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THE UNDERUTILIZATION OF NURSES AND
PHYSICIAN ASSISTANTS IN AMBULATORY CARE*

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Introduction

In answer to the impelling need for more health care for more people, and with the assumed shortage of physicians (especially in the urban poor and rural areas), the increased use of non-physician health personnel has been strongly advocated. There are two approaches included in this advocacy; it includes those who suggest the increasing use of ancillary medical -- paramedical -- personnel to act as "physician extenders" and there are those who suggest expanding the role of the registered nurse to include more primary care.

The thrusts of these efforts initially were (1) to provide nurses and physician assistants with skills in the areas of physical assessment, interviewing, and the care of certain acute and chronic diseases, (2) to place them in settings where there was a clear need, and (3) to provide some backup services for treatment of the very ill. It has almost been a decade since the early work on expanding the nurse's role was reported by Lewis et al. (1969) and Connelly et al (1966), and the start of the physician's associate program at Duke in 1965. Only now can we begin to understand some of the ramifications and difficulties of this effort and report some empirical findings.

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The remainder of this paper is divided into three sections. The first describes some empirical studies which indicate that in many situations these health workers with expanded skills are underutilized (and not able to function in an expanded role). The second section presents the findings from several studies on the reasons why these situations exist. The concluding section describes some approaches to closing the gap between what the nurse practitioner and physician assistant are capable of doing and what they actually do.

Underutilized Health Workers

Some of the early work in this area focused on the opinions and practices of physicians in using non-physician manpower. In 1972, Yankauer et al described a gap between what the physicians were expressing as opinions and what they were doing in practice. It was clear that the delegation of services by the physician to the nurse, although strongly endorsed in theory, was not being practiced. The authors state that

The data presented document the unproductive use of nurses. On the basis of specific task performance it proved impossible to establish a profile of activities of registered nurses which would distinguish them from other office or clinic employees, such as licensed practical nurses, aids, and secretaries...

The gap between opinion and practice is too large and consistent to be dismissed as the spurious product of opinion-polling techniques.

In a more recent study, Gerstein and Herzog (1973) report that a majority of the graduates of an adult nurse practitioner program did not experience many changes in their role. In comparing those nurses whose roles had changed subsequent to the program to those nurses whose roles...
had not changed, the authors found the following:

The median time spent by nurses whose role had changed on administrative and clerical activities is less than one-third of the median time spent on these same activities by nurses whose role had not changed. Instead of spending their time on these activities, these nurses are spending approximately twice as much time on case conferencing and seventy-five percent more time doing physical examinations.

It is a waste of valuable resources to have health workers who are capable of doing physical assessment and caring for the ill performing routine administrative and clerical activities.

These findings are most dramatic when considered in light of the potential benefits of productively using the nurse practitioner and physician assistant in expanded roles. A study by Silver (1968) for instance, indicated that some pediatric nurse practitioners alone can provide care for about three-fourths of the children seen in an office. In another study (Silver and Hecker, 1970), a pediatric nurse practitioner managed 82 percent of 2,735 patient visits, and on only 11 percent did she need to consult a physician, which she did by phone.

These studies illustrate the point; namely, there is tremendous potential to increase the productivity of a delivery setting by insuring the maximum utilization of all personnel. To the best of our knowledge (see Charney and Kitzman, 1971, for example), these increases in productivity can be made while maintaining high quality care. In addition, patient acceptance of the new practitioners on the whole has been positive, although it has varied in some situations.
Why Nurses and Physician Assistants Are Underutilized

There are many plausible causes of the gap between what these health workers are capable of doing and what they actually do. In order to close this gap it is important to determine what seem to be the most critical causes and the ones most susceptible to change.

One reason may be that the physician and/or administrator does not know what skills these workers bring and how to blend these with his own. This is crucial, because as stated by Freidson (1971), "As the final arbiter of practice in the medical division of labor,...(the physician) largely determines what therapeutic efforts are made...and he orders and supervises the efforts of others..." (p. 127). Nowhere in the physician's training is there adequate training for managing some of the changes necessary in order to accommodate to the expanded roles of these workers.

This situation is revealed in Herzog's (1973) study of twenty nurse-physician teams. The findings indicated that the physician almost always felt less efficacious in his work and less satisfied with his organization when the nurse assumed more responsibility. What appears to exist is a close relationship between the physician's efficacy (his sense of "importance to patients and colleagues" and his "effectiveness in his work") and the amount of responsibility he has for the overall delivery of care to the patient. When the nurse assumes responsibility for more than the menial tasks, the physician feels a lessening of control. We can assume that many physicians in ambulatory care probably chose this specialty because of the close contact with patients and would not want to give it up. Given this situation, many physicians will not delegate responsibility to the nurse
or the physician assistant unless he can maintain adequate continuity with his patients.

Another possible cause for the gap between capability and utilization is that the desires and expectations of the nurse and physician assistant may differ from those of their teachers, physician colleagues, administrators, and others. From the study by Gerstein and Herzog (1973), we know that those nurses who have the greatest desire to expand their role and are most invested in their work are most likely to succeed in obtaining more responsibility. However, it appears as if these workers accept responsibility for some health care tasks and not others, depending mostly on what they prefer to do, even though this may not meet the expectations of others with whom they work (see Herzog's study, 1973).

A third likely cause for the underutilization of these workers is the lack of adequate support and acceptance. We know that the physician assistant, because of the newness of the role, faces considerable ambiguity concerning accreditation, salary, and acceptance by others. The nurse, on the other hand, faces a potential identity crisis because he or she may no longer be perceived as a nurse by nursing, and is certainly not perceived as a physician by the physicians. The nurse practitioner is threatening to nursing colleagues and supervisors, for the nurse practitioner is assumed to be more capable than the other nurses. In addition, many settings do not provide the support necessary to allow these workers to function in expanded roles; i.e., no examining rooms, secretarial and telephone service, etc. is provided.
Other likely reasons for the underutilization of the nurse practitioner and physician assistant include the following: the lack of a suitable organization structure for supporting collaborative primary health care (see Beckhard, 1972); the educational programs overtrain these health workers in clinical aspects of care, beyond what they can use for legal or professional reasons; the economic realities make it difficult for some settings to employ these workers at the salary they deserve (see Mahoney, 1972, for a discussion of salaries); the fact that third party payers have been unwilling to reimburse for services they have rendered; and the fact that the potential for change is enormous, but there are few health workers or others who are attempting to manage this change.

Of course, the relative importance of these reasons depends on the given situation and whom you ask. It is clear, however, that there are several reasons which deserve further investigation, while others deserve the immediate attention of educators, administrators, policy makers, health workers, and patients. The next section describes some efforts that are underway to remedy some of the causes for the underutilization of these health workers.

The Challenge

The challenge for all concerned is to initiate efforts which will close the gap between the potential and existing utilization of all health workers. These efforts will require close collaboration between health workers from all health professions; administrators; and social, behavioral and management scientists. In order to provide a focus for these efforts, the remaining part of this paper describes several potentially useful approaches to the
problem of underutilization.*

1. Improving the Skills of Nurses and Physician Assistants

A very important approach is to work directly with the nurse practitioners and physician assistants in order to improve some of their skills. In working with these health workers during their student experiences, we have found that they have a rather low self-image and are incapable of managing some of the pressures and problems that they face. By training them to enter and deal with a social system, negotiate roles and share expectations, problem solve, build a team, and manage change, the students made the following types of comments:

"I feel stronger as an individual and hopefully as an employee..."

"I never understood how important it is to identify roles and expectations. Once you realize you're not in competition with the doctor, there are a whole range of possibilities within the boundaries of your own role."

"...made me feel less guilty about changing my role... gave me a little more self-confidence and improved my self-image."

2. Building the Role of Educators as Links to the Delivery System.

Educators can play a key role in helping the delivery system better utilize the expanded roles of the nurse and the physician assistant. Most programs, for instance, use "preceptors" or "clinical supervisors" to help the student learn clinical skills. However, little effort goes into

*Some of these approaches will be taken by the M.I.T. Sloan School of Management under a grant from the Robert Wood Johnson Foundation.
building a support (or problem solving) group in the delivery setting which could facilitate the student's transition to the work setting.

In many cases, the biases, priorities, and role images of the educators are academically or discipline focused rather than utilization focused. The student needs role images and a considerable amount of "live" problem solving in order to understand and begin to better deal with some of the problems they face (see Plovnick’s work on medical students, 1974, for example).

One such effort in this area is that of the Institute for Health Team Development at Montefiore Hospital and Medical Center. They are assembling delivery/teaching health care teams to provide family-oriented medical care. A team includes an internist, pediatrician, family nurse practitioner and social worker. The thrust of this effort is to explore the best models and methods for primary care teaching. It is assumed that collaborative learning will lead to a better understanding, and ultimately utilization, of all personnel in the health care system.

3. Improving the Curriculum.

In many settings there has been little, if any, analysis of the content of the curriculum for nurse practitioners and physician assistants. Rather, these programs were designed by physicians and nurses who tried to anticipate what the students needed. Educators should now be addressing the following questions: What are the functions of these workers, as presently defined, in the practice settings? Is the training appropriate to accomplish these functions?

Besides revising the content of the curriculum, per se, there is a
need to improve the nature of the program and teaching methods. In some cases, the program may need more of a practice orientation, rather than an academic orientation. Other programs need to modify their approach in such a way as to make the student more responsible for his/her own learning. The program should be flexible enough to encourage the student to meet his or her own needs and utilize the faculty as resources to meet these needs.

4. Increasing the Awareness of Physicians and/or Administrators

In light of some of the difficulties that physicians and administrators have understanding the potential of these workers and their inability to blend their expanded roles with their own and others, much can be done in this area.

One approach, taken by Rubin et al (1974), is the use of educational programs for health teams. These programs are designed to minimize the energy that health teams devote to maintaining themselves as a functioning team and maximize the energy devoted to the task of delivering care. As noted by the authors, the commitment and support of the administrators for the team development activities is essential for its success.

Another approach is to provide the physician and administrator with some "guidelines" for effective utilization of nurses and physician assistants. These guidelines should point out some of the issues and problems involved in using these workers, some alternatives for dealing with them, and some resources available for assistance. In addition, some "packaged" programs for dealing with specific issues may be provided.

A third approach to this problem is the teaching of primary care and team work in the various health schools. Physicians, nurses, and other
health workers receive little exposure to some of the difficult delivery issues during their training. For that reason, many schools have adopted the policy of developing programs in primary care, oftentimes giving the student opportunities to work and learn with health workers from different professions.

5. Improving the Amount of Basic Research and Evaluation

Given the amount of resources which are involved in this area, there is a surprising lack of basic research and evaluation that has been done. There are difficulties in working in this area, of course, but they are not insurmountable.

Some of the fundamental questions are the following: What skills does the nurse and physician assistant need? How can these best be blended with others and how can or should the blending occur? How does one maintain continuity of care when so many workers are involved? How and should all workers be accredited? Who should be doing the tasks which were done by the nurse prior to the expansion of the nursing role? For what additional reasons are there gaps between potential and actual utilization of all workers?

In Summary

In summary this paper has described the problem of the underutilization of nurses and physician assistants in health care systems. Some empirical data documenting the problem was presented. The paper was also concerned with suggesting reasons for the underutilization of these health workers, and giving more attention to some of the critical ones. In the final section some approaches that are being taken to alleviate these causes were identified, and some potential approaches were outlined.

It is hoped that this problem will receive greater attention, for the need is great and the potential to meet that need is within reach.
REFERENCES


