<table>
<thead>
<tr>
<th>Title</th>
<th>Sexual Problems among Japanese Women: Data from an Online Helpline.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Ozaki, Yumi; Nagao, Koichi; Saigo, Rieko; Tai, Toshihiro; Tanaka, Norie; Kobayashi, Hideyuki; Nakajima, Koichi; Takahashi, Yoshimitsu</td>
</tr>
<tr>
<td>Citation</td>
<td>Sexual medicine (2015), 3(4): 295-301</td>
</tr>
<tr>
<td>Issue Date</td>
<td>2015-12</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/2433/215699">http://hdl.handle.net/2433/215699</a></td>
</tr>
<tr>
<td>Rights</td>
<td>© 2015 The Authors. Sexual Medicine published by Wiley Periodicals, Inc. on behalf of International Society for Sexual Medicine. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.</td>
</tr>
<tr>
<td>Type</td>
<td>Journal Article</td>
</tr>
<tr>
<td>Textversion</td>
<td>publisher</td>
</tr>
</tbody>
</table>

Kyoto University
Sexual Problems among Japanese Women: Data from an Online Helpline

Yumi Ozaki, MD, PhD,* Koichi Nagao, MD, PhD,* Rieko Saigo, LLB,* Toshihiro Tai, MD, PhD,* Norie Tanaka, MD,* Hideyuki Kobayashi, MD, PhD,* Koichi Nakajima, MD, PhD,* and Yoshimitsu Takahashi, DrPH†

*Department of Urology, Toho University School of Medicine, Tokyo, Japan; †Department of Health Informatics, Kyoto University School of Public Health, Kyoto, Japan

DOI: 10.1002/sm2.83

ABSTRACT

Introduction. Sexual problems have been more prevalent among East Asian women than those from other areas of the world. However, Japanese women seldom tend to consult their treating physicians as such intimate problems are socially awkward topics to share and may be considered shameful. Presently, there is little data in the literature regarding women's sexual problems in Japan.

Aims. We aimed (i) to investigate the types of sexual problems that were reported among Japanese women who had sought online consultations; and (ii) to examine whether factors such as age and family structure (marital status and presence of children) increased the likelihood of sexual problems.

Methods. An online helpline received a total of 316 messages from Japanese women related to sexual problems over a 3-year period. We evaluated 276 respondents, who provided demographic information such as age and family structure as well as their response to an open-ended question regarding their sexual problems.

Main Outcome Measures. Main outcome measures were the types of sexual problems reported by Japanese women.

Results. The majority of respondents were in their 30s (53.6%). Sexual aversion accounted for 42.4% of the complaints, partners’ sexual issues for 18.5%, and pain during sex for 16.7%. Family structure significantly correlated with sexual problems (P < 0.001). Women with sexual aversion were more likely to be younger (P = 0.003) and have children (P < 0.001). Women whose partners had sexual issues were more likely to be married (P < 0.001) and have no children (P < 0.001). Women who reported pain during sex were more likely to have no children (P = 0.006).

Conclusion. Sexual aversion was the most common sexual problem among Japanese women who sought help via the online helpline. Family structure was related to sexual problems. More detailed assessments of family structure may be important in better identifying the triggering causes of the reported sexual problems. Ozaki Y, Nagao K, Saigo R, Tai T, Tanaka N, Kobayashi H, Nakajima K, and Takahashi Y. Sexual problems among Japanese women: Data from an online helpline. Sex Med 2015;3:295–301.

Key Words. Epidemiology; Sexual Dysfunction; Female; Marital Status; Child; Sex Counseling

Introduction

Women’s sexual problems are common and can affect quality of life at any age [1–3]. They can lead to stress, depression, anxiety, and infertility. Several studies have demonstrated that 38–63% of women worldwide had sexual problems [4–7]. A global survey reported that the...
most common sexual problems among women worldwide were a lack of sexual desire and inability to reach orgasm [8]. Women in East Asia and Southeast Asia were more likely to report sexual problems than women in other areas of the world [8]. Furthermore, in the global study, Japanese couples reported the lowest levels of sexual satisfaction. However, little is known about women’s sexual problems in Japan. One of the reasons is that the topic is treated as taboo among most Asian women, making it difficult to seek medical advice.

Previous studies indicated that helplines were advantageous for patients with sexual problems [9–12] as their anonymity could make consultations less stressful and embarrassing. An online helpline can also remove the barriers of geographical isolation and time restriction. On the other hand, there are several inherent shortcomings, such as a lack of visual cues and the impossibility of physical exams. Nevertheless, for many people suffering from sexual problems, helplines services represent an important first step [12].

Aims

In this present study, we hypothesized that low sexual desire and inability to reach orgasm would be common among Japanese women as in large epidemiological studies. To this end, we set out to determine the prevalence and the major types of sexual complaints encountered among Japanese women who sought online consultations and whether age and family structure such as marital status and presence of children had any correlation with the participants’ sexual complaints.

Methods

Participants and Data Collection

An online-based helpline service (http://www.lab.toho-u.ac.jp/med/omori/repro/patient/sexual_impairment/female_trouble.html) was established in January 2010 at the reproduction center internet website at the Toho University School of Medicine, Japan. From the online data, we conducted a cross-sectional study in order to raise the awareness of Japanese women’s sexual problems and further investigate the yet unexplored field of women sexuality and its problems within Japan.

It provided reliable information about sexual problems such as causes, available treatments, and also a recommended treatment for the specific type of sexual problems. The helpline addressed Japanese women with sexual problems living either in Japan or abroad. We offered an absolute anonymity and free counseling. This was an observational web-based pilot study, and hence, no exclusion criteria were established. Traditionally, there is a pronounced scarcity of data regarding Japanese women’s sexual problems as Japanese women rarely seek advice from their physicians. To our knowledge, our institution is the first in Japan to establish an online helpline for women with sexual problems, and 1 year after the helpline was set up, it constantly appeared on the first page of any major internet search engine whenever the key words “female sexual dysfunction” were entered in the Japanese language.

On the sexual counseling website, participants were informed that their responses would form part of an investigation into Japanese women’s sexual health. Respondents were required to give informed consent before they could respond to the questions. Data were transferred directly to a database, where they were anonymized. Access to the database was password protected.

Participants were asked to provide information regarding their age (teens, 20s, 30s, 40s, 50s, or over), area of residence, presence of sexual partners, and marital status, and were also given the opportunity to answer an open-ended question which specifically related to their sexual problems (Appendix 1). Then, a urologist with postgraduate training in sexual medicine (Y.O.) assessed, defined, and categorized the presenting complaints from each participant e-mail. Each category and reply was separately reviewed by an expert physician (K.N.) before it was sent to the respondent. Although the survey contained only a single open-ended question in connection with their intimate relationship, most participants replied with great details describing the onset, chronological course of the sexual problems, and presence of children, and even speculated on possible causes such as marital/couple relationship issues, lifestyle, and coexisting health problems. From the detailed information gathered, each complaints and issues was categorized and classified. We referred to the DSM-IV-TR and specifically defined “sexual aversion” as the persistent or recurrent extreme fear and aversion to and avoidance of, all or almost all, genital sexual contact with a sexual partner and “low sexual desire” as a deficiency of sexual desire or decreased libido without any aversion toward sexual intimacy or genitalia.
The online helpline had a total of 316 participants between January 2010 and January 2013. Participants with identical electronic addresses were not accounted more than once in this study. Respondents were excluded whenever replies were incomplete or when presence of children was not clearly indicated in the questionnaire. In total, 276 respondents were included in the study. Although the helpline is an integral part of a health-care service, its online nature provided the participants with the full decision to either continue or halt the survey at any time and without any consequence. Furthermore, all identifiable personal information of all participants was solely limited to their e-mail addresses which were anonymized. This study is the result of a pre-existing secondary data analysis, and therefore, we exempted from IRB approval.

Statistical Analysis

Descriptive analyses were used to characterize and compare the parameters under study. To compare five categorical variables (low sexual desire, inability to reach orgasm, pain during sex, sexual aversion, and partners’ sexual issues) between three groups (single, married with no children, and married with children), Pearson’s chi-squared test was used. To determine factors for sexual problems, we utilized the multiple logistic regression model with forced entry method in 246 participants. In this model, objective variables were low sexual desire, inability to reach orgasm, pain during sex, sexual aversion and partners’ sexual issues. We selected age (20s, 30s, and 40s), marital status (single vs. married), and presence of children (yes vs. no) as explanatory variables because some studies reported that marital status, pregnancy, and childbirth were related to sexual problems [5,13–15]. All statistical analyses were performed with EZR (Saitama Medical Center, Jichi Medical University, Saitama, Japan), which is a graphical user interface for R (The R Foundation for Statistical Computing, Vienna, Austria) [16]. All P values were two sided, and P values of 0.05 or less were considered statistically significant.

Main Outcome Measures

The main outcome measures were the types of sexual problems reported by Japanese women.

Results

Participant Characteristics

The study sample consisted of online consultations from 276 Japanese women. The demographic distributions were set according to age, marital status, and presence of children (Table 1). The age of the respondents ranged from teens to 50s or over. Most of the participants were in the 30s (53.6%) and 20s (31.2%), while married women with no children, single women with no children, and women married with children accounted for 39.1%, 37.7%, and 22.8%, respectively.

Women’s Sexual Problems in Online Consultations

The participants’ occurring frequencies of their sexual problems during the online consultation are represented in Table 2. The respondents frequently reported sexual aversion (42.4%), partners’ sexual issues (18.5%), and pain during sex (16.7%). Among the respondents reporting sexual issues with their partners, the majority reported low sexual desire (45.1%), followed by erectile dysfunction (ED), and delayed ejaculation (27.5% and 13.7%, respectively).

Association between Sexual Problems and Family Structure

The correlations between sexual problems and family structure (marital status and presence of children) were analyzed using the multiple logistic regression model with forced entry method in 246 participants. The participants’ age, marital status, and presence of children were included as explanatory variables because some studies reported that marital status, pregnancy, and childbirth were related to sexual problems [5,13–15]. All statistical analyses were performed with EZR (Saitama Medical Center, Jichi Medical University, Saitama, Japan), which is a graphical user interface for R (The R Foundation for Statistical Computing, Vienna, Austria) [16]. All P values were two sided, and P values of 0.05 or less were considered statistically significant.

Main Outcome Measures

The main outcome measures were the types of sexual problems reported by Japanese women.

Results

Participant Characteristics

The study sample consisted of online consultations from 276 Japanese women. The demographic distributions were set according to age, marital status, and presence of children (Table 1). The age of the respondents ranged from teens to 50s or over. Most of the participants were in the 30s (53.6%) and 20s (31.2%), while married women with no children, single women with no children, and women married with children accounted for 39.1%, 37.7%, and 22.8%, respectively.

Women’s Sexual Problems in Online Consultations

The participants’ occurring frequencies of their sexual problems during the online consultation are represented in Table 2. The respondents frequently reported sexual aversion (42.4%), partners’ sexual issues (18.5%), and pain during sex (16.7%). Among the respondents reporting sexual issues with their partners, the majority reported low sexual desire (45.1%), followed by erectile dysfunction (ED), and delayed ejaculation (27.5% and 13.7%, respectively).

Association between Sexual Problems and Family Structure

The correlations between sexual problems and family structure (marital status and presence of children) were analyzed using the multiple logistic regression model with forced entry method in 246 participants. The participants’ age, marital status, and presence of children were included as explanatory variables because some studies reported that marital status, pregnancy, and childbirth were related to sexual problems [5,13–15]. All statistical analyses were performed with EZR (Saitama Medical Center, Jichi Medical University, Saitama, Japan), which is a graphical user interface for R (The R Foundation for Statistical Computing, Vienna, Austria) [16]. All P values were two sided, and P values of 0.05 or less were considered statistically significant.
children) among women aged from 20s to 40s are shown in Table 3. Respondents in their teens and those over 50s were excluded from this analysis because we mainly targeted to women aged from their 20s to their 40s. The results showed family structure significantly correlated with sexual problems ($P < 0.001$). Sexual aversion and pain during sex were more prevalent in unmarried respondents (50.6%, 20.7%, respectively), while married respondents with no children more frequently reported partners' sexual issues, sexual aversion, and pain during sex (39.8%, 30.6%, and 22.5%, respectively). Married respondents with children were more likely to report sexual aversion (65.6%).

Table 4 shows the results of the multivariate analysis using the logistic regression method among the respondents aged 20s–40s. The result demonstrated that respondents with low sexual desire were more likely to have children (odds ratio [OR]: 3.36, 95% confidence interval [CI]: 1.24–9.11). Among the participants who reported pain during sex, there was a significant decrease among those who had children (OR: 0.17, 95% CI: 0.05–0.59). Respondents who reported sexual aversion showed a tendency to be younger (OR: 0.50, 95% CI: 0.32–0.80) and to have children (OR: 4.40, 95% CI: 2.21–8.74). Additionally, respondents whose partners had sexual issues were more likely to be married (OR: 8.88, 95% CI: 3.24–24.4) and have no children (OR: 0.19, 95% CI: 0.08–0.45). Inability to reach orgasm did not appear to be associated with age, marital status, and presence of children.

### Discussion

This study revealed that sexual aversion was the most prevalent complaint among Japanese women who sought help for sexual problems. Family structure such as marital status and presence of children appeared to be related to sexual problems.

A global study reported that lack of sexual desire and inability to reach orgasm were the most prevalent sexual problems among women across the world [8]. In fact, in a previous study of the general population in Japan, Hisasue et al. determined that Japanese women between their 30s and 60s frequently reported sexual desire disorder (27.7–57.9%) and arousal disorder (29.7–57.9%) [1]. Previous helpline studies reported that the most commonly encountered problems were low sexual desire and inability to reach orgasm [9,10], while on the other hand, this present investigation confirms that the respondents were more likely to report sexual aversion (42.4%) than low sexual desire (11.2%) as well as inability to reach orgasm (2.9%) (Table 2). However, these previous reports did not contain a “sexual aversion” category in their data which presumably may have been included within the “low sexual desire” category since according to the DSM-IV-TR, sexual aver-

<table>
<thead>
<tr>
<th>Variables</th>
<th>Low sexual desire</th>
<th>Inability to reach orgasm</th>
<th>Pain during sex</th>
<th>Sexual aversion</th>
<th>Partners' sexual issues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
</tr>
<tr>
<td>Age (more)</td>
<td>1.06 (0.57–2.05)</td>
<td>2.11 (0.71–6.39)</td>
<td>1.37 (0.78–2.39)</td>
<td>0.50 (0.32–0.80)</td>
<td>1.68 (0.94–2.99)</td>
</tr>
<tr>
<td></td>
<td>$P = 0.82$</td>
<td>$P = 0.18$</td>
<td>$P = 0.27$</td>
<td>$P = 0.003$</td>
<td>$P = 0.08$</td>
</tr>
<tr>
<td>Marital status (married)</td>
<td>0.40 (0.15–1.08)</td>
<td>0.00 (0.00—Inf)</td>
<td>0.97 (0.46–2.04)</td>
<td>0.61 (0.33–1.15)</td>
<td>8.88(3.24–24.4)</td>
</tr>
<tr>
<td></td>
<td>$P = 0.07$</td>
<td>$P &lt; 0.001$</td>
<td>$P = 0.93$</td>
<td>$P = 0.13$</td>
<td>$P &lt; 0.001$</td>
</tr>
<tr>
<td>Presence of children</td>
<td>3.36 (1.24–9.11)</td>
<td>0.00 (0.00—Inf)</td>
<td>0.17 (0.05–0.59)</td>
<td>4.40 (2.21–8.74)</td>
<td>0.19 (0.08–0.45)</td>
</tr>
<tr>
<td></td>
<td>$P = 0.02$</td>
<td>$P = 0.99$</td>
<td>$P = 0.006$</td>
<td>$P &lt; 0.001$</td>
<td>$P &lt; 0.001$</td>
</tr>
</tbody>
</table>

CI = confidence interval; Inf = infinite; OR = odds ratio.

© 2015 The Authors. Sexual Medicine published by Wiley Periodicals, Inc. on behalf of International Society for Sexual Medicine.
sion was classified as one of sexual desire disorder. Alternatively, sexual aversion may be caused by the presence of other sexual problems such as sexual interest arousal disorder or genito-pelvic pain/penetration disorder. Mercer et al. reported that 62% of women avoided sex because of their sexual problems [17]. However, Crenshaw noted that sexual aversion was the most common sexual problem based on clinical findings [18]. Crenshaw also speculated that patients suffering from sexual aversion were often misdiagnosed due to the physicians’ unfamiliarity and poor experience in identifying such pathological condition. Additionally, Ohkawa reported that Japanese female outpatients frequently reported vaginismus (68.8%), followed by sexual aversion (11.7%) [19]. This accumulating body of evidence indicates that sexual aversion may be one of the most common sexual problems for women who seek advice in Japan. We surmise that several facets of the Japanese culture, ethics, and values may play a contributing role in the reporting of their sexual problems. A recent landmark survey from the Japanese Ministry of Health, Labor, and Welfare revealed that 41.3% of Japanese married couples engaged in intimate relationships at a frequency of no less than a 30-day interval [20]. As can be seen, Japanese married couples may not appear to engage in sexual intercourse as frequently as their Caucasian counterparts [21]. Of note, many Japanese women consider sexual activity as a mere mean to procreation, while its recreational aspect is viewed as shameful and even disgraceful explaining why the inability to reach orgasm is hardly a concern. Many Japanese women have a negative view about sexual intercourse and rather regard it as a burden. The overwhelming number of Japanese women suffering from sexual aversion may have emanated from these deeply rooted social ideologies demonizing sexual intercourse as a shameful act.

Regarding partners’ sexual issues, we discovered that women frequently complained about their partner’s low sexual desire (45%) and ED (28%). However, other helpline reports indicated that the majority of partner’s sexual issues was attributable to ED [10,12]. The global study estimated that ED was more prevalent than the lack of sexual desire among East Asian men, including Japanese men [8]. It can be inferred that women may have mistaken their partners’ low sexual activities due to erectile or ejaculatory dysfunction as a sign of low sexual desire. It is thought to be important for couples to conduct open discussions about sexual issues.

With respect to the related factors, our data revealed that family structure was associated with sexual problems (Tables 3 and 4) and also that sexual behavior could be influenced by physiologic as well as psychological or sociocultural factors. Some studies reported that marital status was related to sexual problems [5,13]. Furthermore, pregnancy and childbirth may have a direct effect on women’s sexual function, due to psychological impact and biological changes experienced during and after the pregnancy [14,15]. Respondents who reported pain during sex were more likely to be childless. Similarly, Witting et al. have demonstrated that nulliparous women had more pain during sex when compared with women with children [15]. We suggested that their main motivation to engage in sexual intercourse was to get pregnant. Interestingly, our study revealed that women who reported sexual aversion were more likely to be younger and have children. Despite the great number of studies on female sexual problems, little is known about the associated features of sexual aversion [22]. Although few data are available, sexual aversion among younger women is a serious concern that must be identified and adequately addressed. The sexually active and fertile population is critical for the demographic dilemma that Japan is facing today. On the other hand, recent work from Namiki et al. demonstrated that older Japanese men did not report dissatisfaction with their sexual life despite their severe ED [23]. Most of older Japanese couples accept their sexual dysfunction as a part of aging and not a medical problem [24]. Sexual aversion may be more critical among young people. Note the opinion that the Japanese architectural design of the living spaces usually does not favor privacy. The thin wooden walls accompanied with the fear that other family members may suspect an ongoing sexual intercourse are a sufficient deterrent. Sexual aversion appears to aggravate after postpartum since from that period of time, a major relational shift occurs within the couple, and the role of each member becomes clearly defined. Women are usually left with all the childbearing and household duties, while the husband is generally absorbed with professional responsibilities. This transition of role within couples could consequently rupture what may have previously been a relationship full of complicity and intimacy. Additionally, most Japanese women sleep together with their infants all throughout their preschool years, which may further eschew sexual activity.
There are several limitations in our study. Firstly, this study was not a random sample but a self-selected sample. Selection bias may have been introduced by individuals who were more interested in sexual problems or were more familiar with the Internet or had more time to respond to the questions. Furthermore, the majority of the respondents were married women with no child which hence may not faithfully represent the general population of Japanese women with sexual problems. Secondly, the data only indicated the main complaints of the respondents and lacked critical detailed information including medical history, sexual partner characteristics, partner relationship, and lifestyle. Such indispensable information would have contributed to a more thorough and appropriate analysis. Thus, an additional study is warranted to assess further information and the full range of women’s sexual problems using the validated questionnaires such as Female Sexual Function Index [25] or Sexual Function Questionnaire [26]. Furthermore, we did not assess the effectiveness of the online helpline due to little feedback. It is necessary to introduce a system for assessing respondent satisfaction with the online consultation.

Despite limitations, this is the very first study exploring sexual problems among Japanese women and how related factors such as family structure, culture, and values may have contributed to sexual problems, using data from an online helpline. This study may raise awareness and understanding about women’s sexual problems among Japanese physicians. Further research is required to investigate the features of women’s sexual problems, especially sexual aversion among Japanese women.

Conclusions

In the present study, sexual aversion was the most prevalent problem among Japanese women who sought help. Sexual problems were associated with family structure. Women with sexual aversion were more likely to be younger and have children. Respondents reporting their partners’ sexual issues tended to be married and have no children. Women who reported pain during sex were more likely to have no children. The assessment of family structure may be important in exploring the causes of sexual problems.

Corresponding Author: Koichi Nagao, MD, PhD, Department of Urology, Toho University School of Medicine, 6-11-1 Omorinshi, Ota-ku, Tokyo 143-8541, Japan. Tel: (81)3-3762-4151; Fax: (81)3-3768-8817; E-mail: repro@med.toho-u.ac.jp

Conflict of Interest: The author(s) report no conflicts of interest.

References

Appendix 1

Questionnaire Survey

1. How old are you?
   a. Teens
   b. Twenties
   c. Thirties
   d. Forties
   e. Fifties or older

2. Where do you live?

3. Do you have sexual partners?
   a. Yes
   b. No

4. What’s your marital status?
   a. Single
   b. Married

5. Please describe your sexual problem.