DOCUMENT RESUME

ED 134 131 HE 008 629

AUTHOR Arnold, Louise; And Others
TITLE Medical Students on Health Care Teams: Allied Health Professionals' Viewpoint.
PUB DATE [Mar 76]
NOTE 26p.; Not available in hard copy due to marginal legibility of original document. Paper presented at the Southeastern Psychological Society (New Orleans, Louisiana, March 1976)

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS *Clinical Experience; *Curriculum Problems; Delivery Systems; *Health Personnel; Higher Education; Interviews; Medical Care Evaluation; *Medical Schools; Opinions; Physicians; Student Teacher Relationship; *Teaching Methods; *Team Teaching
IDENTIFIERS *University of Missouri Kansas City

ABSTRACT

The University of Missouri-Kansas City Medical School uses a healthcare team approach to medical education. As partial evaluation of the approach, this study explored the views held by health professionals concerning their experiences on the team. Their images of the concept of the team itself, their opinions on the educational function of the team, and their views of the team's effects on health-care delivery were investigated through open-ended interviews. Almost all team members felt they were actively involved in educating medical students. They stressed that students gained not only by active learning through clinical experience but also through association with health professionals regularly on the team. Team members cited a seeming lack of instruction in basic science and theoretical concepts as a major educational disadvantage to the team approach. A significant proportion of the team members also felt that the educational function slows the delivery of health care. However, the presence of students and the need to create a learning environment resulted in more conscientious and thorough health-care delivery, according to the team members. These teams are viewed in general as viable mechanisms for medical education and health-care delivery. (Author/LBH)

SYMPOSIUM: SELECTING AND EVALUATING STUDENTS FOR THEIR FUTURE ROLE ON THE HEALTH CARE TEAM: II

Medical Students on Health Care Teams: Allied Health Professionals' Viewpoint

Louise Arnold, Carl Baty,
and Nancy Shepherd

University of Missouri School of Medicine
Kansas City, Missouri 64108
and
The Institute for Community Studies
University of Missouri
Kansas City, Missouri 64110

Presented March, 1976
At The Southeastern Psychological Society
New Orleans, Louisiana

by Louise Arnold, Ph.D.

INTRODUCTION

The U.M.K.C. School of Medicine accepts student for medical training immediately upon their graduation from high school and offers to them a six year curriculum which integrates their professional education with their baccalaureate studies. Further, it has adopted a health care team approach to educating medical students (and professionals) and to providing patients with care. The teams offer primarily medical service to in-patients and out-patients of an inner-city general hospital, which is also a major teaching facility for the School. Each unit functions within a designated area of the hospital and is organizationally self-contained.

These teams consist of a physician-teacher called a docent, other physicians such as residents, and a host of allied health professionals ranging from a nurse-clinician to a social worker and unit administrator. Each team also has twelve medical students, three each from the year 3 through the year 6 class. Students spend 3 months of each of their last four years with the teams. According to the Schools's formal plan, they return to the same team yearly, and thus they are under the guidance of the same docent during that four year period.

Normally the team is charged with "correlating the needs of the students into an effective medical school education-patient care unit which demonstrates the full range of general medicine" and at the same time the concept of team health care delivery.

AIM OF THE STUDY

As part of our continuing efforts to evaluate the School's formal Academic Plan, this study explored the

perceptions and attitudes held by unit members concerning various aspects of their experience on the health care team. Their perceptions of the concept of the team itself, their views concerning the effect of the team on their own professional development, their opinions concerning the consequences of the team for health care delivery, and their attitudes about its educational impact on students were all investigated.

DESIGN OF THE STUDY

Interviews with questions tapping these four content areas were held with all team members. Items were typically open-ended to allow for maximum flexibility in the subject's responses.

The interviews were conducted during late summer, 1974, at the teaching hospital or at the school of medicine. In most cases, the interviews were held in the respondent's work setting.

Responses to the open ended questions were coded for emergent categories which best reflected the meaning of each individual's answers.

Typically, findings will be presented as aggregated data. In cases where either team differences or different occupational categories had an effect on responses, special analysis will be offered.

THE STUDY GROUP

Under investigation were four self-sufficient health care or docent units, as they are called at U.M.K.C. All team

members who had had contact with medical students were interviewed. Thus, members with less than three months of job tenure and second and third shift docent personnel were excluded from the study. Members who had left their positions at the teaching hospital were not included, unless they had served as docents or residents. In these cases, an effort was made to locate and interview these physicians previously affiliated with a team. In all, 71 team members were interviewed.

Table 1 presents the occupational classification of the respondents. Docents, residents, and registered nurses make up the largest portion of the study group, 12, 8, and 11 respectively. Other team positions (namely, dietician, doctor of pharmacy, psychiatrist, accredited records technician, medical librarian, social worker, and unit manager) have small representations because there is only one such person assigned to each unit. The number of licensed practical nurses, nursing assistants, and out-reach nurses is small because on the dayshift there were so few who had sufficient contact with medical students.

A brief description of the team members' work history might make their responses to questions about their experiences on the health care team more meaningful.

As Table 2 shows, over 60% of the team members had worked in their present capacity prior to the inception of the docent teams. Docents represent the single group with the most previous professional experience. All of them responded that they had had more than five years experience as a practicing physician, and a majority of these docents

indicated that they had over fifteen years of experience.

Table 3 presents the medical settings in which respondents had worked before they became team members. Only three staff members had not worked in a medical setting. About a quarter had been in an educational setting as students or trainees; and almost one-half of the members were recruited from the teaching hospital itself or from some other hospital. The work settings of the docents showed more variance than the work setting of respondents in other occupations. Docent backgrounds included not only hospital settings, but also private practice and medical schools where they were instructors.

The aggregate findings presented in Table 4 indicate that approximately three-fourths of the respondents became members of a docent team after the program was initiated. In terms of occupational categories, docents displayed the highest rate of job tenure. Nine of the twelve docents interviewed had been with the program for two or more years. Unit managers were the newest occupational category on the teams. Other medical and allied health professionals displayed fairly random attrition and hiring rates. The results suggest that docents and registered nurses provided the teams with most of their continuity. Thus, they have probably had the most influence on the ongoing functioning of the teams.

THE DOCENT TEAM AS IT RELATES TO STUDENTS AND MEDICAL EDUCATION: TEAM MEMBERS' PERSPECTIVES

The focus of this paper will be the team members' perspectives concerning the consequences which they believe the docent

health care team has for medical education and for medical students.

These perspectives are particularly important for they form part of the social environment in which medical students begin to develop their own styles of practice. At U.M.K.C., it is hoped that students will see health care delivery as a team endeavor and as professionals will practice medicine within a team context.

Table 5 depicts the perceived major advantages of the docent team concept in medical education. Members of 11 of the 14 occupational categories interviewed cited "active learning through clinical experience with patients" as an advantage for students. This was the spontaneous response of almost 40% of those interviewed. Only 2 of the 12 docents in the study, however, gave this response. More typically, the docents saw the team's advantage in the opportunity it afforded students to utilize resource people and specialists. About a fourth of the respondents actually indicated this as an advantage of the docent team concept for medical education.

Individualized instruction was the next most mentioned advantage for medical students. Seventeen percent of respondents cited this as an advantage. One-third of the docents interviewed in the study indicated that individualized instruction was an advantage of the docent team approach.

Many responses could not be categorized. These, for the most part, were related to the particular occupation of the respondent. For instance, one accredited records technician responded that students will appreciate the value of good record keeping. One docent felt an advantage was that

students are paired and thus get help from other students. A resident responded that the docent team concept is advantageous because it is oriented to the practical.

Table 6 summarizes the team members' perceptions of the disadvantages of the docent team concept for medical education. Note that over forty percent of those interviewed could not cite any disadvantages.

However, the most often cited disadvantage was the lack of adequate student instruction in basic sciences and theoretical concepts. Seven of the eleven persons who gave this response were physicians. The next most often cited disadvantages were that there were too many students for the docent to give sufficient individual attention and that a docent may be a poor teacher. While neither of these responses relates directly to the concept of the docent team, they appear with sufficient frequency to be included as response categories. A close examination of Table 6 will reveal that team member criticism of the concept itself was minimal.

Team members' perceived functions in the medical education of students are dealt with in Table 7. The response category, "teaching students in area of professional competence" was cited by over sixty percent of those interviewed. The only occupational groups who did not give this response were unit managers and licensed practical nurses. This wide range of teaching orientation across the occupational groupings comprising the team is a basic affirmation that the docent team is functioning as a team in educating students.

The function of demonstrating or assisting students in procedures and techniques was cited by close to forty percent of all respondents. Most of the team personnel responding with this answer were nursing staff.

All but one of the team members citing the function of supervising students in patient care were physicians.

The Academic Plan, a formal presentation of the docent team concept, stresses the role of the docent in counseling students in both personal adjustment and curriculum matters. It should be noted that only two docents mentioned advising students on curriculum and only one docent responded that "helping students to develop as people as well as physicians", was a function. This response was classified under the category "other".

Team members were asked if they felt they participated enough, too much, or too little in the education of medical students. Sixty-five percent responded "enough". Twenty-eight percent answered "too little", and almost six percent said "too much". Table 8 shows the responses of personnel answering "too little" to the question, "What more would you like to do?".

The major response category represents a desire for more teaching in the respondent's area of competence. Half of those giving this answer were assigned to one team. Again, a wide range of occupational classifications was represented in the response category.

Over eight percent of respondents cited a desire for more time and contact with students. It is of note that two of the four psychiatrists interviewed fall in this response category.

As Table 9 shows, team members also indicated what they felt medical students were learning from them. As might have been expected, the answers were fairly well linked to occupational classification. No team differences in response patterns were noted.

It is not surprising that over half of those interviewed felt that students were learning from them specific information related to their area of expertise. This is consistent with the findings in the previous two tables. Team members from each of the fourteen occupational classifications gave this response. This again illustrates the depth of the teaching function within the docent teams.

A similar, though more specific response category, is that students are learning procedures, techniques, and skills related to health care duties. Ten physicians and seven registered nurses gave this response. These persons are apparently most involved in the teaching of the more practical and ongoing aspects of health care.

Patient management appeared in this table as a specific area of instruction. Eight physicians, including three of the four psychiatrists, gave this response.

Percentage of time that the various team members spend in medical education is presented in aggregate in Table 10. Fifty-eight percent report that they spend up to fifty percent of their time in the educational function while thirty-two percent of the respondents indicate they spend from fifty-one to one hundred percent of their time performing educational functions.

Team assignment was examined regarding amount of time

spent in medical education. No significant differences were found.

It should be pointed out that thirty-seven percent of the respondents from ten of the occupational categories felt they could not separate their time between health care delivery and medical education. They felt that their functioning in medical education and health care were interdependent and overlapping. It is interesting, yet not surprising, that nine of the twelve docents stated they simply could not separate the time they spent in medical education and health care delivery. All three doctors of pharmacy also indicate an overlap in these two functions as did two of the three medical librarians and two of the three social workers.

THE EDUCATIONAL FUNCTION AND PRESENCE OF MEDICAL STUDENTS AS THESE EFFECT HEALTH CARE DELIVERY

Docent team members' opinions were also sought on the effect which they believed medical students might have on the delivery of health care.

In Table 11, the combined effect of the educational function and presence of medical students on health care delivery is examined.

Almost sixty percent of all respondents felt that the educational function and presence of medical students had no effect on the performance of their health care duties. The category in which the largest percentage of respondents were classified was the one which indicated that performance of health care duties was slowed down because of the educational function and presence of medical students. This should not be taken as a negative response because the next

most frequently cited response category was that the educational function and presence of medical students makes one more conscientious, thorough and detailed in performing health care duties. Almost all of the team members citing these effects on their performance were docents and residents. Team assignment had little or no effect in response patterns.

Team members' views of the role of the medical student in health care delivery is presented in Table 12. It is evident from the number of responses in this table and the relatively high level of respondent agreement, that team members share a rather clear student role definition. Learning and skill development, patient care, and obtaining and transmitting data on patients appear as the core of the role definition.

Team members' views of disadvantages of the docent team approach for the patient appear in Table 13. Over forty percent of respondents saw no disadvantages.

But, the second most frequently cited disadvantage points to possible problems resulting from the students' presence, more particularly from their lack of experience. This response category was cited by members of over one-half of the occupational categories.

SUMMARY

This paper has examined the docent team from the perspective of docent team members. General areas of investigation were: the concept itself, the docent team and its educational function, the role of students, and the effect of students on the team for health care delivery.

It was found that almost all members of the docent teams felt that they were actively involved in educating medical students. Those interviewed stressed that the students gained not only by their active learning through actual clinical experience, but also in association with the various medical and health care professionals which comprised a docent unit. The major disadvantage cited by respondents was that students seemed to lack instruction in basic science and theoretical concepts. A significant proportion of those interviewed felt that the educational function slows the delivery of health care. However, the presence of medical students and the need to create a learning environment was also seen as resulting in a more conscientious and thorough approach to health care delivery. One possible disadvantage of the docent team approach focused on the student in the clinical setting. Over fifteen percent of the respondents felt that quality of care could suffer because of the student's lack of experience.

In conclusion, it is apparent that the docent team concept is perceived by members of the various teams to be a viable means of health care delivery and medical education.

Table 1

Number and Percentage of Respondents in Each Occupational Category

Position	No.	Percent
Docent	12	16.9
Registered Nurse	11	15.5
Resident	8	11.3
Ward Clerk	6	8.5
Unit Manager	4	5.6
Outreach Nurse	4	5.6
Psychiatrist	4	5.6
Nursing Assistant	4	5.6
Doctor of Pharmacy	3	4.2
Clinical Medical Librarian	3	4.2
Dietician	3	4.2
Social Worker	3	4.2
Licensed Practical Nurse	3	4.2
Accredited Records Technician	3	4.2
TOTAL	71	100.0

Table 2

Amount of Time Team Members Worked in Present Capacity

	No.	Percent
1 year or less	2	2.8
1 year to 2 years	13	18.3
2 years to 3 years	13	18.3
3 years to 5 years	12	16.9
5 years to 10 years	11	15.5
10 years to 15 years	6	8.5
15 years to 25 years	8	11.3
25 years or more	6	8.5
TOTAL	71	100.0

Table 3

Work Experience in Medical Setting Prior to Team Membership

	No.	Percent
Hospital	35	49.3
Training	17	23.9
Medical School and Associated Teaching Hospital	7	9.9
Private Practice	7	9.9
Other Medical Facility	2	2.8
No Previous Medical Experience	3	4.2
TOTAL	71	100.0

Table 4

Amount of Time as Member of a Docent Team

	No.	Percent
3 months	4	5.6
6 months	6	8.5
1 year	11	15.5
2 years	13	18.3
Less than 3 years	20	28.2
3 years	17	23.9
TOTAL	71	100.0

Table 5

Advantages of Utilizing Docent Team Concept in Educating Medical Students as Perceived by Team Members

	No.	Percent
Active learning experience for students through clinical practice, patient contact and follow-up	28	39.4
Students learn to recognize and utilize resource people and specialists	19	26.8
Students receive individualized instruction	12	16.9
Students are exposed to varied outlooks, opinions, situations and cases	9	12.7
Students learn how to work as part of team	8	11.3
Continuity of education for students	7	9.9
Students are given responsibility	6	8.5
Students learn to view patient as TOTAL individual	5	7.0
Other	17	23.9
Don't know	1	1.4
No answer	3	4.2

Table 6

Disadvantages of Utilizing Docent Team Concept in Educating Medical Students as Perceived by Team Members

	No.	Percent
Students lack instruction in basic sciences and theoretical concepts	11	15.5
Docent has too many students to give sufficient individual attention	6	8.5
Docent may be a poor teacher	6	8.5
Difficult for students to integrate concepts with practice; lack of continuity and breadth of experience	5	7.0
Students lack subspecialty exposure and training	5	7.0
Students given too much responsibility	4	5.6
Performance of health care duties slowed down	2	2.8
Other	13	18.3
No perceived disadvantages	30	42.3

Table 7

Frequency and Percentage of Team Members' Perceived Functions in the Medical Education of Students

	No.	Percent
Teaching students in area of professional competence	44	62.0
Demonstrating and/or assisting in procedures and/or techniques	27	38.0
Supervising students in patient care	15	21.1
Discussing, consulting with students, regarding patients	15	21.1
Teaching students problem solving techniques; teaching students to teach themselves	7	9.9
Orienting students to hospital system	7	9.9
Acting as role model	6	8.5
Advising students on cirriculum	2	2.8
Other	17	23.9
No answer	1	1.4

Table 8

Frequency and Percentage of What More Team Members Would Like to do in the Medical Education of Students

	No.	Percent
More teaching in area of professional competence	12	16.9
More time and contact with students	6	8.5
Utilized more fully in area of professional competence	3	4.2
Other	3	4.2
Adequate participation	46	64.8

Table 9

Frequency and Percentage of Team Members' Perceptions of What Medical Students are Learning from Them

	No.	Percent
Specific information related to area of expertise	34	47.9
Specific procedures, techniques, skills related to health care duties	22	31.0
Patient management	11	15.5
Functions and roles of other health care personnel	9	12.7
Problem solving and judgement	6	8.5
Other	14	19.7
Don't know	1	1.4
Not applicable	8	11.3

Table 10

Team Members' Assessment of Percentage of Time Spent in Educational Functions

	No.	Percent
10% or less	16	22.5
11% to 20%	6	8.5
21% to 30%	12	16.9
31% to 40%	3	4.2
41% to 50%	4	5.6
51% to 60%	1	1.4
61% to 70%	4	5.6
71% to 80%	10	14.1
81% to 90%	1	1.4
91% to 100%	7	9.9
Inappropriate	1	1.4
Don't know	5	7.0
No answer	1	1.4
TOTAL	71	100.0

Table 11

Ways in which the Educational Function of Team and Presence of Medical Students Alters Performance of Health Care Duties as Perceived by Team Members

	No.	Percent
Slows down performance of duties	14	19.7
Makes one more conscientious, thorough and detailed in performance of duties	11	15.5
Makes job more interesting	3	4.2
Results in more work and responsibility	3	4.2
Time must be allocated in determining techniques and sources appropriate to individual student's level of training	3	4.2
Other	6	8.5
No answer	1	1.4
No perceived alteration in performance of duties	42	59.2

Table 12

Role of the Medical Student in Health Care Delivery as Perceived by Team Members

	No.	Percent
Learning and skill development	32	45.1
*Provider of continuing patient care	25	35.2
Supervised participation in patient care with limited responsibility	23	32.4
Obtaining and transmitting patient data, i.e., physicals and histories	14	19.7
Other	12	16.9
No answer	1	1.4

Table 13

Disadvantages of the Docent Team Approach for the Patient as Perceived by Team Members

	No.	Percent
Large number of staff seeing patients may cause patient to become confused and/or uncomfortable	12	16.9
Quality of care could suffer because of student's lack of experience	11	15.5
Difficult for patient to identify with many different doctors	7	9.9
Large number of staff seeing patients may cause omission in patient care	3	4.2
Patients used as teaching instruments	3	4.2
Other	12	16.9
No perceived disadvantages	31	43.7