The Attitudes of Undergraduate Medical Students towards Psychosocial Factors in Medical Education — MJ Dali

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Curriculum vitae

Mrs Dali trained as a social worker at the University of Fort Hare and the London School of Economics where she qualified with a BA (SW) Hons and MSc (Social Planning) respectively. She practised as a social worker in the former Department of Cooperation and Development, based in Pretoria and Potchefstroom. She lectured at the University of Bophuthatswana in the Department of Social Work and is presently teaching in the Department of Family Medicine at Medunsa (since 1987).

Summary

Some authors document resistance to and poor application of psychosocial teaching by undergraduate students. Medunsa medical students have a component of human science and psychosocial theory and skills taught throughout their course. Factors influencing students are reviewed in the literature, the Medunsa course is described and course evaluation is given describing an increasingly positive attitude to psychosocial issues as important in health care.

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Attitude of Health Personnel; Social Sciences; Students, Medical; Teaching.

Medical educators have realized the importance of psychosocial factors in the aetiology treatment, and recovery of patients. However, many doctors and students rarely apply the psychosocial knowledge and skills learned when dealing with their patients.[1] They tend to apply the biomedical approach which focuses on the patients' physical problems, overlooking the patients' feelings, thoughts and expectations regarding the illness and how the illness affects the patients' family and his other life generally. Students are also said to be resistant to teaching by non-medically trained educators. They see them as lacking "important ingredients of the doctoring process".[2]

Background

Medical students at Medunsa (Medical University of Southern Africa) are introduced to psychosocial factors of illness in the first year and continue through to postgraduate level. At first year, psychosocial concepts are introduced by psychologists from the Department of Psychology. The Department of Family Medicine is involved in teaching the psychosocial factors to medical students from second to sixth year. Collaborative teaching is done by doctors, nurses and a social worker. The content of the course includes communication skills, medical interviewing, doctor-patient relationship, community resources, crisis management, family dynamics, family life cycle, and family and culture.

Lectures, seminars, videos and role plays are the teaching methods frequently used.

Students are attached to families from third to fifth year of study. They see the same families over a period of three years. The families are selected from Paediatric wards, Antenatal Clinics and the Nutrition Rehabilitation Unit. The aims of the attachment are:

1. to provide a biopsychosocial framework for the examination of clinical problems by observing the family's influence on genetics, child development and recovery from illness.
2. to make students aware of the diversity of communication and to help them develop effective communication skills.
3. to make students aware that diseases do not occur in a vacuum – social, cultural and economic factors influence disease processes.
4. to expose students to the patients' context, ie their families and environments, in order to appreciate the influence of these contexts on the patients' illnesses.

Students present the families they are attached to, during seminars in small groups of 10 - 20 students. The seminars last for $1^1/_2$ hours per week, for 3 - 5 weeks. At the end of each year they submit written reports for which they get credits toward the end of the year examination.

From the families, students are expected to observe communication patterns within the family, and the intra and interfamilial interactions, to identify crises experienced by the family and how the family managed the crises. They are also expected to collect information and assess how genetic, environmental, economic, religious and socio-cultural factors influence the family's health. The index child is followed up from birth to at least three years, assessing the child's growth, development, immunization and nutritional status.

Students rarely apply psychosocial knowledge and skills

Factors influencing students attitudes towards psychosocial factors in medical education

Wexler,[2] blames the medical curriculum for students' attitudes. He says the curriculum is such that there is little time for medical students to learn much about social sciences. The social science content is such that it cannot be translated into clinically applicable methods, and students expect to be provided with specific skills with which they can manage specific problems.

The prestige associated with medicine also influences students' attitudes.

Students place more emphasis on mastering biotechnical knowledge and procedures than on paying attention to all of the social science material they received, in order to feel more secure as physicians and to keep the prestige associated with medicine.[3] The medical fields that emphasize the psycho-social aspects of illness, such as psychiatry have met with hostility, amusement and ridicule.[2] Similarly, the Department of Family Medicine is initially resented by medical students because of its incorporation of social sciences. They don't regard it as an equally important medical discipline in comparison with other disciplines such as surgery.

High aptitudes in basic sciences are used as admission criteria in most medical schools (including Medunsa), in spite of the fact that students with high scores in basic sciences appear to be narrower in interests, less adaptable, less articulate and less comfortable in interpersonal relationships compared to students with lower aptitudes in basic sciences.[4]

Social scientists' expectations is another factor influencing students' attitudes. The viability of expecting doctors to learn and apply psychosocial skills in patient care is questionable. Doctors prefer to refer patients with psychosocial problems to professionals who are more expert than themselves.[5] This was confirmed by studies made on social work attachments to general practices. The studies revealed that doctors acknowledged the influence of the psychosocial factors on illness, and were willing to collaborate with social workers as they felt they lacked time and expertise in exploring the patients' problems in depth.[6,7,8,9]

Doctors find it awkward to convene families for family therapy, as they end up with a lot of information which they find difficult to use in assessing the patient's problem.[10] Sometimes students do not want to explore patients' psychosocial backgrounds as they think that they are prying and denying the patients their rights to privacy. This could be because students find other patients' backgrounds to be similar to theirs, hence exploring the patients' problems feel like one is exposing his own family to others.

Economic incentives also influence students attitudes. Fiscal reimbursement encourages focus on biotechnical skills, since these services are quantifiable and reimbursable, compared to social services.[3]

Students' attitudes are also influenced by practising doctors. As role models, they still believe that high prestige and respect are associated with expertise in the biotechnical approach. They rarely apply psycho-social skills in their contact with patients. Some of them never had any training in psychosocial skills.[3]

Students see families over a three year period

The medical school environment itself influences students' attitudes by emphasizing the development of the technical aspect of the physician role. The physician role is associated with

expertise in diagnosis and treatment using very complex instrumentation and specialized biomedical knowledge.[2,3]

In contrast, Juan et al[11] and Parlow and Rothman[12] argue that the medical school is not responsible for the students' attitudes. Instead, students enter medical school with belief systems and personalities which they developed early in their lives. They state that such beliefs are difficult to change. Other studies,[13,14,15,16] found that students' attitudes can be changed through exposure to psychosocial programs such as family attachments or patient follow ups in the community.

Groper[3] and Rezler[17] in their studies found that there was no significant difference between students who were exposed to psychosocial programs and those who were not.

Students attitudes towards psychosocial knowledge

In assessing the Medunsa students' attitudes towards psychosocial factors the responses of one group of students was analysed from their third year to their fifth year of their study, during the 1988 - 1990 period.

In their third and fourth year the students are given evaluation forms at the end of each block, to assess what they learned during the block. The evaluation forms have open-ended questions and a likert-type scale with 11 points, from 0 - 10, where 0 means "very little" and 10 means "a lot". Fifth year students do not use evaluation forms, instead they are requested to comment on what they learned from family studies, over the three years of their attachments. (Refer to table 4 for their comments).

For convenience, only the tasks that are concerned with psychosocial knowledge, namely family studies and patient interviews will be analysed, and not all the tasks done during the block. Third year students' scores on the scale ranged from 0 - 10 on both family studies and patient interviews, and the average score was 2,9 and 3,5 respectively. (See Table I).

Third year students were also requested to comment on the most and least important things they learnt during the block. A summary of their responses is indicated in tables 2 and 3 respectively.

Fourth year students also responded to family studies and to the patient interviews on the likert - type scale. Their scores ranged from 0 - 10 on both family studies and on patient interviews. The averages were 6,9 and 7,6 respectively, which is significantly better than the third year students (See Table 1).

Table 1. Mean Scores on Family Studies and Patient Interviews

	Third Year	Fourth Year	P
Family Studies	2,9	6,9	0,0000*
Patient Interviews	3,5	7,6	0,0000**

* Mann-Whitney UZ-statistic 9,80
** Mann-Whitney UZ-statistic 9,11

The mean differences in both family studies and patient interviews show a significant change to a higher mean score in the fourth year.

Table 2. Students responses on the most valuable things learned

Comments	MBChB III N = 89	%	MBChB IV N = 80	%
No comment	13	14,6	3	3,75
Everything	2	2,2	-	-
Nothing	3	3,4	-	-
Communication Skills	10	11,2	7	8,75
Family's influence on members health	1	1,1	1	-
Patient-centred approach	9	10,1	15	18,75
Patients' perceptions on illness	1	1,1	2	2,5
Family studies	11	12,4	-	-
Ecomap	-	-	4	5,0
Family as patients' context	-	-	5	6,25
Psychosocial factors in illness	-	-	6	7,5
Clinical tasks	39	43,9	38	47,5
Total	89	100,0	80	100,00

Table 3. The Students responses on the least valuable things learned

Comments	MBChB III N = 89	%	MBChB IV N = 80	%
No comment	35	39,4	25	31,2
Everything	-	-	-	-
Nothing	19	21,3	20	25,0
Family visits	1	1,1	8	10,0
Family studies	12	13,5	8	10,0
Patient interviews	5	5,6	12	15,0
Clinical Tasks	17	19,1	7	8,8
Total	89	100,0	80	100,0

Table 4. Students' responses on the things they learned

Comments	Number of Responses
Stress in the family may cause, aggravate and prolong diseases.	9
Social and environmental factors contribute to both the morbidity and the spread of diseases.	10
Psychosocial factors can present as physical symptoms.	10
Illness is both economically and socially costly.	7
Communication skills are a prerequisite for effective communication and it helps in gathering meaningful information.	37
The family attachment scheme was an opportunity to explore the patients' contexts. The family is a place where people get sick and where they recover.	17
Family studies helped in understanding our own families and in assessing how family functioning and sociocultural factors affected us as individuals.	5
The exposure to the families helped in the appreciation of cultural differences.	14
Holistic approach in health.	10
Importance of doctor-patient relationship.	6
Nothing.	4

Fourth year responses on the most valuable things they have learned during the block are indicated in table 2 and their responses on the least valuable things they learned during the block are indicated in table 3.

The total number of students who responded to the evaluation form were 89 third years and 80 fourth years. The decrease in the number of students in fourth year could be due to failure or termination of studies.

Medunsa Students' attitudes towards psychosocial issues in medicine seem to be changing positively. The Department of Family Medicine particularly, has played a major role in effecting such changes. Family Medicine integrates psychosocial factors throughout medical training. Most of the medical staff in the department have been trained or exposed to programs that incorporate psychosocial knowledge. Courses are also offered in the department for staff development.

The literature has indicated that in most medical schools behavioural sciences are taught in the pre-clinical years. The problem with this is that students could easily forget what they were taught as they advance in their studies, and may fail to integrate psychosocial knowledge in their consultations as they had more theory than practical clinical application.[18,19]

Conclusion

I am convinced that there is potential for social sciences in medicine, and that the students and medical practitioners have realized the importance of psychosocial

factors in understanding a patient's problem. MEDUNSA believes this, hence the behavioural science course in first year is compulsory.

I do not feel any resistance from students because of my non-medical training. I think that it is because of my attachment to a medical department, and the multidisciplinary approach adopted in which a doctor, a nurse and a social worker attend the seminars together and help one another to meet the students needs. When students were informally asked about their attitudes towards social workers as medical educators,

Students attitudes are influenced by practising doctors

students stated that social workers are the most appropriate teachers of psychosocial aspects of illness as they are more trained, have more experience and contact with patients in their families and communities, have more time to make visits and explore the patients' problems in depth and they are more knowledgeable about community resources and how to link the people with such resources. They also stated that the medical curriculum is too overloaded to accommodate extensive learning on psychosocial skills but they acknowledge the importance of psychosocial factors in illness and the need to understand and apply such skills within the limits of medicine. If they feel a problem is beyond their skills they can always refer patients to social scientists, as they do with other medical specialities.

References

1. Maguire P, Fairbairn S Fletcher. Consultation skills of young doctors. Br Med J 1986; 292: 1573-8.
2. Wexler M. The behavioral Sciences in Medical Education. Am Psych 1976; 31: 274-83.
3. Groper M. Family Medicine and psychosocial knowledge: how many hats can the family doctor wear? Soc Sci Med 1987; 25: 1249-55.
4. Gough HG. Some predictive implications of pre-medical scientific competence and preference. J Med Educ 1978; 53: 291.
5. Wales E. Behavioral scientist meets the practicing physician. J Fam Pract 6 (6): 839-44.
6. Mizrahi T, Abramson J. Strategies for enhancing collaboration between social workers and physicians. Soc Work Health Care 1985; 1: 1-12.
7. Sheppard MG. Referrals from general practitioner to a social service department. J Roy Coll Gen Prac 1983; 33: 33-9.
8. Williams P, Clare A. Social workers in primary health care: the general practitioners' viewpoint in Social Work and Primary Health Care. Clare AW, Corney RH (Eds). London: Academic Press, 1982: 554-8.
9. Wilson J, Setturland D. Toward holistic social work practice in medical settings. Soc Work Health Care. 1987: 122 (2): 1-13.
10. Schmidt DD. When is it helpful to convince the family? J Fam Pract 1983; 16: 967-73.
11. Juan IR, Gagan IF, Haley HB. Dogmatism and attitude changes in medical students. J Med Educ 1969; 44: 698-702.
12. Parlow J, Rothman A. Attitudes towards social issues in medicine of five health science faculties. Soc Sci Med 1974; 8: 351-8.
13. Walker BA, Mehr M, Brummel - Smith K, Kahn E. Effects of behavioral science orientations on attitudes of first year residents in family practice. J Med Educ 1982; 57: 877-9.
14. Beloff JS, Korper M, Weinerman ER. Medical students response to a program for teaching comprehensive care. J Med Educ 1970; 45: 1047-59.
15. Schreier A, Dubb B. Attitudes of medical students to a family attachment scheme. S Afr Med J 1977; 9: 501-2.
16. Miller LB, Erwin EF. Attitude changes in medical students during a comprehensive care program. J Med Educ 1961; 36: 351-8.
17. Rezler AG. Attitude changes during medical school. A review of the literature. J Med Educ 1974; 49: 1023-30.
18. Brownstein EJ, Singer P, Dornbush R et al. Teaching behavioral science in the pre-clinical curriculum: J Med Educ 1974; 51: 59-62.
19. Brownstein EJ, Singer P, Dornbush R et al. A behavioral science curriculum for medical students: One model. J Psychiatric Educ 1977; 1: 52-62.