers were more commonly used in the group with sexual problems. Patients affected by menopausal symptoms not related to GSM were also more likely to have sexual problems. There were no significant differences regarding the treatments used for menopausal symptoms (not for GSM). There were also no significant differences regarding patients using treatments for hypertension, diabetes, or hypercholesterolemia (Table 3).

The most common sexual problem in our study was dyspareunia (46 cases), followed by female hypoactive desire disorder (34 cases)

**Table 3**  
Sexual dysfunctions in relation to GSM, Menopausal Symptoms or Medical conditions (diabetes, hypercholesterolemia or hypertension).

	No sexual problem (n = 133)	Sexual problem (n = 123)	p	Total n = 256
GSM	33 (24.8%)	85 (69.1%)	< 0.0001	118 (46.1%)
Any treatment	19 (57.6%)	50 (58.8%)	0.679	69 (58.5%)
Local estrogens	12 (63.2%)	21 (42.0%)	0.003	33 (47.8%)
HRT	3 (15.8%)	12 (24%)		15 (21.7%)
Ospemifene	0	0		0
Laser	0	0		0
Hyaluronic	1 (5.3%)	3 (6.0%)		4 (5.8%)
Moisturizers	1 (5.3%)	14 (28%)		15 (21.7%)
Corticosteroids	2 (5.3%)	0		2 (2.9%)
Menopausal Symptoms <sup>a</sup>	70 (52.6%)	82 (66.7%)	0.022	152 (59.4%)
Any treatment	44 (62.9%)	42 (51.2%)	0.149	86 (56.6%)
HRT	23 (52.3%)	18 (42.9%)	0.107	41 (47.7%)
Phytostrogens	15 (34.1%)	18 (42.9%)		33 (38.4%)
Antidepressants	0	2 (4.8%)		2 (2.3%)
Anxiolytics	4 (9.0%)	0		4 (4.7%)
Others	2 (4.5%)	4 (9.5%)		6 (7%)
Medical Conditions	48 (36.1%)	51 (41.5%)	0.378	99 (38.6%)

<sup>a</sup> Postmenopausal symptoms not including GSM.

(Fig. 2). There were nine cases recorded as sexual dysfunction not otherwise specified (eight cases were related to male dysfunction and dysfunctional relationships, and one case was due to dysosmia and did not fulfil the criteria for sexual aversion disorder).

## 5. Discussion

The results of this study suggest that the mere fact of talking about sexuality with our postmenopausal patients is a powerful diagnostic tool. The actual overall prevalence of sexual dysfunction is unknown, and some authors even suggest that such a problem does not exist, while others report that it is underdiagnosed [6,14,15]. In our study, sexual problems in postmenopausal women were very prevalent, but almost three-quarters of cases would not have been detected if we had not asked about sexuality.

Considering that the proportion of gynaecologists who routinely talk about sex with their patients is low, it is easy to understand that the mere fact of asking all patients about sexuality would imply a change in the registered prevalence of female sexual dysfunction [12]. In 1989,

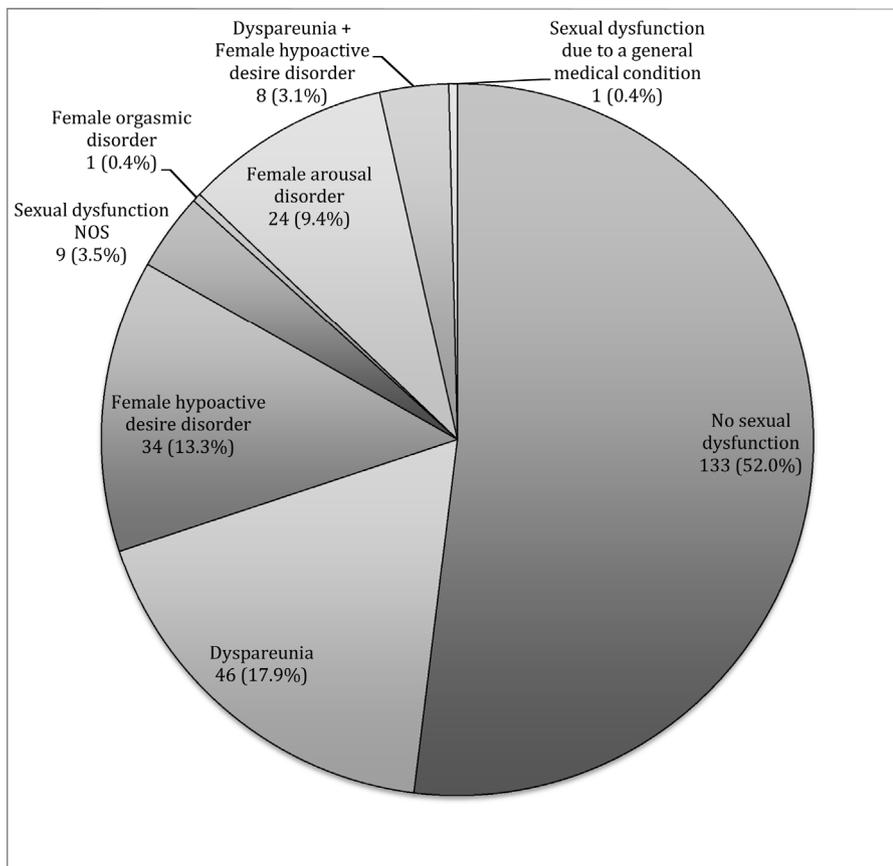


Fig. 2. Sexual problems diagnosed in the study.

Bachmann et al. performed a study with 887 patients ranging in age from 12 to 78 years. Only 3% spontaneously reported a sexual problem and an additional 16% acknowledged sexual problems after being asked [10]. As the highest prevalence of sexual dysfunction occurs in middle-aged women, the observed prevalence was expected to be greater in our study than in Bachmann's [6]. It seems that with the passage of time between that study and ours there has been a remarkable increase in the percentage of patients who spontaneously speak of sexual problems.

One of the possible reasons that may explain why sexuality is often avoided during medical history taking in gynaecology is the fear of upsetting the patient. It was very interesting that no patient left the study when it was revealed that the area that was being avoided in the first 5 min was sexuality. Not a single patient was annoyed by talking openly about sexuality with the gynaecologist. Moreover, there were no significant differences in the proportions of women who spontaneously talked about a sexual problem with a male or with a female physician. Neither did the presence of a patient companion at the consultation influence the patients in this respect, and nor did their religious status. According to Atallah et al., these factors may be important in the attitude of patients in some cultures, and our work group expected some influence among Spanish patients [16]. The assertion of some authors that gynaecologists are probably the health care professionals with the greatest opportunity to talk about sexual problems with their patients seems correct [8,9]. For this reason, it seems that gynaecologists are the ones who are likely to make a first diagnosis and to consider the treatment options.

In this light, it is unfortunate that the training of gynaecologists in relation to sexual problems is not currently adequate. In fact, a study performed with third- and fourth-year gynaecological residents showed severe deficiencies in sexual medicine training. Most of them had treated only dyspareunia [17]. More diagnosis may not imply better health care if the training of gynaecologists in sexual medicine is not improved. However, this problem would also be solved by referring

these patients to professionals with more experience in sexology or reference centres.

There were three factors independently related to a higher probability of detecting a sexual problem in our study: having a stable sexual partner, GSM and shorter time since menopause. Postmenopausal patients with a stable sexual partner in our study had a higher frequency of sexual events and were younger. The fact that, among patients with a stable sexual partner, there was a higher rate of detection of sexual problems may be related to the diagnostic criteria for sexual problems (to be considered a sexual problem, it must have created marked distress and interpersonal difficulty) [11]. Having a partner has been described as the main factor in sexual distress [18]. It may be more common that a sexual problem creates marked distress and interpersonal difficulties if a person is sharing their sexual life and problem with another person they care about. Regarding the frequency of sexual events, it may be less distressing for older patients without stable sexual partners to have a low frequency of sexual events.

GSM was the most important factor associated with sexual problems in our study. Dyspareunia was the most common sexual problem in our population of postmenopausal women. The relation between GSM, sexual distress and dyspareunia has been clearly demonstrated [19,20]. It must be highlighted that, in our study, patients with sexual problems used moisturisers more often and local estrogens less often than patients without sexual problems. Considering that fewer than 60% of the patients with GSM in the study were receiving any treatment, it is possible that the lack of prescription, added to wrong choices in vulvovaginal treatments, may have influenced the high prevalence of patients affected by dyspareunia. It was surprising that none of the patients was using ospemifene, considering its indication in postmenopausal dyspareunia among patients with low tolerance of vaginal treatments [21]. A greater use of local estrogens, as they may have been clearly indicated, was also expected [22].

The third factor that was independently associated with sexual

problems in our study was the time since menopause. Women in their first years after menopause were more likely to be diagnosed with a sexual problem. Symptoms of the menopause, like hot flashes, appear across the menopausal transition and beyond, with a median duration of seven to eight years [23]. Younger patients (those in the first years after menopause) have more symptoms of the menopause and more distressing sexual problems. The relation between age and distressing sexual problems was well studied in the PRESIDE study, which showed that middle-aged women (45–64 years) were more commonly affected by distressing sexual problems than younger or older women [4].

Regarding the diagnoses that were made during the study, the proportion of sexual problems was similar to reports in the literature, except for orgasmic dysfunction. Only one case of orgasmic dysfunction was diagnosed, in contrast to the 20%–30% prevalence reported in other studies [24,25]. A possible explanation is that, due to the characteristics of the study population (postmenopausal patients), those who had a long-term orgasmic dysfunction no longer perceived it to be a problem.

Only the use of HRT and being treated for GSM were significantly related to the probability of speaking spontaneously about sexual problems. Considering that one of the factors that influences adherence to HRT is the time spent in consultations, it is possible that these patients had spent more time in consultations and were less hesitant in talking openly with gynaecologists [26]. On the other hand, having been previously asked about sexuality in gynaecological consultations was not associated with a higher probability of talking about sexual problems in the first 5 min. Considering that having been previously asked about sexuality did not change the probability of spontaneously talking about sexual problems, patients should be asked about sexuality at each visit as is referenced in the SMS clinical guidelines [13].

The main weakness of our study is the lack of a control group. Initially we designed a randomised clinical trial, but it was not approved by the ethics committee because there were patients who were not going to be asked about sexuality, and it is a mandatory part of the medical history [13]. It is not known what percentage of patients with sexual problems would have talked about their sexual problems spontaneously after 5 min. Five minutes was chosen as an appropriate test period because, in Spain, the average consultation lasts between 5 and 10 min (including the gynaecological exam). In fact, in general clinical practice in Spain, an average of 7.8 min per consultation has been estimated [27].

The decision was made not to use a specific instrument such as a questionnaire about sexuality but to give all researchers the freedom to ask about sexuality in the way they usually do, so that we could evaluate usual clinical practice in gynaecological consultations and avoid potential patient resistance to completing written measures of their sexuality. Our main objective was to evaluate how discussing sexuality in the consultation would affect the number of diagnoses made.

In conclusion, openly asking postmenopausal women about sexuality in gynaecological consultations increases the number of diagnoses of sexual problems. Gynaecologists should routinely ask about sexuality in gynaecological consultations. Sexual problems in our study were more common in younger postmenopausal women with GSM and a stable sexual partner. Further investigations are needed to validate the findings from this study in other countries.

## Contributors

All authors significantly contributed to the study conception and design.

## Conflict of interest

None.

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Marcos J Cuerva, Daniel Gonzalez, Marta Canals, Borja Otero and Jose Angel Espinosa and the members of the SMS Young Experts Group participated in the data collection and data analysis.

Nicolas Mendoza supervised data collection and analysis.

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All authors contributed to the writing and editing of the manuscript, and saw and approved the final version.

## Ethical approval

Ethical clearance was obtained from the institutional ethics committee (PI 159/2016).

All participants gave informed consent.

## Peer review

This article has undergone peer review.

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