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ORIGINAL PAPER

Sexual dysfunctions of rheumatological patients are a neglected issue: Results from a national survey of Italian Society of Rheumatology

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Summary *Introduction: Sexual dysfunctions (SD) are frequently encountered in patients with rheumatologic diseases. In this scenario, a multidisciplinary approach to rheumatologic diseases is often mandatory.*
The aim of this survey was to assess whether Italian rheumatologists routinely explore sexual health of their patients, their knowledge on the topic, and the barriers to discussing SD in clinical practice.
Methods: A 32-items anonymous questionnaire was mailed to members of the Italian Society of Rheumatology (rheumatologists and residents in rheumatology training) in February 2023. The questionnaire aimed to determine attitudes, knowledge, and practice patterns regarding the discussion of SD with rheumatologic patients. A descriptive analysis of responses was performed.
Results: A total of 162 responses were received. Overall, 50.0% of respondents occasionally asked patients about SD related to their rheumatologic pathologies, while 37.1% never did so. Respondents declared that patients occasionally (82.3%) or never (16.1%) reported SD related to rheumatologic diseases. The main barriers to discussing sexual health were lack of time during medical examination (46.6%), patients' discomfort (44.8%), and lack of knowledge/experience (39.7%). Overall, 41.9% and 33.9% of respondents respectively totally and partially agreed that rheumatologists should routinely investigate patients' sexual health. Most of the respondents (79.0%) thought that discussing sexual health problems could help patients cope with their rheumatologic diseases. Of all respondents, 74.2% felt the need to broaden their personal knowledge about SD. Finally, 45.9% and 34.4% of respondents respectively partially and totally agreed that training courses for rheumatologists could be helpful in the management of sexual health in rheumatological patients.
Conclusions: SD was not routinely discussed in rheumatology practice, still remaining a neglected issue. The most frequent explanations for the lack of attention toward SD were lack of time, patients' discomfort, and lack of knowledge/experience. Most of the respondents expressed the possible usefulness of attending SD courses to improve knowledge about these conditions.

KEY WORDS: *Sexual dysfunction; Rheumatology; Barrier; Rheumatological disorders.*

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INTRODUCTION

Sexual dysfunctions (SD) are a broad spectrum of conditions such as decreased sexual desire, ejaculatory disorders, erectile dysfunction, orgasmic changes, painful intercourse, and insufficient vaginal lubrication (1-3). They are very common worldwide and have a negative impact on male and female *quality of life* (QoL) (4).
The etiopathogenesis of SD is multifactorial and it can be related to age, comorbidities, psychological or emotional state, hormonal imbalance, couple difficulties, and medical therapies (5).
Several studies reported the frequent association between SD and *rheumatic diseases* (RD) (6, 7). Although many hypotheses have been proposed to explain this association, the exact mechanism is not identified yet. In patients with *rheumatoid arthritis* (RA), SD ranged from 31% to 76% of all cases (8). Pain and depression seem to be the principal factors involved in SD in rheumatoid arthritis (9). Vaginal discomfort or pain during intercourse occur in women affected by Sjogren syndrome, systemic lupus erythematosus, and systemic sclerosis (10, 11).
Depression, pain, and fatigue can affect the sexual function of patients with fibromyalgia (12), premature ejaculation, erectile dysfunction and global sexual dysfunction in patients with RA (13, 14). A multidisciplinary approach to rheumatic diseases is therefore often mandatory. Consequently, rheumatologists should know and

explore the sexuality of their patients for proper management, including referral to the appropriate health professionals (15). Despite this, sexual counseling in patients with RD is a neglected issue nowadays. Most of the evidence shows that it is also a neglected problem in other specialist fields such as cardiology, neurology and gastroenterology. Several reasons such as lack of knowledge/training, lack of time during visits, and embarrassment have been reported (16-20).

To the best of our knowledge, there are no study evaluating how the rheumatologists discuss and manage their patients' sexual problems. The aim of this survey was to assess whether Italian rheumatologists routinely explore sexual health of their patients, their knowledge on the topic, and the barriers to discussing SD in clinical practice.

Materials and methods

The questionnaire

A national cross-sectional anonymous online questionnaire was sent to all members (specialists and residents) of *Italian Society of Rheumatology* (SIR) in February 2023. The questionnaire was designed by two authors (I.P. and L.R.) and structured according with questionnaires used in other studies after a literature review (11,15). A full professor of rheumatology (F.C.) was interviewed to analyze the survey, which was adjusted according to his feedback and comments. The questionnaire was designed using *Google Forms* (*Google LLC, Mountain View, CA, USA*). A brief letter explaining the objectives of the study was sent with the questionnaire. All respondents had to fully complete the questionnaire before submission, since all questions were flagged as mandatory. After submission, users could not review neither amend their answers. Reminder e-mails were sent to non-responders 1 and 2 months after the initial mailing. No incentives were offered for participation in the survey.

The questionnaire comprised 30 questions focusing on: demographic data of respondents; frequency of discussing sexual health with patients during visit; rheumatologist's level of knowledge on sexual dysfunction; rheumatologist's level of knowledge on *phosphodiesterase type 5 inhibitors* (PDE5Is); perceived barriers to address sexual issues; knowledge about referring patients with SD. Some questions had only one possible answer, others gave the possibility of multiple answers. A part of questions had multiple selectable options, others had an open answer. The questionnaire was detailed in ***Supplementary Table 1***.

Given the nature of the study, it was not necessary to obtain Ethics Committee approval. All respondents consented to the publication of the collected data. A descriptive analysis of the results of survey was performed. Categorical variables were presented as frequencies and percentages, continuous variables were reported as means and ranges. No normality test or power analysis was performed.

Results

Demographic data of respondents

A total of 162 responses were received. Overall, 50.0% of respondents were female, 48.4% male, and 1 subject did not declare gender (1.6%). Age was mainly between 30 and 40 years old (56.4%). Most of the respondents were rheumatologists (77.4%), while a minority consisted of rheumatology residents (22.6%). Regarding the workplace, 62.9% of respondents worked in *University Hospitals*, 17.2% in *non-University Hospitals*, and 12.9% were self-employed. Work experience was reported > 10 years by 51.6% of respondents.

Frequency of discussing sexual health with patients during visit

Overall, 50.0% of respondents occasionally asked patients about SD related to their rheumatologic pathologies, while 37.1% never did so. On the other hand, respondents declared that patients occasionally (82.3%) or never (16.1%) reported SD related to rheumatologic diseases. Subjects reporting SD were mainly men < 50 years old (40.3%), men < 40 years old (35.5%), men whose age was between 40-50 years old (30.6%), and women < 40 years old (30.6%). Men mainly complained about erectile dysfunction (57.4%) and loss of libido (27.9%). Women mainly complained about sexual pain (including dyspareunia, vaginismus, and noncoital pain disorder). Fibromyalgia was the rheumatologic disease most associated with SD (58.3%), followed by systemic sclerosis and dermatomyositis (21.7%) and Sjogren syndrome (11.7%).

Management of SD and Perceived barriers to discussing sexual health

Overall, 41.9% and 33.9% of respondents respectively totally and partially agreed that rheumatologists should routinely investigate patients' sexual health. Most of the respondents (79.0%) thought that discussing sexual health problems could help patients cope with their rheumatologic diseases. Related to this, 37.1% and 22.6% of respondents respectively totally and partially disagreed that discussing sexual health was only the responsibility of andrologists and gynecologists. Besides, 37.7% and 29.9% of respondents respectively occasionally and often suggested patients to undergo an andrological/gynecological evaluation for sexual health problems. The main barriers to discussing sexual health were lack of time during medical examination (46.6%), patients' discomfort (44.8%), and lack of knowledge/experience (39.7%) (Figure 1).

Rheumatologist knowledge about SD and sexually impacting drugs

Of all respondents, 74.2% felt the need to broaden their personal knowledge about SD. Besides, 43.5% believed that medicine courses lack sufficient knowledge about sexual health. Finally, 45.9% and 34.4% of respondents respectively partially and totally agreed that training courses for rheumatologists could be helpful in the management of sexual health in rheumatological patients.

Overall, 71.0% of respondents said they were aware that some rheumatologic drugs have the potential to cause SD. The drugs most associated with SD were antidepressants (82.8%) and immunosuppressors (24.1%). Moreover, 61.3% of respondents reported that patients occasionally relate SD to rheumatologic therapy, but 71.0% of physicians did not change therapy when SD were reported. Of all respondents, 78.7% always referred to specialists in

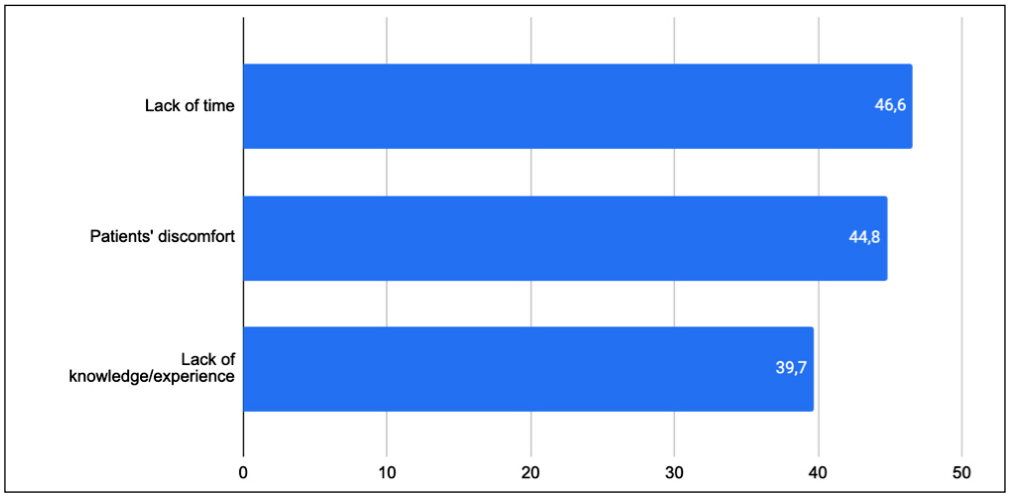

Figure 1.
Perceived barriers to discussing sexual health by rheumatologists.

case of patients who need pharmacological treatment for SD. Besides, 41.9% and 33.9% respectively reported that patients never or rarely used PDE5Is autonomously. Finally, 88.5% of respondents were aware of PDE5Is inhibitors side effects that most of them (75.4%) identified only with flushing and headache.

Discussion

SD have been reported to be common in rheumatologic patients and several risk factors as well as pain, fatigue, stiffness, disability, psychological state, hormonal imbalance, or side effects of medications can contribute to these conditions. There is no doubt that sexuality impacts on the QoL, and represents a fundamental part of medical history, with a great significance in the lives of patients with RD. The reasons for SD are multifactorial and comprise disease-related factors, physiological factors, and therapy. Despite this, SD in rheumatologic settings remains a neglected issue. This study represents the first Italian nationwide survey to investigate the attitude, knowledge, practice, and barriers among rheumatologists in discussing SD in patients with rheumatologic disorders. We reported a gap between rheumatologists' attitudes and their daily practices regarding SD. Indeed, although rheumatologists agreed with the importance of discussing sexual issues with their patients, they did not address it in their clinical practice. These data corroborated findings of previous published studies: 87.1% of rheumatologists addressed SD in their patients and 16.1% of patients did not refer to SD. In our recent publication about SD and gastroenterological disease, we reported that 71% of gastroenterologists never or infrequently addressed SD in patients with gastrointestinal disorders, and only 4% of patients refer their SD to their own gastroenterologist (20). Similar results were reported by *Nicolai et al.* and *Van Ek et al.* in cardiology and nephrology practice respectively (16, 21), while *Sobecki et al.*, reported that 63% of obstetrician and gynecologists routinely assess patients' sexual activities but only 40% investigate their SD (22). Insufficient time during visits (46.6%), followed by patients' embarrassment (44.8%), and lack of training, are the most important reasons that contributed to not assess SD in the daily practice. On the contrary other healthcare professionals as well as gastroenterologists, cardiologists, nephrologists, neurologists, and neurosurgeons reported that the most important reasons are lack of knowledge and training, insufficient time during the visits and embarrassment (19). Despite these, 34.4% of rheumatologists are conscious that a specific training in sexual medicine could be useful in SD treatments. These findings confirmed the data reported by *Romano et al.* among gastroenterologists. Adequate and standardized training should be mandatory to help healthcare in management of SD, in fact nowadays the lack of education represents a widespread problem for several healthcare. Fibromyalgia represents the most frequent rheumatologic disorder (58.3%) related to SD (20). *Collado-Mateo at al.* reported a prevalence of 76% of sexual problems among women with fibromyalgia compared to 15% in healthy controls, in particular among those aged 50 or over (23). It is associated with menopause, psychiatric comorbidities, and high degree of musculoskeletal pain (24).

One of the most important therapies in RD consist of antidepressants, that are notoriously related to SD (25-26). Our responders reported that antidepressants represent the most common drugs related to SD (82.8%), followed by immunosuppressive medication (24.1%). Due to this, sometimes a multidisciplinary approach in SD is necessary (26-29).

To the best of our knowledge, this is the first study focused on the behavior and knowledge of rheumatologists regarding the SD of their patients. However, our results should be read and interpretated according to several limitations, mainly including the small sample size, the use of a non-validated questionnaire, and the inclusion of a limited sample of respondents by country and age. Future research is therefore needed to confirm and further our findings on the topic.

In conclusion, SD is not routinely discussed in rheumatology practice, still remaining a neglected issue. The most frequent explanations are lack of time, patients' discomfort, and lack of knowledge/experience. However, sexual health remains an essential issue in the lives of patients with RD, which should always be addressed by rheumatologists in order to start a correct counseling and an adequate multidisciplinary management. Specific training on SD could be one of the most important steps to improve the practice of rheumatologists in this regard.

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