

The community as an educational field for medical students: medical sociology revisited

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ABSTRACT

Background: The focus of health care has shifted from episodic care of individuals in hospitals to promotion of health in the community and medical training is becoming more student-centered. Increased use of community settings is essential to enhance medical education.

Methods: The current study aimed to assess the role of the Family Studies Programme in meeting the learning needs of medical students in relation to health issues prevalent in the community. Students' reports for the academic year 2003-2004 were reviewed by the authors. Recorded data was grouped into four main categories: medical problems, major life events, family response to their medical and social issues in addition to life styles behavior. Data analysis was conducted manually.

Findings: Medical students involved in the program reflected a high level of satisfaction, participating community agencies were enthusiastic and patients in home care programs reported constructive experience. Students were able to identify a variety of health and social issues and the interaction between both. Their role as health advocates was also highlighted.

Conclusion: This study revealed the usefulness of community placement of medical students. This approach enhanced students' learning opportunities and increased their awareness of the link between medical and social issues and the individual and family health.

INTRODUCTION

The changing role of medicine in society and the growing expectations patients have of their doctors means that the content and delivery of medical curricula have to change. The focus of health care has shifted from episodic care of individuals in hospitals to promotion of health in the community. Medical training is becoming more student-centered, with an emphasis on active learning rather than on the passive acquisition of knowledge¹.

Community has been defined as a contiguous geographic area, composed of people living together, who cooperate to satisfy their basic needs. It has a common organization, e.g. markets, schools, stores, banks and health institutes. The community is a network of human relationships; it is the place where people's homes are located, children are educated, sick people are treated and individual basic needs and desires are met².

The *medical school* as an "Academy in the Community" is obliged to serve the community. Hence, a socially responsive medical school should preserve academic excellence, promoting research focusing on social and community concerns, encouraging work in areas that have been neglected, accepting change and being enthusiastic towards new directions in health care (i.e. health promotion,

disease prevention, community-based services, and public education)³.

The community plays an important role in educating *medical students*. Waddell et al.⁴ stated that community-based learning and home visits expose students to personal travails (e.g. lack of financial resources) in a way that cannot be addressed in traditional institutional settings, and also promotes improved patient-physician relationships⁴.

Community agencies providing both general and specialized health care services — such as community health centers, agencies for people with drug and alcohol problems, social and recreational agencies for elderly people — serve as learning sites for medical students and provide opportunities for students to follow up patients in their homes. This kind of approach will help produce socially responsive medical practitioners who are able to recognize the relationship between illness and patients' social life, family function and dynamics as well as the importance of social support available to the patients in coping with social and health matters⁵. Students benefit by witnessing the impact of long-term personal relationships with patients, the impact of social environment on health, and the importance of dealing with people rather than disease⁶.

The *Family Studies Program* at the Arabian Gulf University

— a Gulf Cooperative Council-sponsored medical institution in the Kingdom of Bahrain — is introduced in the third year of study. The program aims to encourage students to see the human face of medicine, to appreciate the role of the family in a healthy and adaptive society, to learn about families' day-to-day function and resourcefulness. These aims are achieved through students' tasks to identify:

- Health and social issues facing the families and the coping mechanisms adopted,
- The impact of illness on family function and any misbeliefs or myths,
- Major life events and coping mechanisms among family members,
- The family's use of community resources,
- Family function and dynamics specifying communication modes and roles of family members in decision making.

Furthermore, students are obligated to identify opportunities for health education and develop a health education plan in coordination with the family to ensure their compliance.

The students receive an orientation session before starting home visits; tutors conduct preparatory sessions to explain learning tasks and regulatory issues during home visits in addition to responding to students inquiries and alleviating their concerns and fears. The programme is supervised by active and experienced family physicians. Supervising tutors and the programme coordinator review progress and share in problem solving and coordination and possible intervention. Consultative meetings with the Chair of the Family Medicine Department are also held.

Families included in the program are chosen by experienced family physicians from their own practice list after discussing the program with the family to provide their verbal acceptance in addition to ensuring confidentiality of all information gathered about them. Families usually have one member with chronic illness and are assigned to pairs of students. The study period is from October to May each year during which students make 10-12 visits to their assigned families. Students are also obliged to identify themselves to the families as an asset but not decision makers, avoid imposing any ideas or opinions and maintain family autonomy in decision making. In this program it is foreseen that medical students may have a positive role in strengthening the social network between family members through continuous contact at home and explanation of the importance of positive social relationships whereby family members identify their roles in support of their families.

The *students' activities* are evaluated by their tutors at the end of the program, when each task is assessed on a Likert scale. The assessment data is obtained through personal contact with families when they visit the health center, or by telephone in addition to regular student group meetings

with the tutor. Furthermore, students are required to submit an individual report on their assigned family that includes description of the tasks completed and a reflective summary. A specific evaluation of each student's report is included in the overall assessment tool.

METHODOLOGY

The current study aimed to assess the role of the Family Studies Programme in meeting the learning needs of medical students in relation to health issues prevalent in the community.

Students' reports for the academic year 2003 – 2004 were reviewed by the authors. The data obtained were recorded on a data sheet designed for this purpose under the following major themes as reported by students:

- Medical problems
- Major life events
- Family's response to their medical and social issues
- Life style behaviors among families

Data analysis was conducted manually. Owing to the small number of students enrolled in the academic year under review, results cannot be generalized and further studies are recommended.

RESULTS

Role of Community Placement

When the role of community agencies placement for undergraduate medical students was analyzed, the findings were positive. Medical students involved, showed a high level of satisfaction, the participating community agencies were enthusiastic and patients in home care programs reported a constructive experience.

Through regular discussion with family members students were able to raise with families the possibility of utilizing social support parties to help in coping with health and social issues that families are not aware of yet, such as other family members, neighbors, community agencies (e.g. certain associations, religious and health agencies).

Students brought important information to the treating physician that helped in the management of patients' illnesses, in particular chronic diseases, such as diabetic behavior in terms of diet, exercise, social life and compliance with medications. In one family, students reported a case of Down's syndrome which was not known to the health profession as the family members were reticent to divulge such information to the public and health professionals. Medical students through their continuous contact with the family managed to convince them of the importance of getting support and help from available resources. The family was put in contact with the Down's Syndrome Society and the treating physician was informed about the case and provided support and help.

Medical Problems and Major Life Events in the Studied Families

A total of 60 students' reports for 30 families were reviewed; each pair of medical students was attached to one family. Diabetes mellitus was the most common health issue reported (40%). The incidence of hypertension was found to be 20%. They also reported major complications associated with diabetes mellitus which were amputation of one lower limb, blindness and severe visual impairment, and nephropathy. Three cases of stroke were associated with hypertension. The prevalence of diabetes in the Bahraini population is slightly higher than other community studies have reported, ie 30% in adults aged 40 – 69 and 25.5% among those 20 years and above^{7,8}. The higher percentage observed in this study may be due to selection of families having one individual with chronic illness (Table 1).

Table 1. Medical problems in families as reported by the medical students.

Medical problem	No. of Patients
Diabetes mellitus	12
Complication of diabetes	5
Amputation of the lower limb	3
Blindness and severe visual impairment	2
Renal failure on dialysis	
Hypertension	6
Stroke	3
Malignancy	2
Drug addiction	1
Hypercholesterolemia	1

Major life events reported by students were health life-events, family life-events, personal and social life issues and financial life-event (Table 2).

Table 2. Major life events found within the families.

Type of life events	No. of Patients
Health life events including admission, fracture	26
Home and family life events (new baby, death of one member, marriage, university)	19
Personal and social life event	5
Financial life events	5
Work life events	3
Down syndrome	1

Families' Responses to Their Health and Social Issues

Table (3) indicates that the families' responses to their health and social issues varied as reported by the medical students. Sadness and low mood were the most common followed by non-compliance of patients with their treatment, increased

family support and positive changes of roles among family members and anxiety symptoms. Medical students reported that the patients are not receiving enough support from their other family members as only six families were found to have increased family support and positive change of roles of family members. The relationship between social support and health has been addressed in several studies. Berkman⁹ reported the availability of a substantial body of evidence which indicates that the extent to which social relationships are strong and supportive is related to the health of individuals who live within such social context⁹. Franks et al.¹⁰ suggested a complex effect of family functions on health, particularly mental health; family criticism was directly associated with depressive symptoms and family emotional involvement was directly associated with both depressive symptoms and healthy cardiovascular behaviors¹⁰. House et al. also reported that prospective studies, which control for baseline health status, consistently showed increased risk of death among persons with a low quantity and sometimes low quality of social relationships¹¹.

Table 3. Families' psychological responses to their life events.

Type of response to life event	No. of Patients
Sadness and low mood	21
Non compliance	7
Increased family support, and positive change of roles	6
Anxiety symptoms	3
Increase smoking	2
Reduction of income & reducing family expenditure	1
Happiness	1
Broken relationship	1

Life Style Behaviors in the Studied Families

Medical students reported risky lifestyle behaviors among the families (Table 4) including: negative dietary habits, smoking, lack of exercise, alcoholism and sleep disturbances. These findings shed light on the potential role that medical students can play as positive health advocates through health education and promotion of healthy life styles such as quitting smoking, increased exercise and positive dietary habits. Several youth education programs affirmed that teenagers respond well to talks by medical students on certain health issues such as smoking, nutrition and substance abuse. A teaching program on AIDS (1989) revealed that involved medical students had the potential of reaching thousands of teenagers as well as their parents, their teachers and their communities¹².

Table 4. Life style behaviors in studied families as identified by students.

Family behavior style	No. of Patients
Negative dietary habits e.g. high sugar, high fat, less fruit & vegetables	16
Smoking cigarettes & hubble-bubble	11
Lack of exercise	10
Non-compliance with medication	3
Self-prescribed drug use	1
Alcoholic	1
Sleep disturbance	1
Broken relationship	1

CONCLUSION

This study revealed the usefulness of community placement of medical students. Medical students were able to report important medical and social issues and their impact on the families. This enhanced the students' learning opportunities and increased their awareness about the link between medical and social issues and the individual and family health.

Medical institutions and medical schools need to establish a good relationship with the community. Medical schools are encouraged to utilize the community as a learning source for medical students.

REFERENCES

1. Jones R, Higgs R, de Angelis C, Prideaux D. Changing face of medical curricula. *Lancet*. 2001 Mar 3;357(9257):699-703.

2. MacQueen K, McLellan E, Metzger D, Kegeles S, Strauss R, Scotti R, et al. What is community? An evidence-based definition for participatory public health. *Am J Public Health*. 2001 Dec;91(12):1929-38.
3. Murray TJ. Medical education and society. *CMAJ*. 1995 Nov 15;153(10):1433-6.
4. Waddell RF, Davidson RA. The role of the community in educating medical students: initial impressions from a new program. *Educ Health (Abingdon)*. 2000 13(1):69-76.
5. Wasylenki DA, Cohen CA, McRobb BR. Creating community agency placements for undergraduate medical education: a program description. *CMAJ*. 1997 Feb 1;156(3):379-83.
6. Howe A. Patient-centred medicine through student-centred teaching: a student perspective on the key impacts of community-based learning in undergraduate medical education. *Med Educ*. 2001 Jul;35(7):666-72.
7. Al Zurba FI, Al Garf A. Prevalence of diabetes mellitus among Bahrainis attending primary health care centres. *East Mediterr Health J*. 1996 2(2):274-82.
8. Al Mahroos F, McKeigue P. Obesity, physical activity and prevalence of diabetes in Bahrain Arab native population. *Bahrain Medical Bull*. 1998 20(3):114-8.
9. Berkman LF. The role of social relationships and health. *Psychosom Med*. 1995 May;57(3):245-54.
10. Franks P, Campbell TL, Shields CG. Social relationships and health: the relative roles of family functioning and social support. *Soc Sci Med*. 1992 Apr;34(7):779-88.
11. House JS, Landis KR, Umberson D. Social relationships and health. *Science (New York, N.Y.)* 1988 Jul 29;241(4865):540-5.
12. Haven GG, Stolz JW. Students teaching AIDS to students: addressing AIDS in the adolescent population. *Public health reports (Washington, D.C. 1974)* 1989 Jan-Feb;104(1):75-9.