## **EDUCATION**

# Undergraduate Training in Human Sexuality—Evaluation of the Impact on Medical Doctors' Practice Ten Years After Graduation



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#### **ABSTRACT**

**Introduction:** It has been suggested that an indicator of a doctor's ability to assess patients' sexual function relates to the level of earlier training. The amount and quality of training the doctor receives at the undergraduate level and beyond could contribute to the doctor's confidence and competence.

Aims: To evaluate whether doctors found that the teaching in human sexuality received at medical school was sufficient for their future practice and whether their chosen medical specialty and exposure to issues related to sexual health affected this opinion.

**Methods:** One hundred seventy doctors maintaining contact with the University of Sheffield Medical School Alumni Office after qualifying in 2004 were sent self-completion postal questionnaires. Space was allocated for supplementary comments to their answers.

Main Outcome Measures: Self-completion postal questionnaire.

**Results:** Although the response rate was low, there appeared to be an impact of the teaching of human sexuality on the clinical practice of doctors. More than two-thirds of respondents rated the teaching as useful and more than 70% felt more confident in diagnosing and managing male and female sexual issues.

**Conclusion:** The results show a link between the undergraduate teaching of sexual medicine and education and a subsequent proactive approach to sexuality issues; unfortunately, the study does not provide any information about the level of skills or ability in this field of medicine. We have confirmed that the Sheffield model might be suitable for teaching sexual medicine issues in the United Kingdom but cannot confirm that the current format is suitable for international undergraduate audiences. Future study could include other medical schools and a comparison of sexual medicine practice among physicians who received undergraduate medical education and overall numbers could be increased to compare current practice with the number of hours of sexual medicine education as a key parameter. Sex Med 2016;4:e198—e208. Copyright © 2016, The Authors. Published by Elsevier Inc. on behalf of the International Society for Sexual Medicine. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

**Key Words:** Medical School Education; Sexual Medicine Teaching; Clinical Practice; Undergraduate Teaching; Evaluation Clinical Practice; Human Sexuality Sexual Issues; Sexual Dysfunction

# INTRODUCTION

It cannot be denied that various disease states affect the sexual function, interpersonal relationships, and psychiatric and

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physiological well-being of men and women. It is well recognized that human sexuality should be a core part of undergraduate doctor training. However, it has limited representation in those training programs, with no internationally agreed core curriculum or perspective. There appears to be little evaluation of current best practice or evidence reflected in that training. The ability for a doctor to apply a holistic framework in a life cycle context in all aspects of clinical work could be limited according to the training offered at the undergraduate level. It also could be agreed that assessing, diagnosing, and treating sexual dysfunction does require more training and that this should be provided at the undergraduate level. <sup>2,3</sup>

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A 2010 study by Foley et al<sup>4</sup> suggested that an indicator of a doctor's ability to assess patients' sexual function relates to the level of earlier training and that, equally, increased levels of training and continuing education correlate to increased levels of comfort in discussing sexual matters. Their study concluded that a multidisciplinary team approach is the most efficient way to assess and treat sexual dysfunction, with doctors feeling confident in diagnosing sexual dysfunction and, should they judge it appropriate, referring to sex therapists for more in-depth assistance.

A recent study published in the *British Medical Journal (BMJ)* stated that as many as one-third of the British adult population had "prediabetes" (ie, glycated hemoglobin 5.7% to 6.4%). Up to 10% of these adults were at risk of developing diabetes in the next year. A case study by Hirooka and Lapp<sup>6</sup> in the *BMJ* in 2012 highlighted that conditions such as diabetes, hyperlipidemia, hypertension, and obesity can be linked with erectile dysfunction and that erectile dysfunction might be the presenting symptom in men with these conditions. Routine sexual investigation can identify problems that can be indicative of illness. Moreover, many comorbidities and treatments for these conditions cause sexual dysfunction in men and women and that all medical specialties should have basic knowledge of how they affect patients.<sup>2,3</sup>

## **AIMS**

The aim of this study was to evaluate whether doctors found that the teaching in human sexuality they received at medical school was sufficient for their future practice and whether their chosen medical specialty and exposure to issues related to sexual health affected this opinion.

It is anticipated that the results from this study will help medical educators re-evaluate the importance of providing undergraduate teaching of a human sexuality module to enable improvement in service provision and to support patients with sexual health issues.

## **METHODS**

We developed an anonymous self-completion postal questionnaire consisting of 19 questions (Appendix A). This questionnaire used material from the pre- and post-lecture self-assessment feedback forms used by the University of Sheffield Medical School (Sheffield, UK) to evaluate the quality of teaching and the usefulness of lectures to the students. We modified it further to explore whether training at the undergraduate level had any effect impact on the doctors' practice 10 years into their clinical work. The questions were set on a scale of 1 to 10 or free text questions to allow the participants to provide comments. The questionnaire focused on elements that were taught in the module referred to and in particular posed questions about dealing with sexual dysfunction. The questionnaire addressed the impact of their training (and their personal knowledge and skills) to assess their competence and confidence to ascertain whether there were correlations among further training, competence, and proactive enquiry and the incidence detected. We asked how highly regarded the module was and whether changes should be made.

A list was drawn up from records held at the Porterbrook Clinic (Sheffield) of all student doctors who were in phase 3A (fourth year) in 2001 through 2002. This list was compared with doctors who maintained contact with University of Sheffield Medical School Alumni Office. One hundred seventy participants were identified and it was presumed that the alumni office had current address details. They were sent a Participant Information Sheet to give them information on the study (Appendix B) and a letter informing them of the purpose of the study (Appendix C). All documents were sent at the same time on each sending. The first letters were sent in October 2012, with a second sending to all non-responders in April 2013.

The results could be considered significant only if they were from a larger sample, so for the this study, only the descriptive results by percentage of respondents are reported and comparisons are made of certain variables to ascertain whether there were significant findings. Table 1 presents the results as a whole grouped by sex and age.

No ethical approval for this project was required by the Audit and Research Department at the University of Sheffield because we did not have access to the participant's personal details.

## **RESULTS**

Data from the responses were entered onto a datasheet to analyze epidemiologic factors and the responses to the numerical scale questions. The additional free text comments made by participants provided more description to the data and some are presented in Appendix D. The responses of general practitioners (GPs), who were the largest single group to respond, were reviewed by sex and then cross-tabulated with competence and comfort levels together with the frequency with patients with sexual issues were seen.

# Sample and Demographics

Of the 170 possible participants, 76 were men (45%) and 94 were women (55%). There were 34 completed responses (20%). Five questionnaires were returned uncompleted and all respondents lived and practiced in the United Kingdom, with a large proportion still living in the area where they were educated (38%). The proportion of responders to non-responders appears to be representative when assessed by sex. There were limited data available from non-responders because we received only the completed questionnaires from the alumni office (Table 2).

## Practice and Views of Participants

Most participants found that the lectures had been useful in their clinical practice (mean = 5.29, median = 8).. Seventy-nine percent found that the teaching improved their knowledge and confidence in discussing sexual problems. However, only 32% routinely enquired about sexual functioning as part of their

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Table 1. Results grouped by sex and age

Sex	Age (y)	Specialty	Knowledge improved by module	Enquire routinely	Skills use	Men's score of 10	Women's score of 10	Extra training	Do you know referral routes?
Women	30-34	Anesthetics	Yes	No	Never	7	7	No	No
	30-34	Anesthetics	Unsure	No	Never	3	3	No	No
	30-34	Anesthetics	Yes	No	Less than monthly	7	7	No	No
	30-34	Anesthetics	Yes	No	Less than monthly	4	7	No	No
	30-34	GP	Unsure	No	Daily	8	9	Yes	Yes
	30-34	GP	Yes	Yes	Daily	8	6	No	Yes
	30-34	GP	Yes	Yes	Daily	6	9	Yes	Yes
	30-34	GP	Yes	Yes	Every 2-4 wk	8	7	Yes	Yes
	30-34	GP	Yes	Yes	Once a week	8	8	Yes	Yes
	30-34	GPSI sexual health	Yes	Yes	Daily	9	9	Yes	Yes
	30-34	Pediatrics	Yes	No	Never	8	8	No	No
	30-34	Psychiatry CAMHS	No	No	Never	2	4	No	No
	30-34	Respiratory	Yes	No	Less than monthly	7	7	No	No
	35-44	Anesthetics	Yes	No	Never	8	7	No	No
	35-44	Cardiology	Yes	No	Less than monthly	4	1	No	No
	35-44	GP	Yes	Yes	Daily	7	7	Yes	Yes
	35-44	GP/community pediatrics	Yes	No		9	9	Yes	Yes
	35-44	OBGYN	Yes	Yes	Daily	5	8	Yes	No
	35-44	OMS	Yes	No	Never	5	5	Yes	No
	35–44 Respiratory		Yes	No	Less than monthly	5	3	No	No
Men	30-34	Anesthetics	Unsure	No	Less than monthly	2	2	No	Yes
	30-34	ENT surgery	Yes	Yes	Never	4	4	No	Yes
	30-34	GP	Yes	No	Every 2–4 wk	9	5	Yes	Yes
	30-34	GPSI sports medicine	Yes	No	Daily	9	7	Yes	Yes
	30-34	Neurosurgery	Yes	Yes	Once a week	8	8	Yes	Yes
	30-34	Ophthalmology	Yes	No	Never	4	4	No	No
	30-34	Pediatric hematology	Unsure	No	Less than monthly	2	1	No	No
	30-34	Pediatrics	No	No	Never	1	1	No	No
	30-34	Trauma and orthopedics	No	No	Never	4	1	No	No
	30-34	Trauma and orthopedics	Yes	Yes	Less than monthly	7	6	No	No
	30-34	Trauma and orthopedics	Yes	No	Less than monthly	7	7	Yes	No
	35-44	GP	Yes	Yes	Every 2–4 wk	8	5	No	Yes
	35–44	GP	Yes	No	Once a week	8	5	Yes	Yes
	35–44	OBGYN	Yes	No	Less than monthly	7	8	Yes	Yes

CAMHS = Child and Adolescent Mental Health Services; ENT = ear, nose, and throat; GP = general practice; GPSI = General Practitioner with a Special Interest; OBGYN = obstetrics and gynecology; OMS = oral and maxillofacial surgery.

consultations and 42% used these skills at least every 2 to 4 weeks, with 21% using them on a daily basis. Seventy percent of respondents felt confident in their understanding of male sexual dysfunction and the relevant treatment options, with 58% feeling very confident (mean = 6.11, median = 7). Correspondingly, 71% felt confident in their understanding of female sexual dysfunction and the relevant treatment options, with 53% feeling very confident (mean = 5.73, median = 7). Only 47% of our sample felt that they were aware of whom to refer their patients despite feeling confident about treatment options. Of the respondents, 44% had engaged in further training and 35% had a colleague who discussed a patient with sexual symptoms with them. Most respondents (88%) believed that they had enough training and education in human sexuality while they

were students. Of this group, almost one-fourth discussed sexual health with patients daily or weekly, whereas the remainder stated they enquired less than monthly or never asked patients about sexual dysfunction (Table 3).

Analysis of the two largest responding groups of doctors (responses from 12 GPs and 6 anesthetists) showed that differences in clinical practice had an effect on their responses to various questions. Although all six anesthetists denied routinely enquiring about sexual problems, more than 50% of GPs did so on a daily or weekly basis (six daily, two weekly). This might reflect the fact that GPs are often the first port of call for patients struggling with sexual symptoms and who, presumably, would know management and referral points for their patients.

**Table 2.** Demographics of sample

	Men	Women
Total sample, n (%)	76 (45)	94 (55)
Responders, n (%)	14 (41)	20 (59)
Age (y)		
30-34	11	13
35–44	3	7
Medical specialty		
Anesthetics	1	6
Cardiology	0	1
Ear, nose, and throat	1	0
General practice	4	7
Neurosurgery	1	0
Obstetrics and gynecology	1	1
Ophthalmology	1	0
Oral and maxillofacial surgery	0	1
Pediatrics	2	1
Psychiatry	0	1
Respiratory	0	1
Trauma and orthopedics	3	8

For further training availability and confidence of the two groups in managing sexual difficulties, the anesthetists showed a median confidence of 5 and 5.5 for male and female problems, respectively, with nobody undertaking further training, whereas GPs had a median of 8 and 7 for male and female problems, with 10 of the 12 having had further training. This could suggest that routine exposure and additional postgraduate teaching have significant benefit in allowing doctors to understand and treat these problems.

For the specialties of the other respondents, surgical doctors, especially those in trauma and orthopedics, were less confident in the teaching and their own confidence. They also stated that they enquired about sexual problems on a less than monthly basis, with one stating he never enquired about sexual function. Trauma and orthopedic doctors are unlikely to meet patients with sexual problems related to their presenting complaint, which could explain their responses. A similar picture is seen when looking at the responses of pediatricians, most of whom have patients who are younger than the age of consent and, as such, are not appropriate candidates for routine sexual inquiry.

Various descriptors were used by the participants, in the free text comment space, on the impact of the teaching on their values and attitudes to patients with sexual difficulties. Many stated that they were more open and non-judgmental, whereas others stated an understanding that the topic is sensitive and patients present in varying ways.

Some made suggestions on how to improve the teaching, and these ideas involved more exposure to sexual health clinics so they could practice their skills. Many recognized that talking to patients early in their training would ensure they could tackle the issues in subsequent clinical practice.

**Table 3.** Sex- and age-related responses

	Women	Men	30-34 y old	35-44 y old
Routine enquiry, %				
Yes	35	29	66	30
No	65	71	34	70
Frequency of use of skills, %				
Daily	6	1	5	2
Once a week	1	2	1	1
Every 2–4 wk	2	2	3	2
Less than monthly	5	5	7	3
Never	б	4	8	2
Usefulness of teaching, mean score	5.5	5.2	5.5	5.9
Did the teaching improve knowledge?, %				
Yes	17	10	17	10
No	1	2	3	0
Unsure	2	2	4	0
Understanding of male problems, mean score	6.4	5.7	5.9	6.6
Understanding of female problems, mean score	6.5	5.7	5.7	5.8
Aware of where to refer, %				
Yes	8	8	11	5
No	12	6	13	5

It appears that providing training of this type is well received and enhances the knowledge and confidence of doctors in their clinical practice. Many said that it gave them the tools to talk about and engage with their patients and provided a good grounding and understanding of the topic. Relatively high levels of skill on a regular basis appear to be used, when appropriate, by the respondents and those who asked such questions routinely (32%) dealt with sexual difficulties more often. Those who had extra training in this area were more likely to be consulted by their peers with their patient's sexual symptoms.

The questionnaire also defined "routine enquiry" as "appropriate or relevant questioning within a holistic framework for the patient," not "at every encounter, regardless of the reason for the visit." For example, if a patient were to attend a clinic after a gynecologic intervention or a routine diabetic or cardiovascular clinic, it would be more appropriate to ask questions. Some GPs in the sample stated that it came up in their work naturally, and that if they did ask, they were direct and explained the rationale for doing so. Nearly all the respondents who investigated routinely dealt with such issues at least every 2 to 4 weeks and many dealt with it on a daily basis and one in neurosurgery saw a case every week. We noted that that those male GPs who made routine enquiry observed a lower incidence than their female counterparts. Female GPs and one female obstetriciangynecologist constituted the group who saw sexual difficulties on a daily basis. However, nearly 30% of respondents never e202 Clegg et al

encountered sexual problems; of those only one (ear, nose, and throat) asked questions. It is reasonable to assume that the others might have uncovered sexual difficulties they had made routine enquiries. Nevertheless, they did acknowledge that it would be important if it were relevant. One of these respondents worked in psychiatry and another in ortho-maxillofacial surgery, where there a rationale to enquire.<sup>7,8</sup>

As would be expected from their discipline, a large number of the sample (68%) did not use sexual history taking and examination skills in their work because they judged these were not relevant to their clinical practice. Many stated that having insufficient time was a factor not making an enquiry and other reasons included that it not expected by the patient or there was a risk of offending the patient. In contrast, those in general practice saw it as very relevant, with many of them using it as a diagnostic tool.

The questionnaire asked participants to offer solutions to increase engagement with patients and many cited that increasing the time available in consultations, adding suitable questions to general assessment screening tools or templates so they are not missed, patient education notices and leaflets in waiting rooms, and national advertising campaigns could be fruitful avenues to explore.

Many in the sample cited specific examples of diagnosing sexual problems such as male hypogonadism, falsely raised prostate-specific antigen in practicing men who have sex with men, sickle cell priapism, semen storage before chemotherapy, and pituitary adenoma. The participants believed that the training was sufficient at the undergraduate level and that doctors who take up careers in general practice, obstetrics, and gynecology are more likely to continue their education in this field. Just less than half were confident of where to refer and this could reflect the fact that those that do know are mostly GPs who could have formed good working relationships with clinical leads dealing with sexual problems in their area. The study showed that even doctors who rarely have the opportunity to use these skills believe they have some confidence in treating these symptoms despite their limited exposure, but they are unlikely to continue further training in this field and some presumed these patients were treated elsewhere.

## Implications for Clinical Practice

From the responses received, it is apparent that the teaching was evaluated as appropriate and valuable. Although most judged the training was enough for them, some stated further training would have been useful. This highlights that doctors who are routinely exposed to these issues, such as GPs and gynecologists, believe that further training is needed, potentially reflecting their own interests in the subject. However, most stated the module provided sufficient knowledge on sexual dysfunction for use through their career to date.

## Limitations of the Study

The low response rate means that the data were not robust enough to be statistically reviewed, and as such comment is limited to observations in relation to doctors' training pathways, further training, and confidence levels. Because of the sample size, there is limited information about whether these findings can be generalized to other doctors and the lack of a validated assessment instrument for evaluating the doctors' knowledge, attitudes, and professional practice might have affected whether the results also could be skewed. E-mail or online response options could have been included, but time and financial considerations made this impossible. Further analysis could be undertaken, ideally with a larger sample and with a similar questionnaire. Comparing results from medical schools that do teach sexual medicine with those that do not might clarify some of the findings in this study. The particular module studied did not include contraception or sexually transmitted diseases because these would be covered in other modules during the doctors' training. We focused more on sexual dysfunction but sexual issues and sexual function as terms used to convey sexual health were not defined. Therefore, the participants might have assumed that this could have included sexually transmitted disease and contraceptive issues.

We had limited information from the university alumni office on the participants, so it is difficult to speculate why the response rate to the study was low, but the doctors involved might have not updated their details with the alumni office, meaning the questionnaire was sent to an old address. A study into postal questionnaire response rates by Edwards et al<sup>9</sup> found that questionnaire length also inversely affects response rate, with a one-page questionnaire having a return rate of 67% and a three-page questionnaire having a rate of 50%.

## DISCUSSION

Research demonstrates a varying prevalence, with sexual dysfunction affecting approximately 15% to 29% of men, and that loss of desire is a common presentation in female sexual dysfunction.<sup>10</sup> A sample survey from Mercer et al<sup>11</sup> studied a population of 7,000 men and women and found that in the previous year 34.8% of men and 53.8% of women had one episode of a sexual problem lasting at least 1 month. Persistent problems were more frequent in women than in men (15.6% and 6.2%, respectively). The study showed that women were twice as likely to avoid sex because of the problem. Of those with sexual problems, only 21% of women and 10.5% of men consulted a medical practitioner; however, those with persistent problems were more likely to seek medical advice. Because sexual problems can be relatively common, especially in patients with chronic diseases, 4 it would be reasonable to assume that doctors are knowledgeable about sexual matters and feel comfortable helping their patients. Ross<sup>12</sup> found that most doctors who did not routinely assess sexual function in their patients estimated a prevalence of roughly 10%, whereas those who were confident in taking sexual histories had a much higher estimation of 50%.

The module in this study has been delivered to fourth-year undergraduate medical students at the University of Sheffield Medical School for many years, because it has a planned,

structured teaching system for sexual medicine that is defined as human sexuality.<sup>3</sup> The module consists of 1 day of traditional lectures covering sexual history taking and etiologies, classifications, and differential diagnosis of sexual dysfunction, followed by a seminar in which students can see the range of materials used and practice taking a sexual history. The module is a compulsory part of the 6-year MBChB course. The module studied included the psychosexual, relational, social, and environmental elements of sexuality and did not confine itself to a medical model of sexual dysfunction.

It is not a requirement for postgraduates to have detailed training in sexual dysfunction even in areas such as obstetrics and gynecology, urology, and general practice, where such issues are most likely to arise.<sup>2</sup> The concept of sexual medicine, which encompasses sexual dysfunction, being an independent specialty is a relatively new idea that is evolving.<sup>13</sup> Given that adequate sexual functioning is an integral part of many relationships, when problems arise in this area, relationship difficulties and a negative effect on a person's physical and mental health and sense of well-being can ensue.<sup>4</sup>

In the United Kingdom, a student doctor receives less than 2 hours of sexual medicine teaching on average, with only 12 medical schools providing more than 12 hours of structured teaching relating to sexual functioning. Results from an American study of 15 models of undergraduate teaching showed that although students are taught about sexual dysfunction, it is often from a medical, pathologic perspective rather than considering the psychological and normal physiologic events that can be related to sexual problems.<sup>2,14</sup>

Coleman et al<sup>1</sup> found at their 2013 Summit on Medical Education in Sexual Health in the United States and Canada that most medical schools devote 5 to 10 hours to teaching students about sexual health and an average of 5 hours teaching about lesbian, gay, bisexual, and transgender issues. This study highlights the dissatisfaction of students and teachers in the lack of sexual health teaching generally; however, the review does highlight that some medical schools do have integrated sexual medicine modules. Morehouse School of Medicine (Atlanta, GA, USA) in particular has 18 modules related to sexual health and medicine over the 4 years of training. Coleman et al<sup>1</sup> recommended improvements such as implementing sexual medicine blocks throughout training, varied methods for teaching, and encouragement for schools to create curricula related to this field.

We cannot state any validity of the questionnaire because it was developed for the study and that is a limitation we can accept. Although response rates were low, most respondents stated that the teaching was beneficial as part of their training and they believed the teaching improved their knowledge. Approximately one-third of participants still routinely enquire about sexual health in their current specialty, and although many more feel the skills are no longer relevant to their specialty, the free text comments from the questionnaire demonstrate that the teaching was generally well received and beneficial to their undergraduate

education. This provided a baseline from which doctors can improve their knowledge with further training as appropriate.

It is important to engage clinicians in studies of this type to raise awareness of the impact of sexual dysfunction on patients' quality of life. Also, some might derive personal benefit through reflection on their views and practice. Although it is true that a patient will not die as a result of sexual dysfunction, it is true that the emotional impact might make life not worth living. This is particularly true of patients aggressively treated for cancer who find that their intimate relationships are seriously compromised as a direct result of that treatment.<sup>15</sup> More importantly, it is essential for all clinicians to understand that sexual dysfunction can be a marker for much more serious and life-threatening illness and disease and that by routine investigation (eg, on health screeners) these markers can be investigated and treated in a timely manner.<sup>16</sup>

The results could enable medical educators to target and improve education provision and thereby improve services and support for patients with sexual dysfunction. Greater insight has been gained into the barriers and opportunities for supporting service provision for patients with sexual dysfunction.

This study underlines the fact that doctors do need to have a better understanding of how sexual difficulties affect their patients, be able to offer treatment options, or refer to sexual health resources, and we acknowledge that treating sexual dysfunction does require more training and skill. A start point could be in undergraduate training so that the doctors become aware of the complexities of the topic and that they would need further postgraduate training to become competent. They also might need to be aware that patients on the whole are reluctant to bring up the topic or do not realize the importance of their symptoms, and the doctor should be able to initiate the discussion and question routinely when appropriate. <sup>17</sup> This forms a basis for clinical excellence in patient care and best practice.

## CONCLUSION

The results show a link between undergraduate sexual medicine teaching and education and a subsequent proactive approach to sexuality issues; unfortunately, the study does not provide any information about the level of skills or ability in this field of medicine. We have confirmed that the Sheffield model might be suitable for teaching sexual medicine issues in the United Kingdom, but at this stage we cannot confirm that the current format is suitable for an international undergraduate audience. In the future, we could include other medical schools and compare sexual medicine practice among physicians who received undergraduate medical education at other medical schools and increase the overall numbers to compare current practice with the number of hours of sexual medicine education as a key parameter.

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# Appendix A. Questionnaire

What impact did	the teaching of	the sexual medicine	module have on you	ır clinical pract	ice?			
Age	30-34	35-44	<u>≥</u> 45	·				
Sex	Male	Female						
Current location								
Country								
Area (UK only)	North West	North East	Yorkshire and Humber	East Midlands	West Midlands	London	South West	South East
Specialty								
Level of training (	eg, specialty tr	aining/core training, i	registrar, consultant,	general practit	ioner)			
On a scale of 1 to graduation?	10, how usefu	I have the lectures o	n sexual medicine yo	u received in r	medical school	been in tl	ne first 10	years since
1	2	3	4	5	6	7	8	9 10
Do you feel the teaching you received has improved your knowledge and confidence in discussing sexual problems with your patients?								
Yes	No	Unsure						
Why?								
Do you routinely	enquire about y	our patients' level of	f sexual functioning a	as part of your	consultations	?		
Yes	No							
Please explain yo	ur answer and l	how you feel it is be	st to initiate talking t	o patients abo	out their sexua	l history (	if you do s	so):
How often do you	use the skills	you learned in sexua	al history taking and	examination in	your work?			
Daily	Once a week	Every 2-4 weeks	Less than monthly	Never				
Can you think of	reasons why yo	ou do or do not use	these skills in your w	ork?				
Could you think of any ways to increase the extent or frequency you talk to your patients about their sexual function?								
On a scale of 1 to	10, how confid	lent do you feel in yo	our understanding of	male sexual c	lysfunction an	d relevant	treatment	options?
1	2	3	4	5	6	7	8	9 10
On a scale of 1 to	10, how confid	lent do you feel in yo	our understanding of	female sexual	dysfunction a	and relevar	nt treatme	nt options?
1	2	3	4	5	6	7	8	9 10
Are you aware of	where to refer	clients with sexual o	lifficulties in your are	a?				
Yes	No							
If you answered r	no, why is that	the case?						
Can you think of any examples where your knowledge of sexual medicine has allowed you to make a diagnosis based on an unusual presentation (eg, patients presenting with low libido due to elevated prolactin secondary to a pituitary adenoma)?								
		_	bout sexual medicine			,		
Yes	No			, , , , ,				
If yes, what traini	ng have you re	ceived?						
			symptoms with you	?				
Yes	No	•	, .					
If yes, what was the reason they approached you, and was your knowledge enough to help?								
			ation in sexual medic		•	t at Sheff	eld?	
Yes	No	-						
Any further comm	nents related to	the teaching in sex	ual medicine vou reco	eived as an un	dergraduate?			

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## Appendix B. Participant information sheet

#### (On SHSC [Porterbrook Clinic] headed paper)

#### ID number

What impact did the teaching of the sexual medicine module have on your clinical practice?

You are being invited to take part in a research study. This study is being undertaken for educational purposes as part of ongoing research into the impact of the sexual medicine module on clinical practice. The module was a compulsory part of the 6-year MBChB course.

Before you decide to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part. Thank you for reading this.

#### What is this research about?

The aim of this study is to explore the views of doctors regarding the impact of the teaching of the sexual medicine module on their clinical practice. This will help us identify the current value of the teaching and understand whether the knowledge gained makes a difference or impact on their clinical practice. We want to know what impact there is, if any, on their values and attitudes to the sexual difficulties of their patients and whether the teaching improved their confidence in addressing their patients' concerns. We want to know whether they incorporate routine sexual health enquiry in their clinical practice. We want to know whether raising awareness of sexual dysfunction and its impact on patients' and their intimate relationships with others makes any difference to the type of health enquiry they make. This will enable us to target and improve education provision and thereby improve services and support for patients with sexual dysfunction.

#### Why have I been chosen?

You have been invited to take part in this study because you are a former medical student from the intake year of 2000 whose contact details are recorded in the alumni office at the University of Sheffield. Your name and contact details were obtained from your record at the alumni office.

## Do I have to take part?

Taking part in the research is entirely voluntary. If you do not wish to participate, please return the blank questionnaire in the freepost envelope enclosed. This will ensure that we do not contact you again with regard to participation in this survey.

#### What do I have to do?

Taking part involves completing the enclosed questionnaire. This should take no more than 20 minutes. Most of the questions ask you to tick the box which best describes your clinical practice or how you feel about the issues; extra space is also provided for you to add further comment.

## Are there any benefits in my participation?

You could experience some personal benefit through reflection on your views and practice; however, the overall aim of the study is to gain greater insight into the barriers and opportunities for supporting service provision for patients with sexual dysfunction. The information we obtain from this study might help us to identify improvements to the module and treat future patients with sexual dysfunction better.

#### Will my participation be confidential?

If you join the study, all the data will be stored securely and will be made available for analysis only to the authorized persons involved in the study. These authorized persons have the duty of confidentiality to you as a research participant and nothing that could reveal your identity will be disclosed outside the research site or transferred outside the United Kingdom.

## What happens if I change my mind?

Completion and return of the questionnaire will be taken as your consent to participate in this study and your participation is voluntary. All participants have the right to check for the accuracy of data held about them and correct any errors. Each questionnaire has a unique identifier on the top right-hand side of the first sheet, allowing us to track responses; this is the same as the number at the top of this Participant Information Sheet. This will enable you to change or withdraw your participation at any time without giving a reason. Your legal rights will not be affected.

# How long will you keep the data and will they be used for anything else?

It is anticipated that there could be extended analysis of the data beyond the scope of this project. The questionnaires will be kept for 12 months after the submission of the final report and anonymized electronic data files will be kept for 10 years after submission.

#### Where can I get more information?

If you have further questions about the study, please contact Mary Clegg (01264-358853; E-mail: mary@maryclegg.co.uk), Jo Pye (E-mail: mdb08jp@sheffield.ac.uk), or Professor Kevan Wylie (E-mail: k.r.wylie@sheffield.ac.uk).

(continued)

## Appendix B. Continued

## What happens if I have a complaint?

If you have a concern about any aspect of this study, you should ask to speak to one of the researchers and we will do our best to answer your questions. If you have questions about your rights as a participant in this research, or if you feel that you have been placed at any risk, you can contact Prof. Dr. Kevan R. Wylie, Sheffield Health and Social Care NHS Foundation Trust, Porterbrook Clinic, 75 Osborne Road, Nether Edge, Sheffield, S11 9BF, or telephone 0114 271 6671. If you still have concerns, please write to the Complaints and Litigation Department, Sheffield Health and Social Care NHS Foundation Trust, Fulwood House, Old Fulwood Road, Sheffield S103TH.

## What do I do after I have posted the questionnaire back to you?

The Participant Information Sheet is yours to keep for future reference. Refer to the unique identifier in the top right-hand side of the sheet if you need to contact us.

Will you let me know the results?

The findings will be disseminated in a peer-reviewed journal and you will be informed when it is published.

Who has reviewed the study?

Scientific and Lay Review Panels of Sheffield Health and Social Care Trust.

## Appendix C. Letter about the purpose of study

Dear Doctor

## Re: What impact did the teaching of the Sexual Medicine Module have on your clinical practice?

We have obtained your name from your contact details with the Alumni Office at Sheffield University. This study is being undertaken for educational purposes, as part of ongoing research into the impact of the Sexual Medicine Module on clinical practice. The module was a compulsory part of the MBChB six year course. In particular, we wish to know how the teaching of this Module impacted on your clinical practice as a doctor, along with your personal knowledge and skills in dealing with the issues. Many patients experience sexual difficulties but are unaware that they can ask for help or may be reluctant due to embarrassment or anxiety and recent research has demonstrated that healthcare professionals and in particular doctors, are also sometimes reluctant to engage with their patients in this sensitive area.

The Porterbrook Clinic in Sheffield is one of the only NHS sexual difficulties clinics in the country that provides assessment, diagnosis and treatment options for men and women and specialist training for therapists. This clinic provides the delivery and coordination of the Sexual Medicine Module to student doctors at Sheffield Medical School and have done for many years. The Clinic has established itself as a Centre of Excellence specialising in helping people with all kinds of sexual and relationship problems and referrals have been received from all over the UK.

Our aim is to collect information using the short self-completion questionnaire enclosed with this letter; this should not take more than 20 minutes of your time to complete. There is a Participant Information Sheet (PIS) which should give you all the information you require but if you need more information or clarification, please do not hesitate to contact us using the contact details given on the PIS.

We do hope that you can help us with our research, your responses will be very valuable to us.

Yours faithfully

Prof Kevan Wylie, Module Lead Mary Clegg, Sex and Relationship Psychotherapist Jo Pye, Medical Student e208 Clegg et al

## Appendix D. Further comments

I am more aware of the problems my patients might experience. I feel more able to talk openly and engage with my patients. However, given that most of the sexual problems are encountered in men (erectile dysfunction), I do not find many men wish to discuss this with a female doctor. (woman, cardiology)

I am aware of the sexual history questions to ask and of services and treatments available, which help me feel more confident to discuss with the patient. (woman, general practice)

Having done a placement in genitourinary medicine in addition to the standard curriculum, I felt better equipped with both knowledge and communication skills to discuss sexual health with patients. (woman, general practice)

Students should be able to attend consultations/clinics to appreciate the approach to this difficult area. (man, obstetrics and gynecology) Practice consultations/practical skills should be the emphasis. (man, general practice special interest in sports medicine)

I had no idea how to approach the subject prior to teaching at medical school but felt more confident in discussing with patients after I'd practiced in clinics, etc. (woman, oral and maxillofacial surgery)

I do, especially with women with pelvic pain or menopausal symptoms. I also ask men who consult regarding diabetes, urinary problems, or erectile dysfunction itself. I always feel better if I start with "a lot of women/men can have a problem with libido/erection problems but feel embarrassed to talk about them ..." (woman, general practice)

I don't routinely ask because of time constraints of out-patient clinic appointments. I rely on the patients' general practitioner to discuss the issue of erectile dysfunction with the patient unless there is a drug compliance issue that might be secondary to erectile dysfunction or if the patient initiates conversation with regards to this. (woman, cardiology)

Time is the most restrictive factor. My exposure to GUM/gynecology is limited. I don't think my chronic disease patients expect me to ask about sexual function during routine reviews, and although some patients will be relieved you have brought up something they want to discuss, I think others will be either offended or embarrassed (which could end up affecting the patient-doctor relationship). (man, general practice)

I don't think it would be appropriate. If the topic arose I would be supportive but refer them to their general practitioner or local sexual health clinic. (woman, oral and maxillofacial surgery)

In my diabetic clinic it would be easy to add in questions about erectile dysfunction when running through other complications and in my ischaemic heart disease/hypertension reviews. I could ask about erectile dysfunction/sexual dysfunction when enquiring about drug side effects. (man, general practice)

Plenty of cases of male hypogonadism, and false positive raised prostate-specific antigen in a practicing man having sex with men. (man, general practice)

Sickle cell priapism and rarely the discussion around semen storage before chemotherapy. (man, pediatric hematology)

We regularly see pituitary adenoma patients. (man, neurosurgery)