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INTRODUCTION Traditionally, in the various specialities in medicine, the individual is viewed as the unit of treatment. The relatively new specialty of family medicine has taken a different approach. For family medicine the unit of treatment includes the individual and the total family in the context of its community. Such treatment requires a role modification including a close interface between the physician and various other types of professionals in health care.

. Family medicine practitioners are considered a valuable part of the medical work force as defined by the Graduate Medical Education National Advisory Committee (1979). It is an important specialty which will be required increasingly to meet health care needs. If family medicine were so developed that dissatisfaction was built into it inadvertently, the trainee might enter the field only to leave it soon after. It is therefore worthwhile to evaluate physician satisfaction with the role in family medicine. A loss of satisfaction could diminish a physician's interest, and could ultimately result in a loss of medical personnel to the specialty. Such a study is particularly needed when we are preparing for future health care needs and are increasing the number of familty medicine practitioners.

## DEFINITION: THE TEAM APPROACH TO HEALTH CARE

. Basically, teams can vary according to 1) the occupations included; 2) the relative status of members, 3) the degree of structure within the group. The team structure can be of several types. It can vary from formal to informal in such aspects as specific goals and guidelines, delineation of roles, and scheduled meetings. The team may vary according to its type of decision-making process. The two most typical approaches are 1) the leadercentered team which functions solely on the basis of the leader's behavior and his profession's status in the field; and 2) the fraterally-oriented team in which a group of colleagues share the responsibility of leadership and divide the work by consensus (Horowitz 1970).

. The team approach in medicine is usually a leader-centered team consisting of the physician and other personnel such as nurses, technicians, and social workers, who work together and attempt to make the necessary decisions for treatment. Other personnel may be included from time to time, needed, such as specialists and technicians with relevant expertise. However, the core team holds the major responsibility for the care and treatment of the individual patient. The team adapted for family medicine is unusual in that other non-physician health professionals play an even more essential role because the treatment of the total family may require them.

## TEAM PRACTICE & SATISFACTION

. Blauner discusses factors affecting general job satisfaction. The factor of control is believed interchageable with autonomy. He divided control in 3 parts: 1) control over time and physical movement, or the pace of the work; 2) technical and social control over environment; 3) control as freedom from hierarchical authority. The physician in the traditional model is said to have control over these three elements, but working closely with colleagues as part of a team, as the physician in family medicine does, s/he may be placed in a position of giving up a portion of this control to team members and team goals. The industrial worker may gain control through the informal work group, while the physician who has traditionally practiced independently may feel that the working team takes away too much of the FREE INQUIRY in Creative Sociology physician's autonomy (Mayo & Lombard 1944).

. But a number of studies are cited about industrial workers showing that when they work in integrated teams, their work satisfaction is improved (Blauner 1960). While the loss of autonomy could reduce work satisfaction, team practice could compensate in part for this loss through the satisfaction of on-the-job interaction. However, the physician may value autonomy more than the industrial worker, since autonomy is an integral part of the physician's profession.

. Blauner has considered the relation of the worker to his work versus the worker to fellow workers, based on the ideas of Marx and Durkheim. Blauner criticizes the sociologist's neglect of the Marxian point of view, in which the worker's control over his work situation is the critical issue. He points out that the sociologist's preoccupaton with the worker's relations to other workers is directly related to Durkheim's theory of anomie. This study takes both issues into account in an empirical way, since the autonomy variable is a partial operation of Marx' concept of the worker's control, and the social relations variable is a partial operation of Durkheim's concept of the solidarity of social groups.

. "Health services are organized around professional authority, and their basic structure derives from the dominance of a single profession over a variety of other subordinate occupations" (Friedson 1970 xi). Accordingly, the physician might interpret the team approach as a threat to his/her autonomy and the privacy and intensity of rapport within the physician-patient relation. The physician might try to maintain control over the work setting by insisting that physicians' tasks cannot be subdivided and parcelled out among a collection of workers" (Scott 1972 15). Since family medicine is training the physician to interact with a number of other professionals, this new role might

Volume 8 No 2 November 1980 156 diminish the satisfaction which could have ramifications for the physician's performance. For this reason, the focus is on the physician's autonomy and control as a major issue in the physician's job satisfaction.

HYPOTHESES To investigate the effect of the team setting on the physician's satisfaction, the attitudes of those serving on interdisciplinary teams were compared with those in traditional medical practice, using the perceptions of the latter as the standard. The survey was designed to test 3 hypothetical propositions.

H1: The work satisfaction of the physician in the team setting is lower than that of the physician in the non-team setting.

H2: The perceived autonomy of the physician in the team setting is lower than that of the physician in the non-team setting.

H3: The perceived rapport of the physician in the team setting is lower than that of the physician practicing in the non-team setting.

METHODOLOGY The sample survey was used for data collection, and 300 mailed questionnaires were distributed to physicians working in 6 medical and health facilities. They were selected on the basis of work settings, with 150 of the recipients working in well established teams, and 150 working in the traditional mode. Because so few team settings were available, random selection of the physicians was not possible. The organizations where they worked were in Washington, D.C., Ohio, and northern and southern California. The variability which pervades solo practice was controlled by using organization affiliated physicians representing various types of specialties. The sample was not made up solely of family practitioners. At the time this study was conducted, the number of physicians who had been formally trained in family medicine were few. For the control group, the design required physicians with little or no exposure to team

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practice. Since family medicine forces practitioners to function in cooperative relations with a number of support personnel, related specialties were used for the control group. The findings can be applied and have relevance for family medicine practitioners, because of their close interaction with other health care professionals.

Independent variable: Team practice. Team and nonteam settings represent the major conditions. The critical factors differentiating team and non-team settings were 1) the team sharing of responsibility for the patient; and 2) patient contact.

Dependent variables: Work satisfaction, autonomy, and rapport.

Perception of autonomy and rapport in terms of privacy and intensity in patient relations were factors chosen on the basis of information obtained in current research on the subject of work satisfaction.

. They were operationalized with 5-point Likert type scales, as was the physician's general level of satisfaction with the work arrangements. Reliability of the scales was determined by using the split-half procedure. Validity was established by relating the components of work satisfaction to the general concept. The Engel (1970) autonomy scale was adapted for use in this study. The correlation of autonomy and satisfaction is: r = .30, and the correlation between rapport and satisfaction was also .30. In addition to the background variables relevant control variables such as time in practice, social relationships, team training, and special-ty of the respondents were included in the instrument.

RESULTS Data were extracted from the responses, based on a 35 percent return rate for all physicians, including 51 team practice physicians and 54 traditional type physicians. The two groups were about the same in the distribution of age, time in practice, sex, and specialty representation. The

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TABLE 1: WORK ATTITUDES OF TEAM
& NON-TEAM PHYSICIANS

	Team	Non-team	t
	mean	mean	
Satisfaction	16.1	19.9	1.5
Autonomy	19.6	19.1	0.8
Rapport	23.8	23.6	0.5
Social relations	24.2	25.0	1.6
(N)	(51)	(54)	

 $t_{05,100} = 1.98$ 

team physicians averaged 42 years of age, with 15 years of practice of medicine. The sex distribution was: 74 percent males, and 26 percent females. Only 12 percent had prior team training. The average time in team practice was 5 years. The areas of medicine included general medicine and family medicine, 38 percent; pediatrics 32 percent; psychiatry, 13 percent, surgury 10 percent, and other, 7 percent.

. The first hypothesis compared the mean work satisfaction of team and non-team physicians. T-tests showed no significant differences. The t-tests applied to the autonomy and rapport evaluations also proved not to be significant, as shown in Table 1. The variable <u>social</u> <u>relations</u> <u>within</u> teams was analyzed to determine whether physicians correspond to the response patterns of industrial workers. This variable was tested for significance since it was expected that physicians in team practice might find their social relations to be more satisfying in team, because they would have experienced camraderie with their fellow team members as the industrial workers did. This variable also failed to show a significant difference.

. Additional data analysis was carried out in order to determine whether time in practice has an effect. It was suggested that those physicians who practiced alone and who had been in practice a longer time might find team practice a more difficult adjustment. The results are shown in Table 2. A 2-way analysis of

TABLE 2:

EFFECT OF EXPERIENC	E AND	WORK SE	TTING ON	PHYSICIAL	NS' SAT	ISFACTION
Dependent Variable	Practio	ce time	Work s	setting	Intera	ction
	Short :	x long	Team x	non-team		
	F	p	F	р	F	р
Satisfaction	3.8	.10	1.6	ns	1.7	ns
Autonomy	0.3	ns	0.7	ns	0.5	ns
Rapport	1.9	ns	0.3	ns	2.5	ns
Social Relations	0.4	ns	2.0	ns	1.8	ns

 $F_{05(1.100)} = 3.96$ 

variance was used to determine the effect of time in practice. The analysis of variance showed no relationship existed. Those who had longer experience seemed to be as well satisfied as those who had spent less time in practice. This finding was contrary to the original supposition.

CONCLUSION Recent journals herald team practice as a rapidly increased innovation in health care. In this investigation, the hypothesis that team practice might have an adverse effect on the work satisfaction of physicians generally, and specifically on the satisfaction of the <u>family medicine</u> team practitioner was contra-indicated by the findings. There was no apparent difference in work satisfaction comparing team and non-team settings. Nor was there any attitude difference in autonomy, rapport, or social relations. These results were also unaffected by time in practice.

. Generally, the physicians in both the team and non-team categories indicted a high level of satisfaction with their work setting. Perhaps the extremely high prestige and authority relegated to the physician is sustained in his/her position as team leader. The physician would thus not perceive any relative loss of power or status. Most physicians in team practice probably tended to disregard the team in which they were working and saw it as incidental to their primary functions. They may have viewed the contribution of lower status team members as less important than their own. Work satisfaction will

probably not be affected by the spread of team practice in family medicine.

- . Theoretically, the lack of significance in the test of a hypothesis is inconclusive, but these results are suggestive. Recent literature demonstrates that teaching by the use of teams or simulated teams, as family medicine requires is probably advantagious since it appears to enhance students' appreciation for the interdisciplinary approach to patient care, and builds confidence in their ability to adopt the professional role (Mazur et al 1979).
- . Future trends in medicine such as increased technology, group and organizational practice, and national health insurance indicate that team practice will become more essential and more often utilized for all specialties including family medicine. It appears that the physician's commitment and satisfaction with the practice of medicine is not easily affected by alterations in the role and work setting, as studied here. Since family medicine requires the physician to interact so closely and relate to others in the health care field, these findings are encouraging with respect to work satisfaction for practice in this specialty. It tends to support the adopted approach for socializing the physician into family medicine.

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enrolment and funding, the research finding that teaching oriented departments attract more students, especially beginning and intermediate students, is of some importance. Greater emphasis on teaching could increase student enrolment and maintain that enrolment at the levels of potentially greatest absolute numbers of students.

. Third, the current research, consistent with the Swedish research, underscores the importance of consistent program review by teaching oriented departments. While such departments do tend to attract and graduate more students, there is a pattern of expansion which could interfere with the learning process, and ultimately, with the attractiveness of the program. Students may experience a lower degree of learning due to the popularity of the particular area, and the inability of the teaching departments to sustain an adequate teacher-student ratio. . Fourth, teaching departments may wish to give greater attention to experience among the faculty. Findings from this research indicate that teaching oriented departments are lacking the experience provided by associate and full professors. While this probably is a result of a university stratification system based on the teaching-research dichotomy, uni-versities selecting a teaching orientation might well seek to correct the imbalance.

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