

# Sexual dysfunction: a study on learning experience of Australian medical students

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## ABSTRACT

**Background.** Research has shown that clinicians are not comfortable managing sexual dysfunction (SD), and there are gaps in the SD-specific training of medical students in the US and the UK. However, there is little research into the extent of SD-specific training needs and learning experiences of Australian medical students. This study aims to explore the extent of students' learning experiences and training gaps in the postgraduate medical curriculum at one Australian university. **Methods.** The study was completed as part of the Doctor of Medicine program requirement, and due ethics approval was obtained. An anonymous 10-item online questionnaire, including one open-ended question was created and distributed to all final-year medical students at the University of Sydney. Data were analysed using descriptive and analytical statistical measures, and a thematic analysis was used for the open-ended question. **Results.** There are 252 final-year medical students at the University of Sydney, of which 31 students completed the questionnaire, giving a 12% response rate. Of the 31 respondents, the majority of students reported that they never ( $n = 7$ ; 23%) or rarely ( $n = 16$ ; 52%) had opportunities to interact with patients presenting with SD throughout their training. Erectile dysfunction was the topic that all students had some training, whereas female orgasmic disorder was the topic that students had the least training. Of all the students who reported receiving training in the medication/substance-induced SD ( $n = 26$ ), one in two ( $n = 14$ , 54%) reported feeling unprepared. Only 55% of students ( $n = 17$ ) felt comfortable to initiate discussions around SD with patients, whereas 84% of students ( $n = 26$ ) felt comfortable to discuss SD when the patient initiated the conversation. Students expressed a need for training on how to address these sensitive topics with patients, with more emphasis on the management of SD. **Conclusion.** The data suggests that the current medical curriculum at the University of Sydney does offer some training in SD, but it is not adequate enough to confidently and comfortably manage SD. Considerations should be made to the curriculum to facilitate a broader recognition and understanding of SD and to prepare future clinicians to adequately address and manage SD.

**Keywords:** education, MD program, medical curriculum, medical students, medical training, sexual dysfunction.

## Introduction

Sexual dysfunction (SD) refers to the difficulties that occur during any or all phases of sexual response that prevents an individual from experiencing satisfying sexual activity, and it is (i.e. SD) sometimes referred to as sexual 'problems', 'concerns' or 'difficulties'. SD is common in the Australian population, with the second Australian Study of Health and Relationships reporting over half the participants having at least one SD.<sup>1</sup> A patient's sexual health and wellbeing is closely related to their physical and psychosocial wellbeing.<sup>2,3</sup> As such, SD can lead to sexual dissatisfaction, distress and a poorer quality of life.<sup>4</sup> Despite this, research has shown that clinicians feel uncomfortable managing SD.<sup>5–7</sup> In a systematic review, a common theme between clinicians was the belief that they do not have the knowledge and skills to deal with SD of patients.<sup>7</sup> Regardless of specialty, all physicians will encounter patients with SD and must have the adequate knowledge and skills to provide optimal sexual health care, including SD.<sup>5</sup>

There could be many reasons contributing to a clinician's lack of comfort in discussing SD, including limited exposure to the content as a medical student.<sup>6–8</sup> A primary aim of medical education is to prepare future medical doctors with a sense of confidence to begin their work safely upon graduation.<sup>9</sup> Studies have shown that medical students lack the confidence in addressing SD of patients, as they feel ill-equipped to do so.<sup>10–12</sup> Despite this, medical students do recognise the usefulness of learning about SD for their future clinical practice.<sup>13,14</sup> There is consensus within existing research that there is limited education and great variability in areas of SD in medical schools globally.<sup>13–15</sup> SD is usually taught in the sexual health curriculum alongside fertility, contraception, and sexual infections but comparatively receives less attention.<sup>16,17</sup> Potential reasons for this include competition for space within the curriculum, lack of expertise in teaching staff, and a failure to appreciate the importance of SD in clinical practice.<sup>18</sup> There is currently little research detailing the gaps in medical curricula and the learning needs of medical students in Australia on topics of SD. One 2011 study of Australian and New Zealand medical schools found the topics of SD to be missing from the medical curricula.<sup>19</sup>

This study explores the nature and extent of SD-specific training that postgraduate medical students receive in one Australian university. The study aims to explore the students' learning experience, the learning opportunities they are exposed to, and their level of comfort discussing SD.

## Methods

Inclusion criteria for this study was final-year medical students attending The University of Sydney (Class of 2023). The total number of students was 252. An anonymous 10-item online questionnaire was developed. The survey questions were developed by the authors by considering the study's aims. REDCap was used for survey development, distribution, and data collection. The questionnaire collected data regarding participant demographics, ratings of training experience, learning opportunities, and preparedness in managing a range of SD topics. A free text field allowed students to comment on the gaps in the curricula and training needs in SD. An inductive thematic analysis, using Braun and Clarke's six steps guide, was used to identify the themes.<sup>20</sup> The survey was distributed during June–July 2023 via the learning management system, a closed cohort Facebook page, student email distribution, and flyers in each clinical schools' communal space. Data were entered and statistically analysed in IBM SPSS ver. 29,<sup>21</sup> and institutional ethics approval (HREC 2023/166) was obtained. Descriptive statistics were used to report most findings. A Chi-squared test was used to analyse students' preparedness to manage 'medication/substance-induced sexual dysfunction' (MSISD)

based on their learning experience in this topic. The reason for selecting MSISD for this analysis is because it is a topic that the majority of students had some training in; it is a medically focused topic that is not gender specific.

## Results

### Demographic information

There were 252 final-year medical students at the University of Sydney, of which 31 students completed the questionnaire, giving a 12% response rate. Of that, 252, 223 (88.5%) and 29 (11.5%) were placed in metropolitan and rural settings, respectively. The response rate was higher in the rural cohort (24%) when compared to the metro cohort (11%). There were equal proportions of male and female respondents. There were more students in the surgery block (39%), followed by general practice (29%) and medicine (19%). [Table 1](#) shows the participant demographic information.

### Learning opportunity, experience, and confidence in managing SD

Respondents were asked to record the frequency at which they were in contact with patients with SD throughout their medical degree. The majority of participants either reported no ( $n = 7$ ; 23%) or rare ( $n = 16$ ; 52%), and few reported likely ( $n = 6$ , 19%) or very likely ( $n = 2$ , 6%) contact. Only 71% ( $n = 17$ ) of students in the metropolitan placement, as opposed to all students in the rural placement, reported exposure to patients with SD. There were more students in the hospital-based block ( $n = 22$ ) than in the general practice block ( $n = 9$ ). A higher proportion ( $n = 89\%$ ) of students in the general practice block, as opposed to the hospital-based block (73%), reported seeing patients with

**Table 1.** Participant demographic information.

Variable	n (%)
Sex	
Male	15 (48)
Female	15 (48)
Prefer not to answer	1 (3)
Stage of final year	
Medicine	6 (19)
Surgery	12 (39)
General practice	9 (29)
Other <sup>A</sup>	4 (13)
Region of placement	
Metro	24 (77)
Rural	7 (23)

<sup>A</sup>Two students have deferred their degree, two students were bespoke.

SD. The students were asked to rate their training experience on different SDs (Table 2) and their level of preparedness in managing different SDs (Table 3). When students were asked to rate their level of comfort discussing SD with patients, approximately half of them ( $n = 17$ ; 55%) were comfortable to self-initiate discussions whereas the majority of students ( $n = 26$ , 84%) were comfortable to discuss SD when the patient initiates.

**Table 2.** Students' learning experience on topics of sexual dysfunction ( $n = 31$ ).

Topic	n (%)	
	No training	Yes training <sup>A</sup>
<b>Male</b>		
Erectile dysfunction	0	31 (100)
Premature ejaculation	17 (55)	14 (45)
Delayed/retrograde/anejaculation	20 (65)	11 (36)
Hypoactive sexual desire disorder	26 (84)	5 (16)
Sexual pain	26 (84)	5 (16)
<b>Female</b>		
Genito-pelvic pain/penetration disorder (vaginismus and dyspareunia)	5 (16)	26 (84)
Sexual interest/arousal disorder	28 (90)	3 (10)
Orgasmic disorder	30 (97)	1 (3)
<b>General</b>		
Substance-/medication-induced sexual dysfunction	5 (16)	26 (84)

<sup>A</sup>Responses 'semi-formal training' and 'formal training' were re-coded as 'Yes training'.

**Table 3.** Students' confidence on topics of sexual dysfunction ( $n = 31$ ).

Topics	n (%)	
	Unprepared	Prepared <sup>A</sup>
<b>Male</b>		
Erectile dysfunction	8 (26)	23 (74)
Premature ejaculation	27 (87)	4 (13)
Delayed/retrograde/anejaculation	27 (87)	4 (13)
Sexual pain	28 (90)	3 (10)
Hypoactive sexual desire disorder	29 (94)	2 (7)
<b>Female</b>		
Genito-pelvic pain/penetration disorder (vaginismus and dyspareunia)	12 (39)	19 (61)
Orgasmic disorder	30 (97)	1 (3)
Sexual interest/arousal disorder	30 (97)	1 (3)
<b>General</b>		
Substance-/medication-induced sexual dysfunction	17 (55)	14 (45)

<sup>A</sup>Responses 'somewhat prepared' and 'prepared' were re-coded as 'prepared'.

**Table 4.** Students' learning experience and confidence with medication-/substance-induced sexual dysfunction.

	Students' confidence n (%)	
	Unprepared	Prepared <sup>A</sup>
<b>Students' learning experience</b>		
No – training	5 (100)	0 (0)
Yes – training <sup>B</sup>	12 (46)	14 (54)

<sup>A</sup>Responses 'somewhat prepared' and 'prepared' were re-coded as 'prepared'.

<sup>B</sup>Responses 'semi-formal training' and 'formal training' were re-coded as 'Yes training'.  $\chi^2(1, n = 31) = 4.910, P 0.027$ .

## MSISD: learning experience vs preparedness

Data were analysed to examine whether students' preparedness (Table 3) in managing MSISD varied depending on their learning experience on the same topic (Table 2). The receipt of training (formal or informal) in MSISD was positively associated with a sense of preparedness to manage it. This association was statistically significant [ $P = 0.027$ ] (Table 4).

## Reflection of medical curriculum and opportunities for improvement

Participants were given the chance to comment on the current medical curriculum's teaching of SD, and 20 students responded. The most frequent theme focused on the limited learning opportunities that students have had in SD (P2–5, P13–15, P16–17). Some responses comment on the consequences this lack of training has had on their confidence to manage these conditions (P2–3, P5, P16), with one student saying, 'Many of the topics ... I have not encountered to a level that I think would adequately prepare me to address this with patients, which I believe is a shame.' (P5). Regarding students' training needs, students mention learning about the diagnosis, investigation, and treatment of common SD, and when it is appropriate to refer to specialists, as crucial (P4, P5, P18, P20). Students also called for training on how to initiate sensitive conversations around SD with patients (P5, P8, P20). Students commented on when they believe training on SD should be offered (e.g. general practice block) and in what forms (e.g. case-based discussions).

## Discussion

A study of medical schools in Australia and New Zealand found that 'inadequate clinical placement opportunities' was a weakness of the current sexual health curricula.<sup>19</sup> Our data aligns with this finding, as it revealed students had limited opportunities to learn from patients presenting with SD as their primary complaint or as part of other co-morbidities.

Our study revealed that students were most likely to see patients presenting with SD in a community setting, rather than a hospital setting, and it aligns with the evidence that

general practitioners act as the first point of contact for patients with sexual health concerns.<sup>22,23</sup>

Consistent with previous studies, students reported an overall feeling unpreparedness to manage patients with SD.<sup>10,11</sup> We found that training improved self-perceived preparedness. This finding differs from a previous Australian study, which found students who had one or two learning experience opportunities reported no greater preparedness for clinical management than those reporting no experience.<sup>9</sup> When analysing the nature of the training the students received, it was predominantly 'semi-formal' teaching (e.g. mentioning as part of broader case discussion). Our qualitative findings indicate that students are keen to have more education that provides both the knowledge and skills required to become confident in managing SD. Case-based discussions and role plays could be used to develop skills in initiating sensitive discussions.

Our study found that the most commonly taught SD topics were those with biomedical rather than psychosocial pathology, and this mirrors findings in previous research.<sup>3,19</sup> This may be because the psychotherapeutic techniques required for the management of SD originating from psychosocial causes are not usually taught in detail in an undergraduate curriculum. Only one in two students were comfortable initiating discussions on SD with patients, which is consistent with prior research into medical students' low self-reported confidence.<sup>11,13</sup>

This is a study for exploring the current training and attitudes of student towards SD in one medical school, which limits the generalisability of the findings to all medical schools in Australia. The intention of this study was not to be conclusive but to open a discussion on training needs in SD, and to pave a way for further research into medical students in Australia. Our study not only suggests that the current medical curriculum in the University of Sydney does offer some training and opportunity for medical students but also highlights the need for additional training to manage SD confidently and comfortably in real-world clinical settings. Considerations should be made in the curriculum to facilitate a broader recognition and understanding of SD and to prepare future clinicians to adequately address and manage these topics.

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**Data availability.** The data that support this study are available in the article.

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