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SEXUALITY OF HEALTH CARE STUDENTS

With Special Reference to Students' Attitudes towards Sexuality in Disablement

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ABSTRACT. In 283 students in various branches of the health profession commonly involved in physical medicine and rehabilitation, experiences of sexual life were investigated together with parameters of sexual function and of sexual performance-orientation. The findings were related to attitudes towards sexuality of disabled subjects. Results indicate that sexual performance-orientation, frustration and dysfunction are common features for the students. Sexual performance-orientation was associated with alienation towards the sexuality and the sexual counselling needs of the disabled. It is therefore recommended that the curriculae of these students should include sexual education and possibilities for sexual counselling.

Key words: Sexuality, performance-anxiety, stigma, attitudes, disability, rehabilitation

INTRODUCTION

The sexual problems and needs of chronically disabled persons are attracting increasing interest. In our department we have lately directed our efforts towards an understanding of the sexual problems of subjects with hemiplegia due to stroke (26, Sjögren, submitted for publication; Sjögren et al. submitted for publication), in subjects who had sustained a myocardial infarction (28) and in subjects with disabling back-pain (27). The majority of subjects within these groups present symptoms of sexual frustration and dysfunction.

This investigation was designed: (A) to study aspects of sexual life and sexual attitudes in students in the health profession—the primary objective was to clarify the extent of sexual frustration, dysfunction and performance-oriented attitudes; (B) to analyse the students' attitudes towards the sexuality of those they intend to serve—the sick and disabled.

In a report by Woods & Natterson (34) the majority of medical students considered themselves to have enough emotional problems to qualify them for counselling or psychotheraphy and about 75% of these described sexual conflicts or problems. More than half had problems of erectile or orgasmic dysfunction. Mudd & Siegel (18) reported that medical students found it difficult to discuss sex with patients, partly due to taboos. According to Withersty (33) nurses feel uncomfortable about taking the initiative in discussing sexual problems with patients and find it difficult to discuss patients' sexuality with other staff members. Furthermore, Weinstein & Borok (31) observed no differences between the permissiveness of sexual attitudes of younger nurses and those of students from non-medical/psychological spheres. In physicians a significant association between anxiety while communicating on sexual matters and low rate of reported sexual problems in patients indicates that the medical doctor's own sexual attitudes influence his professional communication with patients (3) and Wiggers et al. (33) suggest tht the more comfortable the medical doctor is about his own sexuality, the better able he is to help others.

In the university town of Umeå in northern Sweden no courses in clinical sexology or in human sexuality are included in curriculae of medical or para-medical professions. An important issue of this investigation was, therefore, to determine to what extent students in these professions feel comfortable as hypothetical sexual counsellors. It was hypothesized that sexual performance-anxiety predisposes a subject to alienation towards the sexuality of physically deviant subjects.

MATERIAL AND METHODS

A total number of 283 students of different medical services were included. Some characteristics are given in Table I. The 88% participation (cf. Table I) equaled mean class attendances. The majority (71%) were married or cohabitated.

Preceding a scheduled lecture on sexuality and disabili-

Table I. *Distribution of 283 students of the helping professions according to age and participation rate*

	Females			Males			Participation Present (%)
	n	mean age years (± SD)	≤30 years (%)	*n*	mean age years (± SD)	≤30 years (%)	
(A) *Nursing staff*							
Nurse	24	24 (±4)	83	2	23 (±0)	Both	79
Practical nurse	28	31 (±6)	57	2	32 (±15)	One	97
Nurses' aide	37	31 (±6)	56	3	23 (±2)	All	91
(B) *Therapists*							
Geriatric therapist	23	24 (±7)	91	2	35 (±19)	One	83
Occupational therapist	39	26 (±7)	74	2	46 (±3)	None	80
Physical therapist	20	27 (±9)	65	4	28 (±5)	All	96
(C) *Professionals*							
Medical doctor	5	25 (±1)	100	16	26 (±2)	88	88
Psychologist	19	23 (±2)	100	14	25 (±3)	93	83
Social worker	34	24 (±6)	85	9	26 (±6)	89	98
Total sample	229	27 (±8)	79	54	27 (±6)	72	88

ty, students, while in lecture theatres, were asked to complete a questionnaire with one of the authors present to discourage communication between the students.

The questionnaire contained twelve items which were designed to elucidate sexual satisfaction/dissatisfaction and sexual function/dysfunction. These items and their corresponding answers are presented in Table IV.

By means of 19 statements answerable by 'yes' or 'no' attitudes of sexual performance orientation (5 items), of sexual stigmatization attached to the disabled (9), and of sexual counselling dissociation (5) were probed. Sexual performance-orientation is defined here as attitudes which emphasize genitalization and mechanistics rather than mutual eroticism. Sexual stigmatism characterizes discrediting attitudes towards the disabled as sexual beings, while sexual counselling dissociation displays mainly an unwillingness to tackle and/or fear of communicating on the sexuality of the disabled. All items are given in Table II. For each item a score of one was given for a performance-orientated, a stigmatic, and for a couselling-dissociative attitude. Scores of zero indicated absence of such an attitude. Thus, ad hoc indices ranging between 0–5 and between 0–9 (stigma) were constructed.

For analyses of associations between pairs of variables, simple cross-tabulations were performed. The chosen level of significance was $p \leq 0.05$. A discriminant analysis (19) was used for prediction of female level of sexual satisfaction

RESULTS

Unanswered questions

Mean relative frequency of questions not answered (Table III) was 10% (range 4–14%). Female/male omission of answers did not differ significantly. Evidence from cross-tabulations showed that, for both genders, avoidance of answering was systematic. Thus, a relatively small number of subjects had a high proportion of unanswered questions. Table III shows that, generally, questions were less frequently answered by older subjects (≥30 years old) than by younger ones. Furthermore, subjects who were not married/cohabitating or who belonged to group A (nursing) had a greater proportion of missing answers than those with regular partners and those included in groups B and C (therapists and professionals, respectively). In fact, group A was responsible for abour two-thirds of all missing answers to each sexual item (median: 65%, range 46–75%). This group was also significantly older than groups B and C and had significantly lower social class origin (blue collar/white collar ratio for group A was 2:1, whilst for groups B anc C the ratio was 1:2). Furthermore, missing answers were significantly more common for those who rated themselves low in general sexual satisfaction (item A: 1, the initial item on the questionnaire) than for those who were fairly or completely satisfied.

Sexual satisfaction/dissatisfaction

Levels of satisfaction with sexual life are shown in Table IV. Only one-third of the males, but slightly more than half of the females, felt that their sexual life in general was fully satisfactory. The gender difference was significant. Actual experiences of intercourse as such were satisfactory for only about half the subjects. Furthermore, significantly fewer

males (54%) than females (68%) were satisfied with frequency of intercourse. Concerning duration, especially that of foreplay, females were somewhat less satisfied than males. Few subjects experienced complete dissatisfaction with any of these aspects. On the other hand, only 23% of the females and 15% of the males were totally satisfied in all investigated aspects of their sex lives. In this context it should be noted that only 2 subjects (both females) had never experienced intercourse; they were not sexually dissatisfied.

Sexual function/dysfunction

The overwhelming majority of both genders felt that their partner(s) generally were open to wishes for sexual stimulation and emotionally engaged during mutual sexual activities (Table IV). Although the majority of both genders believed that partners were open to sexual wishes, significantly fewer males than females felt that their partner(s) were often open to such wishes.

About one out of every 5 males had occasional difficulties in achieving erection (Table IV) and about every seventh male spectatored his erection often or occasionally. Whereas nearly all males (92%) achieved orgasm regularly, this was the case for only 59% of females. Furthermore, just over one-third of all subjects were frequent or occasional orgasmic spectators. Cross-tabulations showed that only 40% of females and 65% of males, who regularly achieved orgasm, rarely or never were spectators. This male/female difference was significant. Few males but about 20% of females often or occasionally had dyspareunia.

To elucidate whether the female level of satisfaction with sexual life as such should be explainable by the other parameters of satisfaction/dissatisfaction and of function/dysfunction, a discriminant analysis was carried out (Table V). Such statistics could not be performed for both genders due to the small male sample. However, for the males, cross-tabulations showed that general sexual satisfaction was closely and positively associated both with level of satisfaction of experiences of intercourse as such and with frequency of intercourse.

Out of 172 females (72% of original female sample) who had given answers to all items included in the analysis, the levels of general sexual satisfaction was classified for 122 (71%). Of the 50 subjects who were not correctly classified at first choice, only 7 (4%) were not correctly classified at second choice.

Table II. *Statements included in indices of performance-orientation (5 items), sexual stigmatism (9 items) and sexual couselling attitudes (5 items)*

Performance-orientation
Greater number of coital techniques guarantees better sexual life
Orgasm cannot be achieved from non-genital areas
Erection is necessary for male sexual satisfaction
Orgasm is always the goal of sexuality
Partners' simultaneous orgasms are important
Sexual counselling attitudes
Staff's own sexual attitudes do not influence sexual counselling
It does not feel right and natural for me to talk about sex with patients
Disabled patients—not the staff—should initiate discussions on sexual matters
Disabled patients are usually unwilling to discuss sex with staff
Only a few, highly trained, staff members should discuss sex with patients
Sexual stigmatism
Disabled males can never fully satisfy their partner sexually
Disabled females can never fully satisfy their partner sexually
Males who are interested in disabled females are insecure of their masculinity
Females who marry disabled males want to avoid competition for spouse
Females who are attracted to disabled males want to dominate their partners sexually
Disabled individuals are less interested in sex than are the able-bodied
Individuals who are physically incapable of intercourse have little or no thoughts of sex
The healthiest way for the disabled to deal with diminished sexual capacity is to choose other goals
A disabled individual's partner should not initiate sex

Main determinants for general sexual satisfaction were experience of intercourse as such and partnership status. Thus, greater satisfaction with intercourse and marriage/cohabitation have positive effects on general sexual satisfaction. In order of predictve power these factors were followed by: level of satisfaction with duration of foreplay > frequency of partner's emotional engagement during mutual sexual activities > frequency of orgasm. Of less importance was age—subjects younger than 30 years appeared to be more sexually satisfied than older ones > satisfaction with duration of intercourse and, finally, occurrence of dyspareunia.

Attitudes

A mean of 32% of the answers to each of the five items were performance-oriented. Corresponding-

Table III. *Analysis of not answered questions on sexual life in 283 (229 females, 54 males) students of the helping professions*

χ^2-values are given, one degree of freedom. For $\chi^2 \geq 2.71$ $p \leq 0.05$. Results given as mean percentages (%)

	Questions not answered			
	Fulfilment five items % (±SD)	χ^2	Function/Dysfunction five items % (±SD)	χ^2
Males/Females (*n*: 54) (*n*: 229)	9 (±3)/11 (±2)	0.13	9 (±2)/12 (±2)	0.59
≤29 years/≥30 years (*n*: 219) (*n*: 64)	9 (±2)/16 (±3)	2.20	11 (±1)/25 (±9)	4.80
Partner/No partner (*n*: 201) (*n*: 82)	9 (±2)/18 (±3)	6.01	10 (±2)/20 (±3)	7.84
Nursing/Therapists (*n*: 96) (*n*: 90)	21 (±4)/4 (±2)	13.13	25 (±3)/6 (±2)	11.54
Nursing/Professionals (*n*: 97)	21 (±4)/6 (±3)	8.88	25 (±3)/6(±1)	13.01
Therapists/Professionals	4 (±2)/6 (±3)	0.83	6 (±2)/6 (±1)	0.02

ly, a mean of 6% of the answers indicated sexually stigmatic attitudes. The mean frequency of negative answers to items within the area of communication on sexual matters with patients was 33%.

Fig. 1 shows that the majority of subjects (80%) had some degree of performance-oriented attitudes and 37% had stigmatic tendencies. Moreover, the majority felt uncomfortable, at least to some extent, about sexual discussions with—or counselling the disabled.

All three ad hoc indices co-variated significantly. Furthermore, significantly more subjects in group A than in groups B and C were performance-oriented, were stigmatists and had negative attitudes towards sexual counselling. There were no gender differences or differences according to age or to partnership status. Scores of stigmatic attitudes and counselling were not associated with parameters of sexual satisfaction and sexual function. For the females, performance-orientation was significantly

Table IV. *Some parameters of sexual life in 283 (229 females, 54 males) students of the helping professions*

χ^2 for female/male (F/M) cross-tabulations are given. df: degrees of freedom. For $\chi^2 \geq 6.25$ $p \leq 0.05$. R denotes respondent

	Satisfying (%)		Rather satisfying (%)		Rather unsatisfying (%)		Unsatisfying (%)		F/M χ^2 (df 3)
	F	M	F	M	F	M	F	M	
(A) *Fulfilment*									
1 Sexual life, in general	58	35	35	50	5	13	2	2	9.59
2 Intercourse, as such	53	45	36	47	9	8	2	0	2.27
3 Intercourse, frequency	68	54	22	31	6	15	4	0	8.16
4 Fore-play, duration	64	76	31	20	3	4	2	0	1.78
5 Sex-play duration	76	82	21	16	2	2	1	0	0.78
	Often (%)		Occasionally (%)		Rarely (%)		Never (%)		
	F	M	F	M	F	M	F	M	
(B) *Function/Dysfunction*									
1 Partner open to R's wishes for sexual stimulation	86	67	11	33	2	0	1	0	14.38
2 Partner emotionally engaged during intercourse	90	96	6	4	1	0	3	0	2.64
3 Frequency of orgasm	59	92	31	8	9	0	1	0	18.25
4 Frequency orgasmic spectatoring	12	0	28	35	40	28	20	37	12.28
5 Frequency erectile difficulties	–	0	–	22	–	47	–	31	–
6 Frequency erectile spectatoring	–	4	–	10	–	48	–	38	–
7 Frequency dyspareunia	1	2	21	4	24	12	54	82	14.02

Table V. *Actual and predicted (discriminant analysis) levels of general sexual satisfaction in 172 female students in various health care professions*

	Actual *n*	Predicted (%) 1	2	3
1 Dissatisfied/somewhat dissatisfied	10	60	20	20
2 Somewhat satisfied	63	22	52	25
3 Satisfied	99	3	13	84

Variables (cf Table IV) were dichotomized thus: A2, A3, A4: Satisfied/Somewhat satisfied, Somewhat dissatisfied, Dissatisfied. B2, B3: Often/Occasionally, Rarely, Never. B7: Often, Occasionally/Rarely, Never. Partnership status: No partner/Married, Cohabitating. Age group: ≤29/≥30 years.
Standard function coefficients (cf Table IV): Variable A2: 0.59; Partnership status: 0.49; A4: 0.24; B2: 0.18; B3: 0.18; Ae group: 0.17; A3: 0.16; B7: 0.11.

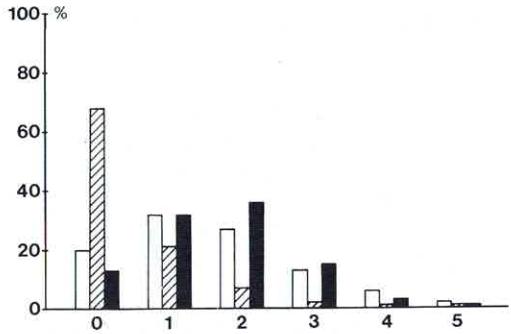

Fig. 1. Frequencies of answers indicating □, 'sexual performance-orientation; ▨, sexual stigmatism of disabled and ■, fear of/uneasiness towards sexual counselling of the disabled, 283 students (229 females, 54 females) of the medical services included.

and positively correlated with occurrence of orgasmic spectatoring. Also, performance-orientation and frequency of partners' emotional engagement during intercourse for both genders showed significant, negative covariation.

DISCUSSION

The discussion will be dealt with in three parts: 1) questions not answered; 2) sexuality and sexual attitudes; 3) attitudes towards sexuality of the disabled.

Questions not answered

Shorter professional training and lower social class origin generally led to a higher rate of missing answers. Moreover, subjects who did not answer questions were less sexually satisfied than those who did answer. Even other authors (7, 21) have reported that sexual maladjustment is relatively more common in lower than in upper social classes. It is suggested that, confronted with the questionnaire, the sexually maladjusted subject may defend herself against consciously admitting sexual dysfunction by rejecting the questionnaire. This concept may be illustrated by the view expressed by one of the assistant nursing students (>30 years old): "My private life is the concern of nobody and I am not concerned about anybody's private life". This student had answered only a few, initial, sexual items.

Sexuality and sexual attitudes

A major finding of this investigation is that males *experience* the highest degree of sexual dissatisfaction but exhibit little *registrable* sexual dysfunction, with the exception of a certain degree of spectatoring. In contrast, the females exhibit a considerable amout of registrable sexual dysfunction with concomitant sexual frustration.

Complete sexual satisfaction appears to be rare in today' northern Swedish students of the health care professions. The level of general complete satisfaction corresponds well to that found by Eysenk (5). Furthermore, Frank & Andersson (6) reported that 38% and 21% of married females and males, respectively, felt that duration of foreplay was not satisfactory, a finding similar to the present observations. In an epidemiological investigation of sexual life in Sweden, Zetterberg (35) found that 56% males and 47% females, married or cohabitating, had experienced the most recent intercourse as being satisfactory. Thus, as far as experiences of sexual satisfaction are concerned, the students do not appear to differ from the general population.

The high prevalence of orgasmic inconsistency in female students appears to agree closely with that found in students in the USA (5, 30) and is also relatively close to that found in other populations (1, 13, 20, 25, 29). The contrasting relatively low frequencies of male orgasmic and erectile dysfunctions found in the present study are also comparable to those found by others (5, 11, 12, 30).

We have not been able to locate any reports on frequency of orgasmic and erectile spectatoring.

However, the fact that 40% of females and 20% of males spectatored their orgasm often or occasionally implies high prevalence of profound sexual dysfunction. Orgasmic spectators are barred from full participation in the sexual experience. Since a close association between ad hoc index of performance-orientation and spectatoring was found, performance-orientation appears to a large extent to reflect performance-anxiety. This suggestion is in agreement with Masters & Johnson (17). Moreover, Sarrel & Sarrel (23) emphasize that among students there is a tendency towards achievement oriented outlooks which may lead to spectatoring. The association between performance-orientation and feelings of partner's lack of sensitivity to wishes for sexual stimulation also indicate that many "performers" have difficulty in adequately communicating sexually.

Specific patterns related to the two genders appear to form the background for sexual fulfilment of these students. The male pattern: the successful, but frustrated, performer. He believes he is orgasmic and his fulfilment depends upon his contention with frequency of intercourse and duration of foreplay. Generally, he does not achieve the desired frequency or duration. The female pattern, accurately predictable: the disappointed performer, characterized by a high degree of orgasmic dysfunction which seems to be accepted rather than focused. Instead, the security of possessing a regular partner, satisfaction of intercourse as such and duration of foreplay are important sexual elements for females. Moreover, at least for the females, sexual fulfilment appears to decrease with age, possibly caused by long-standing, to some degree silently accepted, orgasmic dysfunction.

Attitudes towards the sexuality of the disabled

In a review of the literature on stigma, Schneider & Anderson (24) defined stigma as: "Any physical or behavioural characteristic which in some way discredits individuals or makes them liable to preconceived negative expectations". In the sexual context Goffman (8) suggests that the disparagement of the bodily disfigured serves as "needed narrowing of courtship decisions". Furthermore, emphasis on performance and physique appears to predispose to stigmatizing tendencies (cf 24).

Although in the present investigation few students were systematic sexual stigmatists, one-third had a least one sexually stimatizing attitude towards the disabled. Such attitudes were not only confined to the disabled but also to those who affiliate sexually with them. These findings support Goffman's (8) suggestion that people who associate closely with a person who is physically disabled may be discredited in the eyes of others. It has also been demonstrated that students reduce their level of verbal and non-verbal communication when relating to physically disabled subjects (14, 15, 16). Students prefer handicapped who acknowledge their disability to those who do so but also volunteer personal problems (10). Furthermore, Haring & Meyerson (9) found that students often have negative attitudes towards the sexuality of disabled subjects.

Sexual performance-orientation appears to be associated both with stigmatizing sexual attitudes towards the disabled and with anxiety-associated sexual dysfunction (spectatoring). Hence, it is suggested that performance-anxiety as such deters the students from engaging in their own sexuality as well as in the sexuality of the physically deviant. Very few students would feel definitely confident as sexual counsellors of disabled patients. This finding substantiates previous reports (18, 33). The present findings also agree with those of other authors (3, 32) that own sexual comfortableness influences sexual counselling initiative and competence. Moreover, the significant association between students' stigmatic tendencies and their level of dissociation from communication on sexual matters emphasizes the effect of alienation on factual counselling.

Since sexual problems of organic and/or of psychogenic nature are widespread for the sick and disabled there is definitely a need to understand and help these patients. We agree with Brashear (2) that it is the duty of every member of the rehabilitation team to integrate the sexual dimension in the treatment. But gauging from the sexual attitudes of the students the staff are, generally, ill equipped to tackle sexual problems of the disabled. The majority cannot even cope with their own sexual difficulties. Prejudice and lack of understanding are characteristic attitudes of many students towards the sexuality of the disabled. The common denominator appears to be anxiety, with emphasis on performance. Therefore, sexual counselling should be available to students and sexological education should be integrated in the curriculae of students training in the medical services. The education

should include aspects of sexuality in somatic disease and disablement. Several such programs have been described (4, 22). Hopefully sexual health and sexological knowledge can enable staff to take a basic step of permitting, with empathy, the disabled to be sexual.

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