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THE CLINICAL DIETITIAN: ROLE CONSENSUS OF
DIETITIANS AND PHYSICIANS

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Sister Mary Rosita Schiller, R.S.M., M.S., R.D.

The Ohio State University
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VITA

June 14, 1936 ... Born - New Era, Michigan

1959. ............ B.S., Mercy College of Detroit, Detroit, Michigan

1959-1960 ........ Dietetic Internship, Henry Ford Hospital, Detroit, Michigan

1960-1962 ........ Hospital Dietitian, Mercy Community Hospital, Manistee, Michigan

1962-1966 ........ Administrative Dietitian, Saint Lawrence Hospital, Lansing, Michigan

1966. ............ M.S., Michigan State University, East Lansing, Michigan

1966-1970 ........ Instructor and Assistant Professor, Mercy College of Detroit, Detroit, Michigan

PUBLICATIONS


FIELDS OF STUDY

Major Field: Food and Nutrition

Studies in Human Nutrition. Professor Virginia M. Vivian

Studies in Human Physiology. Professor Charles W. Smith
Studies in Nutritional Biochemistry. Doctor John B. Allred

Studies in Administrative Science. Professor Robert C. Miljus

Studies in Food Service Management. Professor Rachel M. I. Hubbard
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CHAPTER I

OVERVIEW OF THE STUDY

Background

Society and the Dietitian

From its beginning late in the nineteenth century the profession of dietetics has been shaped, strengthened and challenged by the growth and change processes within the American society. Dietitians, first employed in food clinics and cooking schools, have adapted to meet current needs over the past 75 years. The work of the first

dietitians began to take on new dimensions as scientists identified essential vitamins, minerals and significant nutrient relationships. Scientific investigation led to extensive implications for nutrition in the cause and treatment of illness, isolated and improved the techniques for measuring nutrients contained in different sources and forms of food, and elaborated hidden principles of human physiology and cellular metabolism.

During the transition from an agricultural to an urban, industrial and technocratic nation many cultural changes had formidable effects on the occupational status of present-day dietitians. Strong leadership in technical
vocations spearheaded movements toward greater professionalism among semiskilled and skilled workers. Occupational tensions between members of the recognized professions and the career-conscious masses are almost universal. Industrial psychology and post-bureaucratic managerial systems have focused emphasis on the integrity of individuals and the motivational value of autonomy in work situations. The knowledge explosion stretches the human mind beyond its ability to master the totality of theory and skill in any subject area. Rapidity of change requires adjustments of personal priorities in the allocation of time, energies and talents to provide for more effective service, continuing education and appropriate use of resources. All workers are influenced by these dynamics of the society they serve and from which they emerge.

Health professionals cannot escape the impact of the effects of cultural and technologic changes on their occupational roles. Like other medical and allied health practitioners, dietitians are sensitive to health-related consequences of poverty, extended life expectancy and population increases. Dietitians use their influence for improving adequacy and availability of housing, nutrition, medical care, social security benefits and institutional services for all individuals. The competence of qualified nutrition experts is vital in prevention and treatment of
diabetes, cardiovascular disease, malnutrition, hypertension, obesity and other maladies which are prevalent in this highly developed and affluent civilization.

Health Care and Dietetics

Medical care is an integral part of life patterns in the United States. Recent legislation and continuing requests for approval of federal funds to provide for extended and comprehensive health care to a greater proportion of society have had a salient effect on the entire gamut of medical affairs. Evolutionary changes in philosophy and provision of institutional health care have come as the result of rising costs, manpower shortages, labor movements and a theoretical stress on prevention as well as treatment and cure of disease.

There is a shortage of qualified medical practitioners and a particular need for additional physicians (28, 56). More effective and efficient use of available personnel seems possible through a team approach to health care delivery. With the assistance of several allied medical professionals, the physician can coordinate the expertise of all team members toward achievement of common goals. Physicians thus delegate many time-consuming tasks to skilled technicians and are freed for rigorous diagnostic and prescriptive activities.

To meet the demand for health workers, increasing
numbers of students enroll each year in specially designed technical programs of allied health education. The immediate objective of these students is to develop specialized competencies and technical skills which are often provided within the array of duties performed by more liberally educated health professionals. Graduate technicians expect to assume responsibilities and perform tasks normally reserved for higher positions in the medical hierarchy. Analogously, many health professionals assume for themselves a place on the health team and hope for ultimate participation at the level of decision-making activities.

Dietitians have long considered themselves as integral members of the health team. Recent changes in patterns of medical care have stimulated study of the role and status of the dietitian and have accentuated the inclination for recognition of the dietitian as a member of the health team. Two decades ago Mackinnon (89) stated, "It was the historical fate of the dietitian that her work should have been closely allied with the therapeutic team of doctor and nurse in the practice of medicine."1 According to the prevailing concept most dietitians working in hospitals at that time were more than likely relegated

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to the kitchen. However, many problems associated with diet could be solved more quickly if the dietitian were to become a member of the medical professional team and play a more truly clinical, i.e. bedside, role (41). Dietetic journals abound with scholarly opinions about an ideal role but the generally accepted occupational status of the dietitian was aptly summarized by Krehl:

The dietitian has not attained an appropriate place in the health care team and has not had the opportunity to participate significantly in the decision-making processes involved in the delivery of health care to patients and to communities.  

Changing Roles in Medicine

Occupational roles must be examined and defined in the context of present health delivery systems if medical and allied health workers are to cooperate as a team in this futuristic society. The countless demands placed on the physician make it impossible to provide all aspects of diagnosis and treatment for his patients. But the physician must share the responsibility for health care if the expertise of paramedical specialists is to be effectively utilized. The physician who asserts a dictatorial control over all health activities presumably fails to ascribe an appropriate role to allied medical professionals. Satisfactory definitions of role for new positions in the

medical field are lacking "in a system in which rigidly defined roles and ranks are the rule." 3

The functions of new health specialists are not always well known and are often not stabilized or accepted (90:167). Resentments, frustrations and role ambiguity are intensified by the unavoidable duplication of professional functions. A somewhat similar situation exists in the long-established professions which are striving to achieve recognized health team status. Any adjustments in the position or role of one component in the system necessarily require changes in the roles of others. Every new solution for one problem of role definition will create an issue for the role partners unless the group arrives at consensus of individual occupational roles.

Accepting the assumptions that there is a health care team and that the physician retains control as captain of such a team, it follows that the physician determines to a great extent the amount of responsibility delegated to qualified professionals for certain aspects of care. Roles in a functional team are often incompatible with the traditional mission of allied health workers as they seek upward mobility, expanded opportunities and higher status. Hospital dietetics is one profession which

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has been and continues to be stigmatized by an obsolete role. Current trends in health care foster an expansion of responsibilities for the dietitian and a new role definition as a member of the health team.

The Role of the Dietitian

The term dietitian in this study refers specifically to the nutrition specialist, sometimes called 'therapeutic or clinical dietitian' whose duty is to provide direct nutritional care for patients. The progressive dietitian can neither define her role nor assume desired recognition as a member of the health care team without cooperation from her associates. As a strategic role partner and leader of the team, the physician exerts a primary influence in the changing occupational role of the dietitian. Physicians are thought to be unaware of how much dietitians can contribute to them or to their patients (29). But physicians continue to be educated apart from allied medical personnel who comprise the health team. Furthermore, Atwell recently stated: "Little has been done to train the physician in the delegation of tasks and responsibilities or in how best to utilize the services of others."4 Failure of physicians and dietitians to agree upon or at least recognize the dimensions of an evolving

role definition can only lead to frustration and conflict among and between the two professional groups.

Factors other than limitations and apparent misunderstandings imposed by physicians are important in delineating an ideal role for the dietitian. Dietitians who are satisfied with traditional and restrictive roles present major obstacles to others who strongly support internal reform. Deficiencies or obsolescence of education and training may deter some dietitians from full participation in health team activity. Within the hospital setting, restrictive policies, shortage of skilled technical workers and conditioned priorities in allotment of time may also prevent dietitians from providing direct patient nutrition care.

Empirical data are necessary to establish the existence of these issues. Opinions about the role and career aspirations of the dietitian are based on isolated experience and situations. Published statements about physicians' beliefs and impressions of dietitians appear largely to be the unsubstantiated products of conjecture. Serious attempts are being made at the national level to clarify and specify the role of the dietitian. Any assumptions upon which the revised role definition of the dietitian is based must be supported by valid evidence.
Purpose of the Study

The American Dietetic Association has assigned top priority to a program which is designed to

Assist the dietitian in expanding contributions to the health care team, and in consultation with the physician take an active role of making decisions concerning the dietary management of patients including prescriptions of the diet.\(^5\)

Allegedly, physicians are unwilling to relinquish medical authority and permit other health professionals to prescribe treatments following diagnosis by the physician. Dietitians as members of the health team cannot assume a role which is inconsistent with that attributed to them by the physician who, in this case, has a primary relationship as a role partner.

This study was undertaken for a threefold purpose:

1. To determine the level of consensus between clinical dietitians and physicians on tasks, activities and attitudes which characterize the role of the dietitian.

2. To observe the extent to which dietitians and physicians perceive differences between actual and ideal role performance of the dietitian as a member of the health team.

3. To ascertain the influence of common deterrents perceived by dietitians as basic to dichotomies between

actual and ideal role performance of the dietitian.

**Statement and Significance of the Problem**

**History of the Role of the Dietitian**

The term 'dietitian' was first used in 1899 at the annual meeting of The National Home Economics Association. In the original context the term designated that person who specialized in the knowledge of food and could meet the demands of the medical profession for dietary treatment (86). At the turn of the century diet as a treatment for disease was in an incipient stage and the dietitian was usually associated with a food clinic or cooking school or employed to teach the nurse how to prepare and serve food to the sick (46).

At first detailed duties of the dietitian were largely determined by individual persons or the employing institution until standardized functions were described by the Office of the Surgeon General in 1920 (30). The formation of the American Dietetic Association in 1917 served as an effective body to unify the purpose of dietitians. In 1936 the Bureau of Vocational Information characterized the profession of dietetics as "the science of planning, calculating and preparing diets based upon a scientific knowledge of digestion, metabolism and excretion."\(^6\)

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this publication the Bureau distinguished between classifications of 'administrative' and 'therapeutic' dietitians and listed responsibilities of each which conformed to standards established by the American College of Surgeons.

The Dictionary of Occupational Titles (34) illustrates a progressive specificity in defining 'dietitian.' In the early editions of the Dictionary (1939 and 1949) a single general definition for 'dietitian' is given:

Applies the principles of nutrition to the feeding of individuals and groups: plans menus and special diets with proper nutritional value for a hospital, institution, school, restaurant or hotel. Determines dietetic value of foods and food products. Purchases food, equipment and supplies. Supervises chefs and other food service employees. Maintains sanitary conditions. Prepares educational materials. 

In the supplement to the second edition (1955) of the Dictionary published six years later, a classification for therapeutic dietitians is distinguished as follows:

Supervises preparation and service of special diets in accordance with prescription of PHYSICIAN: formulates menus for therapeutic diets to provide indicated proportions of nutritional elements and in accordance with patient's food habits and preferences. Instructs kitchen personnel in type and quantity of food to be prepared and method to be employed. Inspects meals for conformance to prescribed diet and standards of palatability and appearance.

In the third and latest edition (1965), a health team role for the dietitian is clearly enunciated:

---

Consults medical, nursing, and social service staffs concerning problems affecting patients' food habits and needs. Formulates menus for therapeutic diets based on indicated physiologic needs of patients and integrates them with basic institutional menus. . . . Instructs patients and their families on the requirements and importance of their modified diets, and how to plan and prepare the food. . . .

In a recent publication the American Dietetic Association described the 'clinical nutrition specialist,' more commonly designated as the therapeutic dietitian, as "a person with expertise in nutritional treatment." According to the requirements of the description such an individual can evaluate the nutritional status of a person, plan his nutritional care, and direct implementation of the plan of dietary treatment. This specialist is assumed to work with other members of the health team but accepts direct responsibility for the diet prescription and the nutritional care of the patient.

In the formative years of the profession dietitians generally worked autonomously in remote areas of the hospital and had little communication with physicians or other members of the health team. Barber wrote, "Each dietitian had to rely upon herself to do what had to be done and to establish a system for her manifold duties."

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Because of autonomous working conditions any changes in the function of the dietitian occurred from within the ranks and ordinarily did not require compliance among other groups. The newly created image of the dietitian as a decision-making member of the health team calls for direct social confrontation with physicians and members of other health professions.

Strategy for implementation of the health team role of the dietitian can be adequately planned only after several questions have been answered. Has the perception which the physician has of the dietitian changed as her functions have been adapted over the past 70 years? Is the present role aspiration seen as a logical step in professional development and service or as a medical revolution? Do physicians support full and equal membership for dietitians on the health team? Does the practicing dietitian share the enthusiasm of leaders in the dietetic profession for new role expectations? Is the current educational program designed to meet Minimum Academic Requirements for membership in the American Dietetic Association perceived by dietitians as adequate preparation for the contemplated role involvement? This research does not provide direct answers to these questions but furnishes clues to basic queries. This study is restricted to the
dominant issue of role consensus between dietitians and physicians.

Role Theory and the Problem

The concept of social role lends itself to an investigation of the role of the dietitian with respect to consensus between physicians and dietitians. Role theory designates that persons occupying various positions in the social system are expected by others to behave in certain ways and in addition define for themselves appropriate modes of behavior. Each position incumbent has a social role to perform. However, the way one individual defines his personal role may not be in complete accord with the suppositions made by others in that same position or by those in related counter positions (115).

The constructs of role theory can be applied to a study of the clinical dietitian. Practicing physicians and dietitians are committed to the service of patients. Physicians are ultimately responsible for medical care and usually act as leaders of health teams which provide care of the patient. Traditionally, physicians prescribe all treatments including dietary treatment and education. The totality of nutrition care including dietary prescription is ascribed to the dietitian by the expanded role definition. Such a role for the dietitian cannot be conceived outside the role of the physician and whatever authority
he appropriates to her. A given role cannot be perceived apart from one or more other roles. The meaning and implications inherent in any role are thus seen in the entire network of roles, or the role system of which it is a part.

A physician may perceive the dietitian as one who accompanies him on rounds, suggests dietary treatment and uses creative and independent approaches in nutritional care and education of patients. Other physicians may perceive the dietitian in a more traditional role of 'visiting' patients, writing diets, checking trays, and giving diet instructions. Some physicians may not be opposed to the assumption of leadership by the dietitian in patient education but may restrict the dietitian from functions that involve participation in decision-making activities. Individual dietitians may discern their ideal position in a different range of points on this same continuum of activities.

This study was designed to identify the extent to which physicians and dietitians agree on the functions which comprise the ideal role for the dietitian. Role consensus is a necessary factor in quality job performance. If the ideal dietitian is considered as one who embraces a progressive role but in reality she is wedded to an office to perform routine tasks, dissatisfaction can
be predicted. Conflicts are likely to arise, frustrations and job dissatisfactions will ensue and performance is apt to deteriorate if the dietitian conceives her own role as that of a vital and dynamic member of the health team but the physician ascribes to her a 'kitchen' role (53). The dietitian may share identical role perceptions with the physician but she may be inhibited in performance because of poor communication or lack of understanding with the physician, restrictions of hospital policy or lack of self-confidence. The ultimate result of dissensus is that "care will continue to become less satisfactory, even though there are massive increases in cost and numbers of personnel."¹⁰

Role consensus is essential to generalizations about status or role of one position incumbent. Klapp (74) equated the importance of consensus in sociological positions with that of energy in physics—namely, as a unifying concept, an abstraction that includes and relates more specific concepts and data. Members of the health team have practically no capacity to work together unless role consensus is developed. Likewise, complex systems for institutional patient care can be effective if sufficient consensus is generated to support roles for each member

of the health team.

Role consensus does not obliter ate expressions of character. Professionals who occupy the same position will always bring to role behavior their own unique per- sonalities, talents, and experiences which modify individual performance. In her occupational activities each dietitian relates to several physicians; in his practice a physician may encounter many dietitians.

The achievements and personal qualifications of any one dietitian are transcended in this study of role. Definitions for the ideal role and descriptions of the actual performance of dietitians are general statements that allow for the individual differences of the persons who may perchance occupy the role at any one point in time. Accordingly, no attempt was made to pair physicians and dietitians in the same institution or even in the same area of the country.

Importance of the Study

Current minimum academic requirements approved for membership in The American Dietetic Association are the same for all dietitians. The dietitian who actively participates in decision-making activities of the hospital health care team is likely to present the same credentials as the dietitian who perceives her role as 'visiting' patients and writing or calculating diets. Obviously, one
dietitian could feel poorly prepared for her role while
the other might sense that her education is not used to
greatest advantage. Academic standards can be more easily
established and justified if the ideal role of the dieti-
tian, with its necessary competencies, can be identified.

In this investigation an input was sought from rep-
resentative groups of dietitians and physicians. Ques-
tionnaire responses were elicited from all geographic
areas of the United States. No differentiations were made
between the role of the clinical dietitian in a small hos-
pital and a large medical center. The contributions of
the present study toward defining the position 'dietitian'
do not discriminate between the size or location of the
hospital.

Communication between role partners can be effective
only if some consensus exists. Presently there is no evi-
dence on which to base the assumption that physicians and
dietitians agree on what the role of the dietitian should
be. This study will assist in elucidation of trends in
role conceptions and role consensus and provide a basis
from which to promote changes in role conceptions and plan
consensus-developing programs.

Objectives

The objectives of this study were to elicit answers
to the following questions:
1. Does agreement exist among dietitians and physicians on perspectives toward decisions, tasks and responsibilities which comprise the ideal role of the dietitian?

2. Is the role as perceived by these two groups traditional or liberal in its aggregate of tasks and responsibilities?

3. To what extent do physicians and dietitians perceive the dietitian as fulfilling her role expectations?

4. What factors prevent the dietitian from ideal role performance?

Definition of Terms

For purposes of this study the following definitions of terms will apply.

Dietitian: those members of The American Dietetic Association who are employed by hospitals specifically for direct nutritional care of patients. The terms medical or clinical dietitian, medical nutritionist and the usual interpretation of therapeutic dietitian are used synonymously as dietitian in this context.

Physicians: those Medical Doctors who practice in specialties which were considered to be more directly related to nutritional services: pediatrics, internal medicine, surgery, family medicine, general practice and obstetrics.

Role: a limited set of activities performed, responsibilities assumed and qualities and attitudes required by a
person to validate his occupancy of a specific position. Roles are linked with a position, not with the person who is temporarily occupying that position.

**Position**: a cognitive organization of role expectations; a collection of rights and duties designated by a single term, which in this study is 'dietitian.'

**Role Expectation**: a cognitive structure inferred from the tendency of role incumbents to define for themselves descriptions of actions and qualities which are believed appropriate to a specific social position, and from a previous association with regularities in the behavior of role incumbents perceived by role partners.

**Role Conception**: limitations and latitudes of tasks and responsibilities which are perceived as proper to a position.

**Role Consensus**: the shared perspectives toward or agreement on those responsibilities, specific tasks and qualities which comprise role expectations for a position.

**Traditional role**: a role for the dietitian which consists primarily of tasks which have long characterized the position, such as writing diets, checking trays, complying with requests for diet instructions, etc.

**Progressive or Liberal role**: a collection of responsibilities and activities assigned to the dietitian which are primarily prescriptive, judgmental, or consultative and
denote a high degree of professional autonomy.

Health care team: those professionals who are devoted to direct concern for the health care of persons.

Health care: prevention, treatment or cure of illness; limited to hospital care in this study.

Scope of the Investigation

Sources of Data

A Role Conception Inventory including functions, characteristics and attitudes which designate the role of the health team dietitian was developed for use in this research. Data were collected using a questionnaire mailed to selected groups of physicians and dietitians from all geographic areas of the continental United States. Physicians were chosen on the basis of selected medical specialties from towns where there is a hospital of sufficient bed capacity to warrant the full time services of a dietitian. Therefore, generalizations inferred from this study cannot be applied to all physicians without some danger of misrepresentation.

Within the population sample, individual physicians and dietitians were likely to differ in their orientation to the role of the dietitian. A respondent may perceive the dietitian in a completely traditional way or he may be utterly ignorant of those tasks performed or competencies achieved by the health team dietitian and therefore be
confused with the delineation of functions on the questionnaire. This factor was controlled to some extent by the procedure used in selecting physicians and dietitians. Even in these controlled conditions there was no assurance that the respondent would be familiar with a health team role for the dietitian. On the other hand, the expertise of the dietitian may be recognized but resented by the respondent and displayed by a negative attitude reflected in all parts of the questionnaire.

Method

The use of a mailed questionnaire has certain inherent limitations. Conclusions of such a survey are necessarily based, to a greater or lesser extent, on the percentage and completeness of returns.

Statement of Hypotheses

The following hypotheses were tested in this investigation.

1. Role consensus among physicians:
   1.1. There is lack of consensus for role conception of the dietitian among selected groups of physicians.
   1.2. Physicians show high positive role consensus for items which characterize the dietitian in a traditional role.
1.3. Physicians show high negative consensus for items which characterize the dietitian in a progressive role.

1.4. There is no difference in role conception of dietitians among physicians of different medical specialties.

2. Role consensus among dietitians:

2.1. There is lack of consensus in the role conception of the dietitian among role incumbents.

2.2. Dietitians have high positive role consensus on those items which encompass professional responsibility and high status behaviors.

2.3. Dietitians have high negative consensus for items which suggest restrictions on responsibility of the dietitian.

2.4. There is no difference in role conception of dietitians perceived by role incumbents employed in hospitals of different bed capacities.

3. Consensus between physicians and dietitians:

3.0. There is no difference between role expectations of the dietitian perceived by dietitians and physicians.
4. Role performance:

4.1. Physicians perceive no difference between ideal and actual role performance of the dietitian.

4.2. Dietitians perceive no difference between ideal and actual role performance of the dietitian.

4.3. There is no difference in role disparity perceived by dietitians and physicians.

4.4. There is no difference in perception of role disparity between dietitians who perceive the role of the dietitian as progressive and all other dietitians.

4.5. In those behaviors where the physician is a role partner, role disparity perceived by dietitians is primarily attributed to a lack of cooperation from physicians.

Organization of the Study

The evolving role of the dietitian and the need for new role definitions in this era of change are summarized in this first chapter. If the dietitian is to take a vital position on the health team it is essential that she and the physician agree in principle on important aspects of the role definition.

Chapter II is devoted to a review of the literature
related to the health team as a social unit within the organizational structure of the modern hospital, characteristics and functions of the dietitian, her relationship to the physician and the health team and some aspects of role theory relevant to these topics.

Chapter III contains the research methodology. Findings are presented in Chapter IV and discussion and interpretations of findings are the subject of Chapter V. In Chapter VI is found a summary of the study, general conclusions and some recommendations for action based on findings and implications of this investigation.
CHAPTER II

LITERATURE REVIEW

For the clinical dietitian the primary occupational environment is the modern hospital and the work group is the health team. The hospital and the health team can be viewed as sociological systems and thus serve as the normative framework in which the role of the dietitian is derived, perceived and brought to fulfillment. The study of any role requires a true perspective of matrices involving the culture, the organization, formal and informal group relationships and self expectations.

A general description of the hospital environment will provide the orientation for an examination of the health team from a sociological point of view. The tradition and expectations of allied health professionals and physicians and factors that affect team activity will be examined. The third portion of the review will deal specifically with the concepts of role and consensus as they relate to a study of the health team and the dietitian. Lastly, characteristics of the dietitian will be considered: qualities and stereotypes, the influence of a common tradition, duties and responsibilities, and factors that
determine relationships to the physician and the health team.

The Hospital Milieu

Modern hospitals are the product of more than fifteen centuries of evolution in administration and management, medical science, health education, financing, cultural demands and the recent explosion of technological innovations. Greatest changes have occurred in the past century—expansion in size of the physical plants to accommodate increasing demands for beds and space, recognition of needs for ancillary services, rapid proliferation of occupational roles within the social structure of the hospital and, most importantly, a significant redefinition of the philosophy and purpose of the hospital and the corresponding change in patient status.

Hospitals are more than medical workshops. They are large and complex sociological organizations with a recognizable hierarchy of statuses and roles, rights and obligations, attitudes, values and goals (27:233). Each hospital is unique in its spirit, variety of services, availability of resources and social milieu. Yet the word 'hospital' implies that all organizations so designated will conform to certain generalizations about goals, activities and social structure.

Goals of individual hospitals are normally
delineated in terms of medical care services, education and training and research. Administrative, professional, medical and auxiliary personnel pool their expertise and resources for optimum patient care and comfort. Workers bring a variety of personal goals to the work environment but the dominant theme of patient care enables different groups with disparate objectives to work together in the hospital setting.

Although the common goal of patient care provides a unifying principle for health workers in the institutional environment, Wilson (146) identified two elements characteristic of hospitals which are deleterious to group cohesion. These two factors, (a) the diffusion of authority and (b) the struggle for occupational prestige, are basic to an understanding of interpersonal behavior in hospitals. Smith (125) discussed the first of these elements, the dual line of authority. Historically, physicians are 'volunteer staff members' or 'guests' in the hospital. But legal implications and the virtual monopoly of physicians in medical knowledge prevent hospitals from functioning without physicians. Thus the medical staff, an independent collegial organization with its own stratification of specialties, practicing physicians, residents and interns is outside the bureaucratic arrangements of hospital administration. Direct responsibility for
patient care, a primary function of the hospital, is under the jurisdiction of the physician. Yet physicians are often present at the hospital only to make ward rounds and write 'orders' while numerous health professionals and ancillary workers employed by and responsible to legitimate hospital management carry out the prescriptions and orders (44:141). Thus, control of bureaucratic management over its 'line' personnel is limited to providing the means by which medical orders may be accomplished.

Authority in a hospital is diffuse: several attending physicians retain ultimate responsibility for patient medical treatment and the administrator is accountable for the hierarchical system of management within the institution.

The second factor, the struggle for occupational prestige, is rooted in job segmentation and assignment of functions. Each department within the hospital specializes in providing some service leading toward the achievement of institutional goals. Task diversification requires an appropriate division of labor with corresponding specialization and stratification into occupational groupings.

Each professional is eager to be autonomous in his area of specialization. Moreover, the desire for upward mobility and higher occupational status within each
discipline complicates the interprofessional power drive. Many persons representing all levels of all occupational groups may be involved in the single task of caring for a particular patient. Efforts of all personnel are directed toward the same client while the orientation and loyalty of each professional remains with the specialty group which he represents. In fact, hospital personnel who provide service in the same primary milieu are often oblivious of the role played by mutual co-workers (146).

The process of professionalization complicates the task of developing teamwork between individuals in the occupations (52:231). Each professional group tends toward functional autonomy and develops a parochial mentality which tends to widen the gap of ideologies and cooperation between work groups. Not only do professionals in the hospital fail to recognize the contributions of others but the occupational groups "vie with one another for increased recognition, new privileges, and for more advantageous positions in the power system."¹ Brown (19:79) attributed a great deal of the tension observed in many hospitals to the struggle of individuals and entire professions for less dependency, greater esteem and

higher status.

Wilson (146) evinced the physician as model for prestige and autonomy among medical allied personnel. Allied health professionals strive toward the independence, command of technical knowledge and standards of competence legitimized in the medical profession. Each group wages a private battle to attain professional goals and define for itself a 'rightful' place in the social order. Magraw (90:170) reported health professionals in each occupation are prone to seek status and recognition apart from all other medical allied groups. He stated:

Partly because of their lack of recognized professional status, some 25 different professional and technical groups, in relative isolation from each other, have organized to raise standards, declare their professional role, define their functions and stake out boundaries. This sometimes involves unilateral attempts to reassign the duties and functions of other professional groups.2

Hughes reminded his readers "one would, however, expect occupations of long standing to resist attempts, especially from outsiders, to determine the content of their work or rules governing it."3

Despite the struggle for prestige, the objective


'optimal care of patients' unifies professionals in the hospital setting. In theory and principle all persons in the hospital are part of a team cooperating to achieve a common goal. Mutual respect and cooperation among personnel depend in large part on recognizing the role each position incumbent plays, of what the work consists and why it is necessary (15:107).

The dietitian is operative in the hospital setting. She is oriented by the tradition of dietetics as a profession and by the transforming role of nutrition care in institutions. She is not immune to pressures which arise from the dual system of authority or from the internal struggles for prestige and status.

**The Health Team as a Social System**

No line of work can be fully understood outside the social matrix in which it occurs or the social system of which it is a part (66). In its simplest form, a social system is two or more people interacting with each other. Even if each of the two persons in the group performs his tasks with superlative excellence, the interaction introduces a third and potentially disruptive dimension into the system. Problems or tensions that arise because of social relationships must be resolved if the system is to be maintained.

All social interaction is ordered by two
determinants of human behavior, the psychological aspect and the sociological aspect (138). The psychological dimension pertains to those behaviors which are a function of motivational, perceptual or cognitive variables of individuals. Four important psychological elements which determine the quality of group interaction are education, training, personal goals and experiences of individuals. In addition, doctors and medical allied personnel bring to their groups another psychological component, the attitudes nurtured in the process of professionalization.

Sociological aspects of interaction are elements of group, rather than individual traits. Effective group interaction is a result of coordination and integration of individuals. In hospitals the goal of coordination is the care of patients, health professionals may identify the individual and 'health care team' designates the group. This team, like all groups, is ruled by the basic sociological factors governing all organized human activities. The health team is distinctive, though, in its composition and function and therefore differs from other groups oriented toward common goal achievement. Primary differences include the tenuous position of the incipient allied health professional, the aura of tradition which surrounds the physician and the concept of the health team as a functional group.
Allied Health Professionals

Allied health manpower is described by the Department of Health, Education and Welfare as:

All those professional technical, and supportive workers in the field of patient care, public health, and health research who engage in activities that support, complement, or supplement the professional functions of physicians, dentists, and registered nurses; as well as personnel engaged in organized environmental health activities who are expected to have some expertise in environmental health.\(^4\)

The use of terms paramedical, medical allied and allied health professional qualify some statements about allied health manpower. The term 'medical allied' usually excludes occupations related to dentistry, nursing or environmental control (106:6). Because medical allied is therefore a specific term, Freidson (43:49) has described 'paramedical' as occupations which fall under the jurisdiction of the physician and are characterized by a relative lack of autonomy, responsibility, authority and prestige. Greenfield (51) designated 'allied health professional' as those health occupations which require academic preparation between the baccalaureate and doctoral levels. But generally, allied health professions designate the groups enumerated in the Health Manpower Act of 1968

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found in Appendix A.

The allied health professional has paramedical status and can never achieve total autonomy and authority in his discipline. Paramedical status obligates the health professional to work under the direction of a physician. The function of the allied health professional is given legitimacy by its relationship to the role of the physician. Freidson identified this limitation as integral to paramedical professions and the source of occupational tension. He stated:

"... Those paramedical occupations which are ranged around the physician cannot fail to be subordinate in authority and responsibility and, so long as their work remains medical in character, cannot gain occupational autonomy no matter how intelligent and aggressive its leadership." 5

Three other aspects of paramedical status are important in understanding the recognition of allied health professionals. These are (a) role ambiguity, (b) composition of paramedical groups and (c) professional ideologies. The first of these aspects is related to the diffusion of authority in the hospital and the assignment of duties and functions by an "outsider" to accommodate other professional groups. Professionals are vexed by the apparent lack of understanding displayed by co-workers. Others seem not to have the same appreciation as the

professional for his competence, status and level of responsibility. Hughes summarized the vexing problems for the health professional as:

Differing conceptions of what the work really is or should be, of what mandate has been given by the public, of what is possible to accomplish and by what means; as well as of the particular part to be played by those in each position, their proper responsibilities and rewards.6

The second aspect which influences attitudes toward paramedical status is a disproportionate number of paramedical workers are women and those considered to be of the less valued ethnic, racial and religious groups in the United States (43:53). There is sometimes conflict between the professional woman and the physician in the medical setting, a fact which is especially pertinent for the profession of dietetics in which almost all professionals are women. King outlined the cultural belief which is basic to the discord between sexes in health professions:

... Women are less independent, less capable of initiative, and less creative than men, and therefore need masculine control and guidance. Responsibility for the diagnosis and treatment of sickness has long resided in the male physician, and with the development of a role that has been subservient to that of the physician in the care of the ill, it is easy for this role to be filled by women.7

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The third characteristic, unrealistic professional ideology, derives from the emphasis placed on dignity and autonomy during formal education. The hierarchical system bars the allied health professional from the freedom or recognition which he desires and which his professional training leads him to believe are rightly his (19:74). Generally, the health professional has rather clear cut role expectations; when these presumptions are not satisfied he may experience a sense of acute role deprivation. Since it is the physician who is able, by his occupational position, to order a great deal of the total environment of medical care (44:128) health workers often blame the doctor when their search for self-expectations is thwarted (19:75).

The allied health professional thus brings to the health team a host of personal attitudes and characteristics which necessarily affect his role behaviors. On the other hand, the physician also has experienced a process of socialization which affects his orientation toward the health team.

Physicians

The structural position of the medical profession in society strongly influences the pattern of relationships within the health care team. Thus, it is essential to examine individual characteristics of the physician and
his attitudes toward allied health professionals prior to a consideration of the team.

The physician is required to be decisive, authoritative and assertive if he is to assume the role of physician. Magraw (90:172) asserted the physician by his very nature reflexly resists any development which may require him to relinquish an authoritative position in medicine. For the physician to recognize the need for special skills of others is to acknowledge limitations in medicine. Furthermore, the physician is stereotyped as being resentful of interference (124:90), annoyed by any insinuation that another may exceed him in skill or knowledge (95) and fearful of encroachment upon his profession (51:154).

The physician may be cognizant of team expectations for delegation of responsibility to health professionals. Yet, while he must depend on others for complete and successful care of the patient, tradition catches the doctor in the net of prestige brought about by public preservation of attitudes based on the concept of his "honorable calling" (95).

Physicians have an obligation to the public which sanctions medical legitimacy (52). The public may demand the physician to continue in his classic role and not delegate any authority or responsibility to other health professionals. The patient may be hostile toward the
physician, or refuse treatment if tasks or decision-making activities are shared with allied health personnel. In the final analysis, it is the physician who is held legally responsible for treatment which is executed under his supervision.

The Health Team

The term 'health team' is commonly applied to the coordinated efforts of physicians and medical allied professionals in providing high quality health care. The concept of a team has been defined as:

People working together with a special coordination of effort and collective efficiency; it means a natural sense of teamwork and a spirit of comradeship that makes for successful cooperation.8

Pascasio further described the team concept with reference to role definition. She stated:

To function as a team, all members must know their own specific roles as well as the specific roles of others on the team. They also must know how all of the roles relate.9

The team approach in hospitals is becoming increasingly prominent because of medical manpower shortages, inequitable distribution of medical personnel and rocketing costs of health maintenance (137:66, 33). The health


team concept was specially strengthened by legislation in 1966 which granted federal support to Schools of Allied Health Professions and to educational programs for allied health personnel.

The very concept and structure of the health team entails several deterrents to effective team coordination. First, the physician may perceive himself in the midst of a group of ancillary personnel whose professional activities simply involve the filling of his prescriptions. On the other hand, the technical staff may try to maintain professional identity through the exercise of clinical judgment and discretion and conceive of a prescription not as an order but as an orientation of the physician (62: 111). In either case, a health team in the strict sense does not exist. The former situation suggests monopoly of all decision-making by the physician and the latter implies a failure of the group to recognize specific roles and the relationship of professionals to each other (105).

However, little thought has been given to the role of the physician on the health team. As a team member the physician must orient himself to a new role which is different from traditional concepts. Wilson described the expectations made of physicians in this new role as follows:

He may be expected to continue in a position of great influence but not transcendent authority;
of unusual competence but not charismatic quality; of individualism strongly tempered by the requirements of team interaction and organizational division of labor.\textsuperscript{10}

The second deterrent to effective team coordination is an extension of the first. It arises from the absence of a well-defined role for the physician. Roles of all technical staff must be defined in relationship to all others in the system. Freidson (44:128) conceptually placed the physician at the center of the health team and accented the fact his position patterns all role relationships among professionals who provide health related services. But Magraw (90:170) has described an isolationism among professionals which prevents consolidated efforts among diverse members of the health team to study the role matrices of each position.

This isolationism results in the third factor detrimental to team activity, the social barriers erected between occupational groups. Burling (21:312) observed that the interaction of dietitians and doctors is seldom close or truly reciprocal, especially in larger hospitals. Spangler (127) showed that dietitians had few problems in consulting with nurses but were not satisfied with their degree of participation on the medical team. Wesson (143)

found that on the ward the doctor was three times more likely to speak to another physician than to a nurse, and his interaction with personnel in other occupational groups was minimal.

Occupational stratification within and between medical (73:185) and health professions (44:144, 76) affects team interaction and patient care (62:137). Homans (59) observed communication between members of different statuses is usually originated by the person of higher rank. The physician has traditionally been awarded highest rank in the medical setting. Thus, in the social order the doctor may be expected to initiate all interaction. But Wesson (145) showed that physicians seldom take the initiative for communication with health workers having lower social status than the physician. Seeman and Evans (122) concluded stratification does not favor excellence in medical intern performance, hospital care or hospital teaching functions.

The fourth deterrent evolves from the theory no health team can be a reality unless the physician ascribes to allied health professionals a share in the decision-making processes (33). Magraw (90:169) maintained physicians as a group have not fully accorded any allied health practitioner professional status or the occupational autonomy they claim. Furthermore, physicians are said to
be detached from the problems of identity and status of paramedical workers and this lack of concern is believed to have a dampening effect on medical teamwork (33).

The fifth deterrent to health team activity is that graduates of traditional professional programs seem to lack the technical skills required for vibrant health team activity (62:60).

This enumeration of deterrents to health team coordination elucidates some reasons for the perplexity among leaders and educators in medical and allied health professions. A health care team may exist in theory but practically speaking, it has not come of age in the medical world (121, 134). Furthermore, there is little discussion or elaboration of the health team concept anywhere in the professional literature (80). The prevailing status of the health team was recently summarized by Light:

> The physician continues to delegate duties rather than share responsibilities. . . . Until the health team concept is clarified, or at least analyzed in terms of what any relevant occupational group thinks about it, the nature and scope of allied health manpower will remain out of focus.11

**Role Theory**

The theory of role is an appropriate frame of reference by which to examine the relationship of the dietitian

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to the physician and her position on the health team.

King (73:69) pointed out role theory is especially pertinent to the health professions in analyzing the perceptions and behaviors of physicians, health specialists and patients. The roles to be played by the profession of dietetics or by dietitians as a group have not been the subject of intensive research. Cleveland (26) recognized dietitians do not enjoy the role stability of physicians and urged the charting of the role and position of the dietitian in relation to other well-established positions. Role ambiguity of dietitians was noted by Wagner and Dreyer (140) while Beeuwkes (11) called for a redefinition and delineation of the role.

The concept of role is highly institutionalized and is restricted to structural features of social and occupational relationships (118:13). The abstraction of role presupposes people are in agreement with their respective obligations to each other and each knows what to expect from all others. Certain common norms and expectations will be typical for like positions in different groups. Thus, universal statements can be made about each position in a system.

Role Defined

The concept of role was first introduced into sociological literature in 1945 by Linton (82) who defined role
as "the sum total of the cultural patterns associated with a particular status." Any role should include the attitudes, values and behaviors ascribed by society to all persons occupying a given status or position. In addition, role comprises legitimate expectations of a particular person made by others occupying different positions within the same system. Role is the dynamic expression for the structural components of status and position.

Since its initial use, the Linton concept has been refined principally by Sarbin (120), Newcomb (101) and Haas (55) for broader application in social systems. Role defined by Sarbin is the common body of expectations for members of a particular group. He characterized role in terms of expectations with a dual cognitive structure. Expectations are inferred from previous experiences of behavior on the one side, and on the opposite side from the tendency to group a number of descriptive actions and qualities expected from incumbents of a distinctive social position.

The verbal description of a specific role must be distinguished from actual role performance. The individual who performs the functions of a certain role is differentiated from the role. What the person does, or the

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way he behaves in a particular role is determined by (a) motivation, (b) self-perceptions and (c) uniqueness of the individual. No two role incumbents perform identical roles in exactly the same way (100:332).

Role is always stated in terms broad enough to apply to all occupants of a position. However, not all activities of an individual are components of the same role. Each person has several roles. For example, Mary Jones, who has a role as 'dietitian' may also assume the role of mother, friend, club president and wife. Human behavior which flows from any of these latter roles is irrelevant in the concept of role behavior prescribed by the position 'dietitian'.

Newcomb stated that "role consists of a common understanding of the functions of a position." Role behaviors are distinguished from other behaviors to the extent (a) they are characteristic of all occupants of a position and (b) role consensus is shared by the behaving individuals as well as by those with whom they interact. Thus, every role is comprised of several relationships and each of these affiliations ascribes a set of role expectations.

A specific role is determined by a combination of expectations from many sources. These include official expectations filtered through administrative channels, expectations of colleagues, reference groups outside the immediate work situation and self-expectations. Activities associated with the role of dietitian are expected from all role incumbents and such behaviors are commonly perceived as appropriate by other dietitians, physicians, patients, members of the health care team and dietary employees, to name a few.

Haas described role in functional terms as:

A set of standards and procedures which define the rights and obligations of persons in certain social situations, sanctioned by interacting members and authorized by the larger society or particular segments of it.\textsuperscript{14}

Using the definition of Haas a specific role can be characterized by four dimensions of behavior: (a) tasks, (b) attitudes which describe how role actors should feel about each other, (c) deference implying the kind of prestige or respect oriented behaviors anticipated in a role and (d) authority which identifies who has control and how decisions are made. Role behaviors are distinguished from the role and refer to the actual behavior of individuals as they assume roles. Such behavior is a function of

\textsuperscript{14}J. Eugene Haas: Role Conception and Group Consensus. Bureau Business Research, The Ohio State University, Columbus, Research Monograph No. 117, 1964, p. 1.
group norms and is personally motivated and characteristic for each individual (31:330).

Concept of Position

The concept of position or status is implicit in an understanding of role. Position has been described as a cluster of roles perceived as belonging together (54), as a cognitive organization of role expectations made explicit in actions and qualities (119) or simply a unit of social structure (12). Hence, a position is comprised of a plurality of roles and changes in any part of the social system will lead to changes in other parts (100).

Position signifies a recognized category or collectivity of persons. This collectivity can be illustrated for the position 'dietitian' as a partial complex of role relationships (55:29) involving the dietary department chairman, physician, nurse, patient and hospital administrator (Figure 1). This array of roles and the accompanying set of role relationships comprises in part the 'role set' of the dietitian (50).

Role Expectations and Role Conception

Role expectations arise from the social system and make demands for behavior or qualify what the person should do. If the role partner is to behave in a particular way, he must perceive expectations as realistic,
FIGURE I
A COMPLEX OF ROLES RELATED TO THE DIETITIAN
coherent and clear. His understanding depends on the effectiveness and accuracy with which the expectations are communicated to him and the preciseness with which he as a social object perceives the expectation. Accuracy of perceptions increases when expectations persist over time and when satisfactory interpersonal relations exist between the role partners (138). Role performance is evaluated by conformity with role expectations. When a role incumbent conforms to expectations social interaction will be enhanced, when he conforms only in part the likely consequences are tension and frustration (73:70).

Role conception designates a position as understood by the role incumbent and role partners. Corwin (31) showed a positive association between the certainty with which a role is conceived and the self-assurance of the incumbent. Uncertainty was shown to create dissatisfaction with the present role and to motivate persons to search for less ambiguous positions. Role ambiguity may cause the incumbent to seek a position which is elaborately described. Corwin related the discrepancy between ideal goals and actual role performance to the dynamics of career aspiration. The discrepancy or role frustration may lead to an adjustment of goals or to an intensification of present aspirations.

To summarize, role is a conceptual entity by which a
sociological position or status can be perceived and by which a delineation of tasks, values, attitudes and characteristics common to all position incumbents is possible. Position and role are structural concepts and are in a different realm than the person who occupies a position in a role system. One person may occupy more than one position and be a part of several role sets at the same time; not all behaviors are specific to any one role. Furthermore, role behaviors are dependent upon individuals. Role performance is a function of role expectations and role conception is the criterion by which role incumbents are judged by role partners.

Role Consensus

Role consensus may be defined as agreement or shared perspectives between role partners concerning mutual expectations, role conceptions or role performance. In day to day activities role consensus is primarily related to job satisfaction. Dissensus, or lack of consensus, is sometimes employed to determine the effectiveness of mutual expectations. The effects of dissensus have been succinctly described as follows:

Disagreement on expectations increases ambiguity of the role conception and also self-conception, making classification of either the self or others difficult. Failure to place the self and others clearly not only frustrates the person's
original goals, denying the self-conception, but it also interferes with efficient interaction.\footnote{Marvin J. Taves, Ronald G. Corwin and J. Eugene Haas: Role Conception and Vocational Success and Satisfaction. Bureau of Business Research, The Ohio State University, Columbus, Research Monograph No. 112, 1963, p. 10.}

Despite the salience of consensus, and the disruptive effects of its absence, research studies on this topic have not been prolific. Those published, however, do provide a basis from which to develop hypotheses about consensus between physicians and dietitians. For purposes of discussion, investigations on role consensus can be assigned to one of three categories: (a) consensus between role partners or dyads, (b) consensus between persons occupying similar or counter positions in selected institutions, or (c) the study of consensus as the dependent variable to measure the effect of age, sex, education, experience, etc.

Dyadic consensus was first used by Gross, McEarchen and Mason (53) in a study of school administrators. This method has been adapted for use in most studies related to role consensus. Four studies summarized here represent investigations of consensus between two persons in a role set.

Tosi (136) examined the relationship among role expectations, role consensus, and performance of salesmen
in the buyer-seller and seller-salesmanager dyads. He found role consensus between buyer and seller was not a significant factor in evaluating the effectiveness of a salesman nor was the level of consensus between salesman and manager related to performance ratings by the superior.

Green (50) supplied evidence which showed increased interaction between group members tends to increase the accuracy with which behavior is perceived. Consensus in managerial dyads reported by Green was weakly but positively influenced by correlations between similarity in years of service, age, years of education, childhood environment, organizational identification and political attitudes. Green concluded that role consensus is strongly and positively related to job satisfaction and to role performance.

Haas (55) studied role consensus between dyads in hospital nursing units. Instruments used for data collection were a role conception inventory in which items were restricted to role performance, a sociometric test and a schedule of the number of friction events that occurred within the group. The level of consensus and patterns of sociograms were used to identify friction and disharmony in groups. Results of this study indicated role consensus is a function of educational background and the level of
role consensus is inversely related to incidence of friction. Haas concluded role consensus is probably a major factor of intragroup harmony.

Julian (72) employed a modified card sort method to judge role performance items and to describe the roles of physicians, registered nurses, practical nurses and patients. A dyadic design was used and each individual paired with every other individual in the same occupational group and in counter groups. Results were contrary to the supposition that greater socialization and educational preparation will result in less dissensus on the role prescriptions for self and for counter positions. Practical nurses showed less agreement than patients on role definitions of registered nurses. Registered nurses exhibited high dissensus on their perceptions of the role of practical nurses. These departures from the expected were ascribed to a movement among practical nurses to assume some of the role behaviors hitherto reserved for the registered nurse.

The second type of research on consensus emphasizes agreement between persons occupying similar or counter paired positions in different institutions. Gorman (48) reported a study of role conception and role consensus of purchasing agents, functional managers and executives from 15 manufacturing firms. In 70% of the descriptive items
used to define the role, purchasing agents as a group found disparagement between the ideal role perception and the actual role definition in their respective firms. Functional managers and top executives indicated disparagement on 60% and 40% of the descriptive items. Thus, the further a person is removed from the role under consideration, the less incongruity he perceives between the ideal role prescription and actual definition of that role.

Gorman found purchasing agents, functional managers and executives shared their perspectives of the "ideal" on 72%, 50% and 75% of items. High consensus existed among purchasing agents on those items of a professional nature and those which dealt with staff authority and control. Greatest dissensus between the groups were those about which an intragroup consensus was not evident. Incumbents of the same position in different firms did not differ greatly in their role expectations.

Herron (58) reported nurse practitioners and physicians tend to perceive the "nurse" role as primarily related to care functions. Herron contended the greatest single reason for dissensus and confusion in the role of the nurse lay in the ubiquitous use of a universal label to designate persons with varying degrees of expertise. The author argued there is no single role for the licensed
nurse practitioners who have been educated for different purposes within diverse types of programs.

The third method of studying consensus is illustrated by two studies in which consensus is used as the dependent variable. In one study Thomas (133) measured the level of role consensus as a function of organization size. In smaller bureaus greater role consensus existed between welfare workers and their supervisors and the roles were more broadly conceived than in larger institutions. Thomas suggested higher consensus in smaller organizations may be due to greater cohesion in primary groups and to a stronger willingness to accept common goals in providing services to clients.

Sills (123) related personal and organizational characteristics to role conception and consensus in the nurse-attendant dyad. There was no apparent relationship between disparity in age or sex and the level of consensus. Lower levels of consensus were attributed to more than three years difference in formal education and a three year disparity in nurse experience. Findings supported previous reports which indicated smaller organizations tend to favor higher levels of role consensus.

To recapitulate, a high level of role consensus is positively related to job satisfaction and intragroup harmony and may influence higher performance ratings. On
the other hand, dissensus is associated with high levels of friction and disharmony. Frequent interaction of group members and smaller organizational structures have a favorable effect on the development on consensus. Similarities in education, work experience and personal characteristics may influence role consensus but socialization and professionalization seem to have a strong counteracting effect on the impact of these variables in determining consensus. Part of the problem in arriving at consensus for some roles may be due to strong traditional expectations or in semantic connotations of certain established roles.

Role Theory and the Dietitian

The American Dietetic Association (ADA) was formed in response to common interest in food problems associated with World War I. Dietitians, having been established in food clinics since 1890 but now given the support of a distinctive professional organization, assumed control of dietary departments and their operation from the matron or housekeeper (61:582), the pharmacist (141), or the nurse (144). Occupational emphasis changed from the previous concentration on "feeding the sick" to management of institutional food services.

Thirty years after the professional organization (ADA) was chartered Prall (109) observed dietitians had
been so engrossed with establishing status there had been little effort to critically study their role. This supposition is borne out even now by the meager empirical evidence which supports many statements and generalizations about dietitians and their duties, responsibilities, skills, attitudes, relationships, functions and job performance.

The pressing need to delineate the role of the dietitian is accented by three emerging trends: current transitions in health care, emphasis on the team concept in medical care and trends toward professionalization among allied health personnel. The transition from curative to preventive and comprehensive health care affects the emphasis and delivery of nutritional care in health maintenance programs (99:45). These changing health trends require a redefinition of the role of the dietitian to provide for legitimate nutritional services in broad and future-oriented health programs (9).

The second trend, present-day emphasis on the team concept in medical care, affords all dietitians the unique opportunity to redefine their role to include an integral position within the health team. Fifty years ago MacEachern (85) articulated the desirability of dietitians and doctors working together as a therapeutic team in the treatment of disease, particularly in cases where food was
implicated in prophylactic or curative measures. Dietitians have allegedly been established members of the health team (129) but this position is praised in theory rather than actualized in practice (78). Physicians spend a large share of patient consultation periods performing tasks that could be expeditiously discharged by less broadly trained personnel (23). The dietitian should be ascribed a vital role in effectual team health care assuming that at least a portion of the non-diagnostic tasks of the physician relate to nutrition and that dietitians are better prepared than physicians to provide nutritional care (3).

The third trend is professionalization, a key concept in the emerging medical allied occupations. The appropriation of authority and control in matters relating to human nutrition is the current phase in sequential development of the dietetics profession (22). The trend toward professionalization in dietetics is enhanced by campaigns on two poles of the continuum of occupational prestige: (a) delegation of menial tasks to positions of less prominence and (b) assumption of duties traditionally reserved for higher levels on the stratification ladder.

On the one extreme, it has become common practice to assign supervisory and clerical duties to non-professional dietary assistants (42, 75). More recently, the position
"dietetic technician" has been created to make available to the dietitian assistants with technical skills in nutritional care (108). Thus the dietitian is released for deliberative tasks which have generally been ascribed to the dietitian. These functions include interpretation of diet orders, consultation with physicians, interviewing and instructing patients and clinical research (65, 68).

At the opposite pole of the professionalization process there is a thrust for what is known as "upward position expansion" (125). This movement prompts dietitians to:

Encourage physicians to share with them such responsibilities as evaluating the patients' nutritional needs for care as part of the plan of treatment and constructing a practical dietary prescription for patients with medical consultation and guidelines.16

Clearly, these trends in professionalization demonstrate the need for a redefinition of role for the dietitian of today (87).

The Dietitian

Two important factors in the redefinition and proclamation of a new role are (a) the qualities and stereotypes which are attributed to the dietitian and (b) historical influence of dietetic tradition which is

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concerned primarily with the classic role definition and established duties and functions of the dietitian.

Qualities and Stereotypes

Although sweeping statements are sometimes made about characteristics common to all dietitians, only three studies dealing with the topic have been found in the literature. None of these studies is specific for therapeutic dietitians but may relate to any specialty area in the profession. The first report was published by Cleveland (26) in which personality patterns associated with the professions of nursing and dietetics were compared. Dietetic interns evidenced personality traits stressing achievement, success and desire for challenge. Dietitians "approach their challenge with an air of confidence, a feeling of capability and the poise and social facility for getting out of tough places."17 In addition, dietitians were found to be status conscious and to exert a feeling of natural superiority. The need for prestige is reportedly satisfied through opportunities for influencing others.

This latter finding was supported by Hornaday (60) who suggested dietitians prefer situations where they can

be in a position of authority. Participants in the Hornaday study showed negative interest in clerical activities. But a study of activities of therapeutic dietitians revealed that 44% or the largest segment of work time was consumed in written communication (102).

Wagner and Dreyer (140) reported therapeutic dietitians as a group were very aware of social status distinctions in expressing aggression. Dietitians were directly and indirectly aggressive with high status and low status figures. Administrative dietitians were more directly aggressive than therapeutic dietitians. Conversely, more therapeutic than administrative dietitians tended to blame themselves for failures and to admit mistakes to low status individuals. These authors raise two important questions in relating perceptions of the dietitian to her role definition. First, do dietitians perceive and are they perceived as having sufficient training to function as "therapeutic-nutritional experts" with high competence? Second, does the lack of role clarity and proliferation of responsibilities in food service management, teaching and membership on the health team place too great a burden on the dietitian? The forthcoming report from the Study Commission on Dietetics (94) may shed some light on these unanswered dilemmas.

Many other assertions have been made about
dietitians. More often than not the generalizations are used to explain discrepancies in role performance. For example, therapeutic dietitians are stereotyped as lacking in initiative (148), by superficiality and/or rigidity in education and training (117), isolation (113) and involvement in routines or administrative functions (102, 142). The dietitian allegedly fails to recognize the implications of psychological dimensions of patient and professional relationships (29, 124). What is more, dietitians are reported to lack job satisfaction (104) and exhibit a high turnover rate in hospitals (141, 79). In other instances it is said:

The dietitian has been relegated to a position 'near the kitchen' where she may be thought to prepare the menus, even 'cook the meals' and be the prime focus for criticism by patients. . . . 18

Two technical generalizations reported in the literature are related to inferences made about dietitians. First, food, considered to be the work object of the dietitian, is perceived as a maintenance function in the hospital and not as a part of the therapeutic milieu (84). Second, the profession of dietetics satisfies all the features which are characteristic of the classic professions but lacks public recognition of the status (145). No doubt, these allegations will have a negative effect on

the profession of dietetics and will influence attitudes and role expectations of physicians and health team members.

The Tradition of Dietetics

Role Definition

In 1945 Margaret Mead (92) outlined the role of the dietitian. This role definition of the clinical dietitian allowed great variation in scope and applies for the most part as the ideal in present day medical care practices. The dietitian was characterized by Mead as (a) a specialist who can translate prescribed nutrient needs into exact amounts and kinds of foods prepared in specific ways, (b) an expert in delineating the relationship between food and bodily needs who can guide others in selecting foods to produce physiological changes or to maintain a status quo, (c) a professional who understands the psychological and sociological and economic influences on dietary practices and assists others to make appropriate food choices within the constraints of these factors and (d) a member of the therapeutic team providing nutritional care as an integral part of treatment.

Allocating a role and grouping activities for the dietitian is fundamentally a social process (67). Role performance may differ from the role definition as the former is greatly influenced by occupational, educational
and sexual prestige and status of the participants. An investigation of common hospital practices provides insight to the significance of social factors and norms which may prevent the dietitian from observing an ideal role.

At the time Mead delineated the role the occupational status of the dietitian and hospital practices deterred implementation. A contemporary of Mead described practices in the hospital dietary department:

Rarely if ever does the doctor find his way to the special diet kitchen and still more rarely is the dietitian called to the patient's bedside to consult with the doctor as to the most effective methods of meeting the patient's dietetic needs.

She [the dietitian] should also meet the physician often in order that she may receive assistance and advice in her efforts to help him solve his patients' food problems.19

In some instances these conditions continue to exist and exert an influence on the daily function of the dietitian. Only the pretentious would assume Mead's laudatory role for the dietitian would be effectual when imposed in these prohibitive environments.

A sense of inadequacy could result among dietitians who compare educational achievements of physicians with

dietitians. An inferior self-concept may prevent the dietitian from incarnating the ideal "specialist" or an "expert" (117). Most dietetic practitioners possess a baccalaureate degree which in most dietetics curricula prevents specialization in patient nutrition care. Usually the dietitian who pursues graduate education and achieves specialization is employed as a public health nutritionist or in a formal teaching situation rather than in the clinical or hospital setting.

Duties and Responsibilities

Though three decades have elapsed since a role was defined for the clinical dietitian much of the literature and exiguous research pertaining to the duties and responsibilities of the therapeutic dietitian focuses on one or another facet of the role developed by Mead. The first three aspects of this expansive role definition relate to patient-client interaction and education while the fourth identifies the dietitian as a member of the health care team. The justification for a universal acceptance of this role definition is its conformance with classic functions while supporting full and equal status for the dietitian as a member of the health team.

In 1962 a special committee of the American Dietetic Association compiled a list of "Responsibilities of the Dietitian to the Physician" (110). In 1965 the
Association published the "Therapeutic Responsibilities of the Dietitian" (39). These enumerations (Appendix B) illustrate the duties and responsibilities generally accepted as prerogatives of the clinical dietitian.

Research studies related to the duties of the dietitian seem to focus totally on amounts of time devoted by the dietitian to different categories of activity. These investigations indicate adaptations of task assignment to realistic work situations. Noland and Steinberg (102) reported in 1965 therapeutic dietitians spent an average of 12.3% of their work day in patient contact and 5.6% in personalized services to patients. More time (35%) was devoted to written communication than to any other activity. Dietitians spent 14.6% of their time in oral communication, including professional consultations, while only 0.4% was spent in ward rounds with physicians. Dietitians classified 21.4% of the working hours as non-productive. In general, the amount of time spent in various activities was not a function of hospital size or other factors of work environment.

The report of a 1953 survey of general hospitals indicated 62% of dietitians made out diet slips, 32% fed patients metabolic diets and 46% distributed trays to patients (147). The percentage of working hours devoted to various activities by dietitians in a research hospital
was investigated in 1963 by Tillotson and Loughney (135). These authors concluded only 3% of the time was used to perform duties that could be and normally were delegated to nonprofessionals while a large portion of time was given to duties and communications which required a knowledge of dietary modifications and a high level of skills.

The effectiveness of the dietitian is in large part determined by the quality and orientation of her interaction with the patient (139). Yet Noland reported the dietitian spends about 12% of her time in direct patient contact (102). Robinson (114) stated dietitians must devote full time to patient education but this activity must differ from the traditional practices of "visiting patients, writing diets, checking trays and giving diet instructions."\(^{20}\) In addition others state the dietitian must be held responsible for nutrition education and follow-up to be provided within the community and for the patient after his discharge from the hospital (8, 85, 114).

An alleged but contended deterrent to effective nutritional care of patients is the appropriation of administrative and food service responsibilities to the therapeutic dietitian, or therapeutic assignments to the

administrative dietitian. Hubbard and Donaldson (64) reported few administrative activities are considered by hospital superintendents and directors of dietary departments as part of the responsibility of therapeutic positions. In a 1958 study Wellin (142) surmised responsibilities for food service aspects of dietary care placed insatiable demands on the dietitian and patient education tended to be correspondingly sacrificed. A decade later Robinson (114) stated many dietitians continued to have administrative responsibilities which restricted their effectiveness in patient counseling. At least in one instance when dietitians were relieved of some administrative duties these dietitians were asked by physicians to use their specialized dietetic skills and information and were accepted as members of the health team (135).

Alternatively, patient related activities seem to be a major concern of administrative dietitians. Gillam (45) found in a 1940 study of dietary departments in hospitals of all bed capacities the person who most often provided nutrition instructions for patients was the "head dietitian." Responsibility for patient education was ascribed to the combined grouping of assistant, ward, therapeutic and clinic dietitians less often than to head dietitians alone. Bloetjies, Couch and Gottlieb (13) studied the duties of dietitians as reported in 1962 by
heads of dietary departments from 118 hospitals in New York State. They noted that 40% of administrative dietitians calculated prescribed nutritional elements of modified diets and planned menus for modified diets. Twenty per cent of these administrative dietitians prepared menu items for patients, 10% accompanied physicians on medical rounds and 20% instructed clinic patients on modified diets.

These investigations suggest no fixed pattern of activity has been established for different dietitians, to say nothing of defining a distinctive role for the clinical or therapeutic dietitian.

Dietitian and Physician as Role Partners

It is beyond the scope of this review to examine the many relationships of the physician but the role and function of the dietitian can be understood only in the light of a patient-doctor-dietitian triad. A dietitian is employed by the hospital to provide quality nutritional care and is subject to hospital policies and legitimate authority but answers to the physician for dietary treatment of patients. Dietary care is but one segment of health care coordinated by physicians. In effecting services for hospitalized patients the physician relies on the competence of many professionals organized and administered independently of his own individual practice (43:115).
The nature of responsibility and autonomy the physician ascribes to the dietitian can be predicted on the basis of two factors: (a) the nutrition education of the physician and (b) the role of the dietitian as perceived by the doctor. Few physicians have any significant exposure to nutrition education during medical school (88, 91). Even though present medical education is rigorous, curricula in many schools are being accelerated to accommodate more students and satisfy the shortage of physicians. An alternative to nutrition as a distinct unit of study in the medical curricula is the acceptance of the dietitian by the physician as an integral member of the professional health team. The physician would then realize the significant contribution to patient nutritional care which is afforded by the dietitian (3).

Almost four decades ago Wilder (144) and Morrill (96) stated few physicians had sufficient knowledge of dietary treatment to make proper use of nutritional services. In the presence of the dietitian who may be considered inferior but better educated in the field of nutrition, some physicians are said to feel uncomfortable. English (41) suggested if the physician would develop a new course of training for the dietitian she might be more effective in providing services to physicians and patients.

Limited communication between dietitians and
physicians may impede the development of authentic role expectations. Some physicians think of the dietitian as a food server (149) while others simply ignore her (8) and the expertise she could offer to patient nutritional care and to the therapeutic team (148). On the other hand dietitians contend physicians have a limited understanding of nutritional care and the organization of hospital dietary services and constraints (15:109). In one survey 77% of dietitians indicated physicians hindered rather than accommodated adequate patient dietary instruction (142). Lack of communication between dietitians and physicians is considered an underlying cause of incongruity between role conception of the dietitian and her role performance (69). Where communication is poor, or the dietitian held in low esteem, responsibility for role deprivation is often placed on the physician (5, 57, 124).

However, many dietitians are highly respected colleagues of the physician (87, 91). Spangler (127) found that physicians who worked closely with the dietitian rated her higher in communication skills, understanding goals of health team activity and ability to apply theoretical knowledge in nutritional care of patients than did physicians chosen at random. When the competence of the dietitian is recognized she actively participates at a decision-making level in patient nutritional care (6, 129).
Dietitian as a Member of the Health Team

Social systems, of which the medical team is one example, have two types of activities: (a) instrumental or functional activities to achieve goal attainment and (b) expressive activities which help groups keep internal equilibrium by managing the tensions which are set up in an effort to achieve the stated objectives. Johnson and Martin (70) suggested that in the physician-patient-nurse triad the physician is the task leader and prescribes those treatments required to attain or maintain health while the nurse makes the patient comfortable and receptive of that which has been prescribed. Neither of these activities is exclusive but each group predominates in one or the other aspect of activity.

The dietitian, too, has been described as one possessing "expressive" rather than "technical or instrumental" skills. One doctor commented as follows:

The doctor wants his patient comfortable, contented and pleased with the food, and he holds you responsible. He expects the dietitian to have knowledge of scientific dietetics but considers it more important that she know how to choose and prepare simple, nutritious foods and serve them in such a manner that they appear tempting, even to a sick person.²¹

The extent to which this expressive dimension is expected in modern dietary treatment has not been determined.

As noted earlier, the struggle toward upward position expansion for the dietitian motivates her to arrogate some prescriptive activities. Conflict is inevitable if the dietitian continues to be identified primarily with expressive functions. Young (148) acknowledged awareness on the part of the dietitian of her obligation to work with patients only under medical supervision. Burling (21:301) and Brener (16) emphasized the need for the dietitian to contribute to discussions and decisions of the health team and assume responsibility for greater flexibility in patient relationships and nutritional care if she is to be a professional ally of medicine rather than the provider of a purely technical service.

The role of the dietitian as a member of the health team is characterized by her identification as a scholar in nutrition (129), researcher (135, 144), educator of professional and medical personnel (111, 132, 144, 148), and leader of the team when nutritional concepts are discussed (20). The participation of the dietitian in the everyday decision-making processes of the health care team, patient and professional education or research is in large part determined by the physician and the hospital administrator (21:305, 149).

At least 30 years have elapsed since the dietitian was first specified as a member of the medical team (111);
modern authors give support to this role (41, 93, 103, 113, 114, 129, 148). A dynamic role on the health team may be theoretically ascribed but Krehl emphatically denied the reality of health team participation for the dietitian when he stated:

There is little doubt in my mind that the dietitian, generally, has not attained an appropriate place in the health care team and has not had the opportunity to participate significantly in the decision-making processes involved in the delivery of health care to patients and to communities.  

This statement of Krehl was verified in a study of Michigan dietitians. Spangler (127) found greatest discrepancies between role conception of dietitians and role performance in attendance at ward rounds and medical conferences, prescription of special diets, participation in decision-making processes and following patients after their hospital discharge. Greatest congruence existed between role definition and task performance of the dietitian in writing menus, determining food likes, providing instructions for and visiting with patients, consulting with nurses and calculating diets. Dietitians indicated supervision of food preparation and tallies of diet food are not consistent with the ideal functions of a dietitian.

Prescribing the diet and attending ward rounds with the physician are two activities toward which the dietitian

aspire as a health team member, but which are highly controverted as part of her role. The American Dietetic Association assigned the task of dietary prescription to the newly defined "Clinical Nutrition Specialist" (l), more commonly known as therapeutic dietitian. Some physicians do delegate responsibility for recommending dietary treatment and countersign each order (29, 116). Graning (49) proposed the dietitian might appraise each patient and chart recommendations for dietary treatment. Freidson (43:48) maintained the physician retains control of the health care system while the work of others is performed at the request or prescription of the physician.

Spangler (127) found dietitians who had completed an internship believed physicians would prefer the dietitian to prescribe diets. In another phase of her study Spangler asked doctors to select their preferred procedure from a list of four methods for ordering diet changes if the "ideal" dietitian were available. Seventy per cent of physicians chose to retain authority in changing dietary prescriptions: 14% without seeking the opinion of the dietitian, 23% after consulting with the dietitian and 33% allowing the dietitian to modify a prescription after approval of the physician. Twenty-seven percent of the doctors preferred to allow the dietitian to change a prescribed diet pending approval of the physician. The
characteristics of an "ideal" dietitian were not defined by Spangler; no data are available to justify qualifications said to be necessary prior to the dietitian accepting the responsibility for making or changing dietary prescriptions.

In 1925 Wilder (144) wrote the dietitian should accompany each regular staff physician on his rounds not less than twice a week. Nearly 50 years later Graning (49), a physician, suggested doctors set a time for rounds which would be attended by dietitians, pharmacists and nurses—all of whom would make specific contributions to patient management. Such a proposal implies participative team rounds are not the general practice among physicians. Stare (128) suggested dietitians should attend "nutrition rounds" to make a positive contribution to patient dietary treatment and nutrition education for medical personnel. Young (148) indicated the dietitian should be a familiar member of the team during rounds with the physician. Mertens (93) maintained attendance at rounds is an opportunity for the dietitian to communicate with the physician.

There is no evidence to support the common preconception physicians object to, or at least do not encourage, attendance of the dietitian at medical rounds. An indication of how doctors may view this practice can be inferred from data related to the nursing profession. Not all
physicians (85%) believe the nurse should attend hospital rounds (58). Perhaps even fewer doctors would expect the dietitian to attend rounds regularly.

Summary

The clinical dietitian functions in the sociologically complex hospital which is characterized by a diffusion of authority between medical staff and administrative hierarchy and by the excruciating struggle of health professionals for greater autonomy, recognition, prestige and professionalization. Allied medical professionals, as members of the health team, are necessarily restricted in activity which is dependent upon and achieves legitimacy through a relationship with the physician. The position of health professionals is greatly influenced by role designations of other professions, sexual status and pre-conceived role expectations.

Health team activity is to a large part determined by the physician since he holds ultimate authority in the medical setting. The doctor is characterized as dictatorial and desirous of retaining control of all decision-making in diagnosis and treatment of patients. Effectiveness of the health team activity is minimized by a lack of adequate role definitions, ascription of all decision-making powers to the physician, limitations in education of health professionals and stratification with consequent
social barriers among team members.

Role theory is an appropriate tool for examining the position of the dietitian on the health care team. Role is defined as those activities and responsibilities, sanctioned by interacting members and authorized by a larger society, which define the rights and obligations of the dietitian. Role is distinguished from the position incumbent; position is characterized by a plurality of roles. Role behavior is dependent upon individuals while role performance is a function of role expectations and role conception.

Consensus between role partners is basic to job satisfaction and intragroup harmony. High consensus is associated with smaller rather than larger institutions, similarities in age and years of service and level of education. Incumbents of the same position in different organizations do not differ greatly in role expectations.

The need to redefine the role of the clinical dietitian is accentuated by evolutionary changes in health care practices and trends toward increased professionalization. Dietitians as a group are characteristically status and authority conscious, success and achievement oriented, aggressive and self-confident. Other assertions about personality and professional traits frequently appear in the literature and necessarily affect role expectations.
but are unsupported by empirical data. Duties of the clinical dietitian derive for the most part from the role delineated in 1945. The dietitian devotes a large percentage of time to written communication and, in some instances, to administrative duties.

The physician greatly influences the autonomy and decision-making authority ascribed to the dietitian. Role expectations are related to nutrition education of the physician and role performance of the dietitian; these influences are modified by communication and affiliation between the two groups.

The dietitian has been assigned a role in "expressive" activity; the professional tendency is toward a prescriptive function in dietary treatment of patients. Recognition as a vital member of the health team, attendance at medical rounds and freedom to prescribe dietary modifications are key issues in role delineations of the clinical dietitian.
CHAPTER III

METHODOLOGY

Introduction

This study was undertaken to determine (a) the level of agreement which exists among physicians and dietitians and between these groups on tasks, activities or attitudes which are reported to comprise the health team role of the dietitian, (b) the extent to which physicians and dietitians perceive differences between present role expectations and role performance of the dietitian and (c) the influence of common deterrents which dietitians perceive as basic to dichotomies between role expectations and role performance.

Design of the Study

Descriptive and analytical survey designs were used in this research. The descriptive design allowed characterization of the research sample and was the method used to determine the importance of particular deterrents which dietitians perceived as barriers to ideal performance. The analytical survey method was also used since a major purpose of this study was to explore specific hypotheses of relationships between particular variables. The
research hypotheses were formulated to identify levels of role consensus among and between the two occupational groups and to determine differences in perceptions toward ideal and actual role performance of the dietitian.

All data were derived from responses to a questionnaire developed by the investigator (Appendix C). The questionnaire consisted of a list of 34 behavioral items. Physicians and dietitians indicated their perceptions of role expectations and actual performance of dietitians for each of the items. Dietitians were requested to indicate probable reasons for role incongruity they perceived for any item.

Population and Sample of Physicians

The selection of population and sample of physicians for this study was based on several assumptions. First, physicians from specialties in which nutrition is often an integral part of medical treatment were expected to exhibit an interest in the activities of the dietitian and a willingness to participate in the study of her role. The medical specialties considered to have a particular relationship to nutritional care were internal medicine, obstetrics-gynecology, pediatrics, surgery and general practice.

Second, greater interest in the study was anticipated among physicians who admit patients to hospitals in
which services of a therapeutic dietitian are available. Since hospitals of at least 150 beds were assumed to employ the full time services of a therapeutic dietitian, the physician population was limited to cities with at least one hospital of the required bed capacity.

Third, a 20% return of questionnaires was expected from physicians. This prediction was based on results of a study of medical continuing education by a physician who mailed a questionnaire to professional colleagues in the same city (25). The mailing of that questionnaire was accompanied by an intensive communication program urging physicians to complete and return the questionnaire. A final response of 32% was achieved. Rigorous pursuit of physicians was prohibitive in the present study and a smaller percentage of returns was expected.

Only physicians from the continental United States, outside the military, were included in the population. A sample of 2000 physicians was selected to ensure at least 400 questionnaires for statistical analysis based on a 20% return. The sample was stratified and larger representation assigned to specialties in which nutritional care is presumably given a prominent place or is more frequently implicated in medical treatment (Table 1).

A quasi-random sampling technique (97:77) was used to select names and addresses of physicians from two
sources. Physicians with medical specialty in internal medicine, pediatrics, obstetrics or surgery were selected from the 1970-71 Directory of Medical Specialists (36). Membership in Family Medicine as a Specialty Board was not listed in the 1970-71 Directory but physicians were given the option of indicating this as their specialty on the survey questionnaire. General practitioners, cardiologists and gastroenterologists were selected from the 1969 American Medical Directory (2).

**TABLE 1**

**POPULATION SAMPLE OF PHYSICIANS**

<table>
<thead>
<tr>
<th>Medical Specialty</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Practice</td>
<td>500</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>700</td>
</tr>
<tr>
<td>Cardiology</td>
<td>100</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>100</td>
</tr>
<tr>
<td>Other</td>
<td>500</td>
</tr>
<tr>
<td>Obstetrics-Gynecology</td>
<td>100</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>500</td>
</tr>
<tr>
<td>Surgery</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2000</strong></td>
</tr>
</tbody>
</table>

A cursory study of the American Hospital Association Directory (83) guided selection of physicians from cities which listed at least one hospital of 150 or more bed capacity. Several random observations were made to
determine the relationship between cities which listed a hospital meeting the research specifications and number of physicians listed for that city. As a result physicians were not selected from cities where less than 20 physicians were listed or where less than 5 were given for any of the selected specialties.

Population and Sample of Dietitians

The population of dietitians used in this study was that group of American Dietetic Association members who stipulated on their 1971 dues information data card they resided in the continental United States and were employed as therapeutic dietitians.

No basic distinctions in personal qualifications, professional preparation, or continuing education were made among clinical dietitians who are employed in different geographical regions or in the variety of hospitals representing all types and sizes. Thus no regional, occupational or individual restrictions were imposed in delimiting the population of therapeutic dietitians in the United States.

Names and addresses of the dietitian population were obtained through the Executive Director of The American Dietetic Association, Chicago. The roster totaled 3577 names of which 110 were eliminated due to residence outside the United States or insufficient address information
leaving a total population of 3467 dietitians.

One thousand dietitians were selected from the population using the quasi-random sampling technique. Distribution of one half the number of questionnaires to dietitians than to physicians was based on three factors. First, approximately equal numbers of returned questionnaires were desired from each group. Second, a return of approximately 50% was expected. This anticipation was derived from previously reported surveys of therapeutic dietitians (69, 81, 140). Third, dietitians were expected to display greater interest than physicians in this study.

**Development of the Questionnaire**

The questionnaire in its final form consisted of a single sheet containing background data specific to physicians and dietitians and 34 behavioral items related to the role of the dietitian. Demographic data for each group included information specifying position or area of medical specialty, sex, age and hospital setting. A Role Conception Inventory (98) was used for the substantive section of the questionnaire. Role Conception Inventories have been utilized almost exclusively as the research instrument in other studies of role consensus (48, 55, 115, 123).

A tentative inventory of 60 items which alluded to or specified functions to be performed or qualities to be
exhibited by the health team dietitian was compiled. Since a basic tenet of this investigation was that physicians and dietitians differ in their perceptions of role expectations of the health team dietitian, the inventory included a wide range of items which are stated in the literature to be functions of the dietitian who may or may not actively participate as a team member. In June, 1971, this list of 60 items was submitted to 14 dietitians and dietetic educators in Columbus, Ohio, who served as experts and ranked items on continua according to level of role expectation, degree of present role performance and traditional-progressive nature of the item. The 14 member group was also asked to indicate items they considered ambiguous, biased or irrelevant to the study.

The questionnaire was revised to incorporate pertinent suggestions of the experts. The final inventory consisted of 25 activity items and 9 items related to qualities and attitudes of the dietitian. Questionnaires to physicians and dietitians requested answers to two questions in relation to each item: (a) Should this item be a part of the function of the dietitian? (Column A) and (b) Does the dietitian now perform this function? (Column B). In addition, dietitians were asked to choose from seven deterrents to answer the question, Why does the dietitian fail to perform this function if it should be
a part of the role? (Column C).

A modified Likert scale was used for response categories. Respondents on the Likert-type scales make attitudinal judgments of items on a five-category continuum ranging from "strongly agree" to "strongly disagree" (97: 238). For purposes of brevity in the questionnaire for this present study the normative method of Roger (115) was adapted. In the normative-type scale respondents are asked to indicate on a continuum whether an item "definitely should" to "definitely should not" be a part of the role being considered. Thus, responses to this questionnaire were arranged on a normative continuum and six, in preference to five, points were used to prevent neutrality in the responses.

Distribution of the Questionnaire

An explanatory cover letter, instruction sheet, the questionnaire and a coded self-addressed, stamped envelope were sent to 2000 physicians and 1000 dietitians in October, 1971 (Appendixes C and D). Envelopes were coded to allow one follow-up of non-respondents; no attempt was made to code questionnaires or to pair names with code numbers.

A second letter and a copy of the original questionnaire were sent in November, 1971, to physicians and dietitians who had not responded to the initial request.
for participation in the study (Appendix E).

Coding of Responses

Responses from returned questionnaires were coded by the investigator in DIGITEK computer scanning sheets for automated card punching. Responses from the two sample groups were handled separately throughout the data analysis processes.

All questionnaires which provided some information but which contained some incomplete or unanswered items were included in the analyses. In a few instances explanatory notes or qualified answers were given in Column A or B. These responses were assigned, on the judgment of the investigator, to one of the six response categories. The very few qualified answers given by dietitians in Column C were treated as separate responses in the statistical analyses. Several dietitians listed more than one deterrent for dichotomies between role expectation and role performance. When several impediments were indicated one was chosen for entry on the DIGITEK form and other responses were tallied manually and used in the final analyses of the data.

DIGITEK scanning sheets were submitted to the Center for Evaluation at The Ohio State University where automated card punching was provided. Item analyses and frequency distributions were supplied by the IBM 360/165
computer using existing programs furnished by the Center for Evaluation.

Data Analysis

Information from physicians and dietitians was analyzed as individual sets of data and differences examined among responses of each group and between groups. Calculation of totals and percentages of responses provided information for three purposes: (a) to categorize demographic data to develop a profile of physicians and dietitians in the sample, (b) to establish the basis for a measurement of consensus and (c) to ascertain the overall influence of specified deterrents to ideal role performance as perceived by dietitians. Methods for measurement of role consensus and role disparity were adapted for use in this study from similar types of research described in the literature (18, 72, 112, 115, 133).

The Measurement of Consensus

Role consensus is a shared perspective toward or agreement among members of a role set on those responsibilities and tasks which comprise role expectations for a certain position. In this study measurements of role consensus were applied only to role conception or that part of the questionnaire which addressed the question: Should this item be a part of the dietitian's function? (Column A
of the questionnaire). Each item was considered as a separate entity in all measurements of role conception. Thus, information from dietitians and from physicians was evaluated to determine for each item (a) the existence of consensus among either group and (b) consensus shared between the professions.

Three important aspects of role consensus are intensity, direction and representativeness. Intensity varies according to the strength or weakness of support given to an attitude about a specific item. Direction designates the positive or negative orientation of a commonly shared perspective. Representativeness of a generalized opinion indirectly suggests the level of consensus. Consensus may be high or low inasmuch as a belief can be held by many or few representatives of the group.

Consensus was determined using two measurements: (a) percentage of similar responses from each professional group and (b) sample variance scores of each group. Responses to the inventory items were grouped into three broad categories (Figure 2). Category A included responses "definitely should" and "should," Category B designated responses "possibly should" and "possibly should not" and Category C referred to responses "should not" and "definitely should not." Replies in Categories A and C were considered to be of sufficient intensity to
FIGURE 2
CATEGORIES OF RESPONSES
indicate the respondent concurred the item should or should not be included as part of the role of the dietician. Responses in Category B were not utilized in this analysis because they indicate a position of neutrality or indecision.

All responses on the positive and negative aspects of the continuum indicate the direction of a reply. However, only those answers given in the two extremes of the continuum were considered of sufficient intensity to be supported by the respondent in work situations. The merging of responses to create Categories A and C does combine opinions of differing intensity but these responses do intimate similar perceptions which can therefore be pooled without misrepresenting the intentions of the respondents.

Consensus was said to be present if more than 60% of responses from a group were in Category A or Category C. Level I or high consensus was said to exist if 90% or more of the responses to an item were in Category A or C (Figure 3). Level II or moderate consensus existed when 75-89% of responses were in one of the designated categories. Low or Level III consensus was evident when 60-74% of responses were in Category A or C. Lack of consensus or dissensus was observed when less than 60% of responses were in one of the extreme categories.
Sample variances were used as a second and more sensitive measurement of consensus. This method of measurement does not differentiate direction or intensity of consensus but indicates the degree of conformity or amount of disparity between responses. Variance scores take into account neutral responses in Category B (Figure 2) which were omitted from the first measurement of consensus. Since variance employs squared deviations, differences in responses are magnified and small or moderate variations in the level of consensus are visible. Larger deviations from mean responses are also enunciated in the measurement.
of variance.

Sample variances were computed by the formula

$$\sum_{i=1}^{n} \frac{(x_i - \bar{x})^2}{n}$$

where $$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

One of three degrees of conformity among responses was arbitrarily assigned on the basis of sample variances. A small variance signifies clustering of responses around the mean. High conformity was therefore evident among responses for which calculated variance scores were less than 0.500. Moderate and low conformity of responses were associated with variance scores of 0.501 to 1.000 and 1.001 to 1.500 respectively. Sample variances which were greater than 1.501 denoted lack of agreement among responses.

Considered together these two methods of measuring consensus provided a reliable and sensitive criterion by which to examine consensus of role conception within the two professional groups. Measurement by determining levels of consensus on percentages of responses in Categories A and C took into account the attributes of intensity, direction and representativeness of consensus. Variance scores provided information about dispersion of
responses around the mean or the degree of conformity among opinions.

Consensus between doctors and dietitians was determined by (a) comparing levels of consensus of the two groups on each of the inventory items and (b) chi-square statistics to test the significance of differences in the dispersion of all responses on the six points of the normative continuum and differences in the dispersion of positive and negative (Figure 2) responses.

The Measurement of Role Disparity

Role disparity or differences between role expectations (Column A) and actual role performance (Column B) was measured by calculating interval scores for each item. A t-test was used to determine significance of interval scores. Interval scores were determined by comparing responses given by each participant to all items in Column A with the response to the respective item given in Column B. Questionnaires in which no response was given for either ideal or actual performance on individual items were eliminated from calculations for that item.

Confidence intervals were calculated by subtracting the numerical value (1-6) of the responses given in Column B from the respective numerical value of the response to the same item in Column A. For example, if the response "should" (numerical value "2") was given in
Column A and "usually does not" (numerical value "5") was given for the respective item in Column B, the contribution of that respondent to the confidence interval score would be "-3" \((2 - 5 = -3)\). Numerical differences between responses to ideal and actual performance of each respondent were summed and a confidence interval was calculated for each of the items. The confidence interval thus derived indicates \((P = .05)\) mean numerical value of all responses of dietitians or physicians would fall within the calculated interval. Any observed differences between means of role expectation and role performance will not be statistically significant when the digit "0" occurs in the interval.

Three levels of disparity between ideal and actual role performance were signified on the basis of confidence intervals. Low disparity was observed for items in which confidence intervals ranged from 0 to 1 and thus represented the least discrepancy between role expectations and role performance. Moderate disparity was attributed to those items for which interval scores ranged between 1 and 2. High disparity was indicated when interval scores fell between 2 and 3. High disparity indicates the greatest differences observed between role expectations and actual performance. Incongruity between ideal and actual performance was determined by location of the largest segment
of the interval when a calculated interval extended into two of the arbitrary ranges designating different levels of disparity.

Classification of Activities

For purposes of brevity and clarity of discussion items of the role conception inventory will be abbreviated as shown in Table 2.

### TABLE 2

**ABBREVIATED FORMS OF INVENTORY ITEMS**

<table>
<thead>
<tr>
<th>Inventory Item</th>
<th>Abbreviated Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attends physicians' routine rounds.</td>
<td>Attends medical rounds</td>
</tr>
<tr>
<td>2. Gives seminars for physicians and professional personnel.</td>
<td>Gives seminars</td>
</tr>
<tr>
<td>3. Recommends reliable sources of nutritional information.</td>
<td>Gives nutrition information</td>
</tr>
<tr>
<td>4. Offers information of clinical interest during rounds.</td>
<td>Discusses during rounds</td>
</tr>
<tr>
<td>5. Shows an awareness of current nutrition topics and research.</td>
<td>Is aware of current topics</td>
</tr>
<tr>
<td>6. Takes initiative in making or changing diet orders.</td>
<td>Initiates dietary prescriptions</td>
</tr>
<tr>
<td>7. Recommends an appropriate diet after patient is diagnosed.</td>
<td>Recommends diet</td>
</tr>
<tr>
<td>8. Contacts physician if questions a diet order.</td>
<td>Questions physician</td>
</tr>
<tr>
<td>Inventory Item</td>
<td>Abbreviated Form</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>9. Has ready and accurate information on food composition.</td>
<td>Knows food composition</td>
</tr>
<tr>
<td>10. Follows diet orders without question or adaptation.</td>
<td>Follows diet orders</td>
</tr>
<tr>
<td>11. Is readily available for consultation.</td>
<td>Is readily available</td>
</tr>
<tr>
<td>12. Performs as a full and equal member of the health care team.</td>
<td>Is team member</td>
</tr>
<tr>
<td>13. Makes appropriate notations on medical charts.</td>
<td>Charts information</td>
</tr>
<tr>
<td>14. Has open and cordial communication with physicians.</td>
<td>Is open and cordial</td>
</tr>
<tr>
<td>15. Makes positive contributions to the health care team.</td>
<td>Contributes to team</td>
</tr>
<tr>
<td>16. Applies current research findings to daily situations.</td>
<td>Applies research findings</td>
</tr>
<tr>
<td>17. Makes home visits to patients after they leave the hospital.</td>
<td>Makes home visits</td>
</tr>
<tr>
<td>18. Motivates patients to follow a diet.</td>
<td>Motivates patients</td>
</tr>
<tr>
<td>19. Takes nutrition histories of patients.</td>
<td>Takes nutrition histories</td>
</tr>
<tr>
<td>20. Probes patients' behavior for causes of failure to follow a diet.</td>
<td>Seeks causes for diet problems</td>
</tr>
<tr>
<td>Inventory Item</td>
<td>Abbreviated Form</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>22. Recommends reliable sources of nutrition information.</td>
<td>Gives patients nutrition information</td>
</tr>
<tr>
<td>23. Makes routine visits to patients during mealtime.</td>
<td>Visits patients during meals</td>
</tr>
<tr>
<td>24. Checks each tray for accuracy before it is served.</td>
<td>Checks trays</td>
</tr>
<tr>
<td>25. Instructs patients for whom modified diet is prescribed.</td>
<td>Gives diet instructions</td>
</tr>
<tr>
<td>26. Understands effect of disease on body metabolism.</td>
<td>Knows effects of disease</td>
</tr>
<tr>
<td>27. Has grasp of physical and biochemical bases of disease.</td>
<td>Knows bases of disease</td>
</tr>
<tr>
<td>28. Understands psychological dimensions of illness.</td>
<td>Knows psychology of illness</td>
</tr>
<tr>
<td>29. Delegates clerical and routine duties to technicians.</td>
<td>Delegates non-technical tasks</td>
</tr>
<tr>
<td>30. Shows self-confidence in profession.</td>
<td>Is self-confident</td>
</tr>
<tr>
<td>31. Exercises professional ethics.</td>
<td>Exercises ethics</td>
</tr>
<tr>
<td>32. Is competent in matters relating to nutrition.</td>
<td>Is competent</td>
</tr>
<tr>
<td>33. Has good rapport with patients and hospital personnel.</td>
<td>Has good rapport</td>
</tr>
<tr>
<td>34. Understands the relationship between disease and specific diets.</td>
<td>Relates diet and disease</td>
</tr>
</tbody>
</table>
Some items have been designated as "progressive" or "traditional" in the testing of hypotheses. Two other classifications, duties denoting high levels of responsibility and restriction of responsibility, have been identified for use in the study.

Progressive and Traditional Activities

For purposes of discussion and testing hypotheses some activities were classified as "progressive" or "traditional" on the basis of evaluations made by experts in development of the questionnaire. An activity is said to be progressive if a total of at least 11 of the 14 judges ranked the item within the points "neutral-progressive-very progressive" (no more than 3 "neutral" responses) on the 5-point continuum which ranged from "very traditional" to "very progressive." Progressive activities include the following:

Attends rounds
Gives seminars
Discusses during rounds
Recommends diet
Is team member
Applies research findings
Makes home visits
Contributes to team
Motivates patients

Activities which have long endured as duties of the dietitian are considered as "traditional." Specific activities in the inventory are said to be traditional if
a total of at least 11 of the 14 experts ranked the item within the points "neutral-traditional-very traditional" (maximum of 3 "neutral" responses) on a 5-point continuum which ranged from "very traditional" to "very progressive." Following are the traditional activities:

Knows food composition  
Follows diet orders  
Checks trays  
Takes nutrition histories  
Gives diet instructions

Activities Denoting High Levels and Restrictions of Responsibility

Two other sets of items were developed to classify activities as those which connote a high level of responsibility or occupational status and those which suggest a restrictive role for the dietitian. Activities indicative of high responsibility or status are:

Attends medical rounds  
Gives seminars  
Discusses during rounds  
Initiates dietary prescriptions  
Recommended diet  
Is team member  
Charts information  
Contributes to team

Activities which are restrictive (a) indicate lack of autonomy or freedom to participate in decision-making activities, (b) are routine or clerical in nature and could be relinquished by the health team dietitian or (c) fail to ascribe to the dietitian functions which are perceived as her prerogatives. Two items, "follows diet
"orders" and "checks trays," are considered to restrict the responsibility of the dietitian.
CHAPTER IV

RESEARCH FINDINGS

Introduction

The purpose of this investigation was to ascertain if there is consensus among dietitians and physicians on activities editorialized in professional literature as definitive functions in the role of the health team dietitian. This study addressed only a few of the parameters of role. These parameters are role conceptions of clinical dietitians and physicians, the level of role consensus observed within and between the two groups, the present status of role performance in comparison with role expectations, and deterrents to ideal performance as perceived by dietitians.

Findings will be presented under three general topics. First, demographic profiles of the samples will be presented. The second section will deal with research findings related to consensus on role conceptions among and between physicians and dietitians. The third portion will be related to discrepancies between actual and ideal performance as perceived by the two groups.
Respondents to the Questionnaire

Demographic Profile of Physicians

Questionnaires and one follow-up letter were sent to 2000 physicians in the United States in autumn, 1971. A total of 843 (43.5%) questionnaires were returned. Of the returned questionnaires, 728 (36.4%) were completed and usable for data analysis and the remaining 115 were unanswered or returned too late for inclusion in the study.

The medical specialties of the physicians are given in Table 3. The sample was comprised of 7% female physicians, 86% male and 7% unidentified. Sixty-six per cent of doctors were between the ages of 36 and 55 and over 60% had held their current practice more than 10 years (Table 4). More than one-fourth of physicians admitted patients to university, general and municipal hospitals. About two-thirds of the respondents utilized hospitals with capacities of 150-500 beds. Services of a therapeutic dietitian were accessible to 93% of those who completed the questionnaire.

Demographic Profile of Dietitians

The questionnaire and one follow-up letter were mailed to 1000 therapeutic dietitians in the United States in the fall of 1971. A total of 738 (73.8%) of the questionnaires were returned. Thirty-seven questionnaires were not completed; a total of 701 questionnaires were
<table>
<thead>
<tr>
<th>Medical Specialty</th>
<th>Questionnaires</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Returned</td>
<td>Number</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>500</td>
<td>51</td>
<td>7.0</td>
<td>35.0</td>
<td>301</td>
</tr>
<tr>
<td>General Practice</td>
<td>500</td>
<td>64</td>
<td>8.8</td>
<td>25.0</td>
<td>113</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>500</td>
<td>113</td>
<td>15.5</td>
<td>25.0</td>
<td>89</td>
</tr>
<tr>
<td>Cardiology</td>
<td>100</td>
<td>89</td>
<td>12.2</td>
<td>5.0</td>
<td>18</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>..</td>
<td>18</td>
<td>2.5</td>
<td>..</td>
<td>18</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>100</td>
<td>63</td>
<td>8.6</td>
<td>5.0</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>..</td>
<td>18</td>
<td>2.6</td>
<td>..</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>700</td>
<td>301</td>
<td>41.4</td>
<td>35.0</td>
<td>301</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>100</td>
<td>28</td>
<td>3.8</td>
<td>5.0</td>
<td>28</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>500</td>
<td>217</td>
<td>29.8</td>
<td>25.0</td>
<td>217</td>
</tr>
<tr>
<td>Surgery</td>
<td>200</td>
<td>67</td>
<td>9.2</td>
<td>10.0</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>2000</td>
<td>728</td>
<td>100.0</td>
<td>100.0</td>
<td>728</td>
</tr>
</tbody>
</table>
TABLE 4
AGE OF PHYSICIANS AND YEARS IN CURRENT PRACTICE

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>&lt;1</th>
<th>1-3</th>
<th>3-5</th>
<th>5-10</th>
<th>&gt;10</th>
<th>No Response</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26-35</td>
<td>7</td>
<td>20</td>
<td>21</td>
<td>19</td>
<td>3</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td>36-45</td>
<td>2</td>
<td>13</td>
<td>23</td>
<td>125</td>
<td>113</td>
<td></td>
<td>280</td>
</tr>
<tr>
<td>46-55</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>185</td>
<td></td>
<td>199</td>
</tr>
<tr>
<td>56-65</td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>97</td>
<td></td>
<td>101</td>
</tr>
<tr>
<td>&gt;65</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>43</td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>

No Response: ...

Totals: No. 10 36 50 153 451 28 728

Per Cent: 1.4 4.9 6.9 21.0 62.0 3.8 100.0
used in the data analyses.

Dietitians designated as "staff therapeutic" (57.9%) and "head therapeutic" (24%) comprised the largest percentages of respondents. Ninety-eight per cent of the dietitians were female, the largest percentage (38%) in the age range 26-35 years (Table 5). More than 70% of the dietitians had been in their present positions less than five years. More than one-third (40%) of dietitians indicated they were employed in private, denominational, convalescent or county hospitals (Table 6). Another 22% and 25% of dietitians held positions in university and municipal hospitals. More than half of the dietitians represented hospitals with capacities of 150-500 beds. More than 90% of the sample obtained undergraduate education in Schools of Home Economics and 4.9% received baccalaureate degrees from Schools of Allied Health.

Role Conceptions and Role Consensus

Physicians

Role Consensus and Conception

Role consensus was determined by (a) more than 60% of responses to any item occurring in response categories A or C (Figure 2) and (b) sample variance values of less than 1.500. As a general rule hypotheses were not rejected if 85% of the object being tested was not rejected. Accordingly, rejection of hypotheses related to consensus
### TABLE 5

**AGE OF DIETITIANS AND YEARS IN PRESENT POSITIONS**

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>&lt;1</th>
<th>1-3</th>
<th>3-5</th>
<th>5-10</th>
<th>&gt;10</th>
<th>No Response</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>23</td>
<td>68</td>
<td>3</td>
<td>..</td>
<td>..</td>
<td>2</td>
<td>96</td>
<td>13.8</td>
</tr>
<tr>
<td>26-35</td>
<td>49</td>
<td>127</td>
<td>63</td>
<td>22</td>
<td>6</td>
<td>2</td>
<td>269</td>
<td>38.2</td>
</tr>
<tr>
<td>36-45</td>
<td>10</td>
<td>32</td>
<td>29</td>
<td>25</td>
<td>28</td>
<td>2</td>
<td>126</td>
<td>18.0</td>
</tr>
<tr>
<td>46-55</td>
<td>12</td>
<td>34</td>
<td>23</td>
<td>39</td>
<td>29</td>
<td>..</td>
<td>137</td>
<td>19.5</td>
</tr>
<tr>
<td>56-65</td>
<td>2</td>
<td>9</td>
<td>10</td>
<td>13</td>
<td>19</td>
<td>..</td>
<td>53</td>
<td>7.6</td>
</tr>
<tr>
<td>&gt;65</td>
<td>..</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>..</td>
<td>11</td>
<td>1.6</td>
</tr>
<tr>
<td>No Response</td>
<td>..</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>1.3</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>96</td>
<td>272</td>
<td>133</td>
<td>104</td>
<td>87</td>
<td>9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Totals**

- Number: 701
- Per cent: 100.0
TABLE 6

DISTRIBUTION OF DIETITIANS BY TYPES AND BED CAPACITIES OF HOSPITALS

<table>
<thead>
<tr>
<th>Type</th>
<th>&lt;150</th>
<th>151-300</th>
<th>301-500</th>
<th>501-800</th>
<th>&gt;800</th>
<th>NR&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Number</th>
<th>Per Cent</th>
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</thead>
<tbody>
<tr>
<td>University</td>
<td>7</td>
<td>19</td>
<td>62</td>
<td>53</td>
<td>35</td>
<td>2</td>
<td>178</td>
<td>25.3</td>
</tr>
<tr>
<td>Government</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>12</td>
<td>30</td>
<td>4</td>
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<td>Municipal</td>
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<td>52</td>
<td>54</td>
<td>22</td>
<td>5</td>
<td>1</td>
<td>154</td>
<td>22.0</td>
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<tr>
<td>Other</td>
<td>43</td>
<td>79</td>
<td>90</td>
<td>46</td>
<td>15</td>
<td>5</td>
<td>278</td>
<td>39.6</td>
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<tr>
<td>NR&lt;sup&gt;a&lt;/sup&gt;</td>
<td>..</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>9</td>
<td>21</td>
<td>3.0</td>
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<td>73</td>
<td>159</td>
<td>223</td>
<td>138</td>
<td>87</td>
<td>21</td>
<td>701</td>
<td>..</td>
</tr>
</tbody>
</table>

<sup>a</sup>No response.
of all items was based on the criterion of 85% of the 34 inventory items. Hypotheses which stipulate specific classifications of items (progressive, traditional, etc.) were rejected if 85% of the items failed to meet the expectations indicated in the statement of hypotheses.

All consensus among physicians was positive. Positive consensus was not observed for all items but there was no consensus that any of the activities listed in the inventory should be excluded from an ideal role for the dietitian.

Hypothesis 1.1: There is lack of consensus for role conception of the dietitian among selected groups of physicians. The hypothesis is not rejected. Physicians exhibited consensus for 82% of the items. A high consensus (Figure 3) was demonstrated on the following 14 items (Table 7):

- Is aware of current topics
- Questions physician
- Knows food composition
- Is readily available
- Is open and cordial
- Contributes to team
- Motivates patients
- Gives patients nutrition information
- Gives diet instructions
- Knows effect of disease
- Is self-confident
- Is competent
- Has good rapport
- Relates diet and disease

Moderate (Level II) and low (Level III) consensus were each assigned to seven items. Consensus was lacking on
<table>
<thead>
<tr>
<th>Item</th>
<th>Physicians Responses (%)</th>
<th>Level of Consensus</th>
<th>Dietitians Responses (%)</th>
<th>Level of Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attends medical rounds</td>
<td>20.9</td>
<td>d</td>
<td>79.8</td>
<td>II</td>
</tr>
<tr>
<td>2. Gives seminars</td>
<td>62.1</td>
<td>III</td>
<td>68.7</td>
<td>III</td>
</tr>
<tr>
<td>3. Gives nutrition information</td>
<td>87.1</td>
<td>II</td>
<td>95.8</td>
<td>I</td>
</tr>
<tr>
<td>4. Discusses during rounds</td>
<td>42.8</td>
<td></td>
<td>86.5</td>
<td>II</td>
</tr>
<tr>
<td>5. Is aware of current topics</td>
<td>91.4</td>
<td>I</td>
<td>97.8</td>
<td>I</td>
</tr>
<tr>
<td>6. Initiates dietary prescriptions</td>
<td>26.3</td>
<td></td>
<td>67.0</td>
<td>III</td>
</tr>
<tr>
<td>7. Recommends diet</td>
<td>49.1</td>
<td></td>
<td>58.8</td>
<td>I</td>
</tr>
<tr>
<td>8. Questions physician</td>
<td>93.5</td>
<td>I</td>
<td>99.4</td>
<td>I</td>
</tr>
<tr>
<td>9. Knows food composition</td>
<td>95.9</td>
<td>I</td>
<td>97.4</td>
<td>I</td>
</tr>
<tr>
<td>10. Follows diet orders</td>
<td>45.0</td>
<td>c</td>
<td>60.3</td>
<td>III</td>
</tr>
<tr>
<td>11. Is readily available</td>
<td>97.9</td>
<td>I</td>
<td>97.8</td>
<td>I</td>
</tr>
<tr>
<td>12. Is team member</td>
<td>74.8</td>
<td>III</td>
<td>97.5</td>
<td>I</td>
</tr>
<tr>
<td>13. Charts information</td>
<td>67.2</td>
<td>III</td>
<td>96.7</td>
<td>I</td>
</tr>
<tr>
<td>14. Is open and cordial</td>
<td>98.0</td>
<td>I</td>
<td>98.9</td>
<td>I</td>
</tr>
<tr>
<td>15. Contributes to team</td>
<td>93.0</td>
<td>I</td>
<td>98.1</td>
<td>I</td>
</tr>
<tr>
<td>16. Applies research findings</td>
<td>87.3</td>
<td>II</td>
<td>89.8</td>
<td>II</td>
</tr>
<tr>
<td>17. Makes home visits</td>
<td>24.1</td>
<td></td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>18. Motivates patients</td>
<td>91.8</td>
<td>I</td>
<td>98.6</td>
<td>I</td>
</tr>
<tr>
<td>19. Takes nutrition histories</td>
<td>70.8</td>
<td>III</td>
<td>78.6</td>
<td>II</td>
</tr>
<tr>
<td>20. Seeks causes for diet problems</td>
<td>71.9</td>
<td>III</td>
<td>81.7</td>
<td>II</td>
</tr>
<tr>
<td>Item</td>
<td>Physicians</td>
<td>Dietitians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responses (%)</td>
<td>Level of Consensus</td>
<td>Responses (%)</td>
<td>Level of Consensus</td>
</tr>
<tr>
<td>21.</td>
<td>Knows patient dietary status</td>
<td>86.4</td>
<td>II</td>
<td>91.5</td>
</tr>
<tr>
<td>22.</td>
<td>Gives patients nutrition information</td>
<td>91.0</td>
<td>I</td>
<td>94.8</td>
</tr>
<tr>
<td>23.</td>
<td>Visits patients during meals</td>
<td>74.1</td>
<td>III</td>
<td>88.3</td>
</tr>
<tr>
<td>24.</td>
<td>Checks trays</td>
<td>65.3</td>
<td>III</td>
<td>38.6</td>
</tr>
<tr>
<td>25.</td>
<td>Gives diet instructions</td>
<td>94.6</td>
<td>I</td>
<td>98.1</td>
</tr>
<tr>
<td>26.</td>
<td>Knows effects of disease</td>
<td>91.2</td>
<td>I</td>
<td>98.3</td>
</tr>
<tr>
<td>27.</td>
<td>Knows bases of disease</td>
<td>78.9</td>
<td>II</td>
<td>94.6</td>
</tr>
<tr>
<td>28.</td>
<td>Knows psychology of illness</td>
<td>78.5</td>
<td>II</td>
<td>92.7</td>
</tr>
<tr>
<td>29.</td>
<td>Delegates non-technical tasks</td>
<td>76.2</td>
<td>II</td>
<td>95.2</td>
</tr>
<tr>
<td>30.</td>
<td>Is self confident</td>
<td>96.3</td>
<td>I</td>
<td>100.0</td>
</tr>
<tr>
<td>31.</td>
<td>Exercises ethics</td>
<td>83.7</td>
<td>II</td>
<td>99.9</td>
</tr>
<tr>
<td>32.</td>
<td>Is competent</td>
<td>98.8</td>
<td>I</td>
<td>99.4</td>
</tr>
<tr>
<td>33.</td>
<td>Has good rapport</td>
<td>98.0</td>
<td>I</td>
<td>100.0</td>
</tr>
<tr>
<td>34.</td>
<td>Relates diet and disease</td>
<td>96.9</td>
<td>I</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*a* Percent responses in Category A or C.

*b* Level I (high consensus)
Level II (moderate consensus)
Level III (low consensus).

*c* Response Category C (negative consensus).

*d* No consensus.
the following six items:

Attends medical rounds
Discusses during rounds
Initiates dietary prescriptions
Recommends diets
Follows diet orders
Makes home visits

Physicians are therefore in agreement the dietitian should exhibit high levels of professional competence but the group lacks consensus on many of the specific activities which indicate a high level of responsibility for the dietitian.

Levels of consensus were closely associated with the degree of conformity among responses measured by sample variance (Table 8). High conformity of responses was evident for 13 items, 12 of which showed Level I (high) consensus. Moderate conformity among responses was associated with 10 items and of these, six were marked by moderate consensus. Low conformity was evident for responses to six items; five of these were associated with low consensus. A lack of conformity among responses was found for five of the six items which lacked consensus among physicians. Conformity among responses as measured by sample variance supported the finding that physicians were of a consensus on 82% of the inventory items which should be included in the role definition of the dietitian.
<table>
<thead>
<tr>
<th>Item</th>
<th>Sample Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Degree of Conformity</strong> Among Responses:</td>
<td></td>
</tr>
<tr>
<td>Is competent.</td>
<td>0.218</td>
</tr>
<tr>
<td>Is readily available.</td>
<td>0.253</td>
</tr>
<tr>
<td>Has good rapport.</td>
<td>0.261</td>
</tr>
<tr>
<td>Is open and cordial.</td>
<td>0.266</td>
</tr>
<tr>
<td>Exercises ethics.</td>
<td>0.284</td>
</tr>
<tr>
<td>Is self confident</td>
<td>0.321</td>
</tr>
<tr>
<td>Relates diet and disease.</td>
<td>0.342</td>
</tr>
<tr>
<td>Gives diet instructions</td>
<td>0.354</td>
</tr>
<tr>
<td>Contributes to team.</td>
<td>0.389</td>
</tr>
<tr>
<td>Knows effects of disease.</td>
<td>0.427</td>
</tr>
<tr>
<td>Questions physician</td>
<td>0.433</td>
</tr>
<tr>
<td>Knows food composition.</td>
<td>0.436</td>
</tr>
<tr>
<td>Motivates patients.</td>
<td>0.477</td>
</tr>
<tr>
<td><strong>Moderate Degree of Conformity</strong> Among Responses:</td>
<td></td>
</tr>
<tr>
<td>Knows patient dietary status.</td>
<td>0.553</td>
</tr>
<tr>
<td>Gives patients nutrition information.</td>
<td>0.553</td>
</tr>
<tr>
<td>Applies research findings</td>
<td>0.620</td>
</tr>
<tr>
<td>Knows psychology of illness</td>
<td>0.672</td>
</tr>
<tr>
<td>Is aware of current topics.</td>
<td>0.690</td>
</tr>
<tr>
<td>Knows bases of disease.</td>
<td>0.695</td>
</tr>
<tr>
<td>Gives nutrition information</td>
<td>0.716</td>
</tr>
<tr>
<td>Delegates non-technical tasks</td>
<td>0.832</td>
</tr>
<tr>
<td>Gives seminars.</td>
<td>0.884</td>
</tr>
<tr>
<td>Visits patients during meals.</td>
<td>0.923</td>
</tr>
<tr>
<td><strong>Low Degree of Conformity</strong> Among Responses:</td>
<td></td>
</tr>
<tr>
<td>Takes nutrition histories</td>
<td>1.113</td>
</tr>
<tr>
<td>Seeks causes for diet problems.</td>
<td>1.214</td>
</tr>
<tr>
<td>Is team member.</td>
<td>1.311</td>
</tr>
<tr>
<td>Checks trays.</td>
<td>1.448</td>
</tr>
<tr>
<td>Makes home visits.</td>
<td>1.496</td>
</tr>
<tr>
<td>Charts information.</td>
<td>1.496</td>
</tr>
<tr>
<td><strong>Lack of Conformity</strong> Among Responses:</td>
<td></td>
</tr>
<tr>
<td>Recommends diet</td>
<td>1.732</td>
</tr>
<tr>
<td>Discusses during rounds</td>
<td>1.954</td>
</tr>
<tr>
<td>Attends medical rounds.</td>
<td>2.011</td>
</tr>
<tr>
<td>Follows diet orders.</td>
<td>2.324</td>
</tr>
<tr>
<td>Initiates dietary prescriptions</td>
<td>3.019</td>
</tr>
</tbody>
</table>
Consensus on Traditional Activities

The literature suggests physicians perceive allied health professionals in roles which have been accepted over decades as appropriate to paramedical status (90:167, 43:69, 67). Five activities in the inventory were judged to be traditional (see p. 102).

Hypothesis 1.2: Physicians show high positive role consensus for items which characterize the dietitian in a traditional role. This hypothesis is rejected since high positive consensus was exhibited for only two (40%) of the five traditional items: the dietitian should "know food composition" and "give diet instructions" (Table 9). A positive but low (Level III) consensus indicated the dietitian should "take nutrition histories" and "check trays." A lack of consensus among responses showed physicians do not agree the dietitian should "follow diet orders without question or adaptation." Since many physicians were of intense opinion the dietitian should not "follow diet orders without question" and less than 75% indicated she should "check trays" the evidence suggests physicians do not perceive the dietitian in a totally traditional role.

Consensus on Progressive Activities

Physicians reportedly resent developments which may attribute greater autonomy and responsibility to allied health professionals and thereby result in a lessening of
authority and status for physicians (90:172, 51:154). Ten progressive activities were included in the inventory (page 101).

**TABLE 9**

RESPONSES AND CONSENSUS AMONG PHYSICIANS ON TRADITIONAL ACTIVITIES OF THE DIETITIAN

<table>
<thead>
<tr>
<th>Item</th>
<th>Responses</th>
<th></th>
<th>Level of Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category A</td>
<td>Category C</td>
<td></td>
</tr>
<tr>
<td>Knows food composition</td>
<td>95.9</td>
<td>0.9</td>
<td>I</td>
</tr>
<tr>
<td>Follows diet orders</td>
<td>19.8</td>
<td>45.0</td>
<td>II (moderate consensus)</td>
</tr>
<tr>
<td>Takes nutrition histories</td>
<td>70.8</td>
<td>3.0</td>
<td>III (low consensus)</td>
</tr>
<tr>
<td>Checks trays</td>
<td>65.3</td>
<td>5.4</td>
<td>III (low consensus)</td>
</tr>
<tr>
<td>Gives diet instructions</td>
<td>94.6</td>
<td>0.0</td>
<td>I</td>
</tr>
</tbody>
</table>

*See Figure 2.*

*Level I (high consensus)*

*Level II (moderate consensus)*

*Level III (low consensus).*

*No consensus.*

Hypothesis 1.3: Physicians show high negative consensus for items which characterize the dietitian in a progressive role. The hypothesis is rejected. There was no negative consensus among physicians for any of the
progressive activities which have been attributed to the health team dietitian.

Positive consensus was evident for five of the 10 progressive activities (Table 10). More than 90% of physicians agreed the dietitian should "contribute to health team activity" and "motivate patients to follow a diet." A moderate (Level II) consensus intimated the dietitian should "apply research findings to daily situations." A low (Level III) consensus confirmed the dietitian should "give seminars" and "perform as an equal member of the health team." Consensus was lacking among physicians for activities related to ward rounds, dietary prescriptions and visiting patients after hospital discharge. Physicians are in agreement the dietitian should make a definite contribution to the health team but the group lacks consensus on those specific activities by which meaningful health team participation is actuated.

However, when all positive or all negative responses (Figure 2) are grouped, indications are that physicians may not be totally opposed to the dietitian attending medical rounds or recommending modified dietary treatments. By including these less intense responses in the evaluation 58% of physicians agreed the dietitian should attend and 76% said she should contribute to discussion during ward rounds. Fifty-five per cent indicated the dietitian
TABLE 10
RESPONSES AND CONSENSUS AMONG PHYSICIANS ON PROGRESSIVE ACTIVITIES OF THE DIETITIAN

<table>
<thead>
<tr>
<th>Item</th>
<th>Responses</th>
<th>Level of Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category A</td>
<td>Category C</td>
</tr>
<tr>
<td>Attends medical rounds</td>
<td>20.9</td>
<td>33.9</td>
</tr>
<tr>
<td>Gives seminars</td>
<td>62.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Discusses during rounds</td>
<td>42.8</td>
<td>17.4</td>
</tr>
<tr>
<td>Initiates dietary prescription</td>
<td>26.3</td>
<td>43.3</td>
</tr>
<tr>
<td>Recommends diet</td>
<td>49.1</td>
<td>12.5</td>
</tr>
<tr>
<td>Is team member</td>
<td>71.4</td>
<td>4.8</td>
</tr>
<tr>
<td>Contributes to team</td>
<td>93.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Applies research findings</td>
<td>87.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Makes home visits</td>
<td>24.1</td>
<td>15.0</td>
</tr>
<tr>
<td>Motivates patients</td>
<td>91.8</td>
<td>0.1</td>
</tr>
</tbody>
</table>

^aSee Figure 2.

^bLevel I (high consensus)
Level II (moderate consensus)
Level III (low consensus).

^cNo consensus.
should not "take initiative" in prescribing dietary treatment but 84\% agreed she should "recommend" an appropriate diet following diagnosis of the patient. Physicians do not deny the dietitian a place on the health care team; they may even share the responsibility for activities which ascribe status as a full and equal member thereof as long as the physician retains control of all activities. Physicians do not, however, exhibit strong opinions in assigning progressive activities to the dietitian.

Consensus and Medical Specialty

The basic role of the physician does not differ from one area of specialization to another. Physicians representing different specialties chosen for this study were not expected to exhibit differences in their perceptions of the role of the dietitian. The significance of any observed differences in responses by specialty was tested by two chi-square determinations. In the first determination comparisons among physicians in each area of specialization were made in the distribution of responses for all items in each of the six categories ranging from "definitely should" to "definitely should not."

Hypothesis 1.4: There is no difference in role conception of dietitians among physicians of different medical specialties. This hypothesis is rejected. There were no significant differences observed for 26 (76\%)
items. Significant differences (P = .05) were found in the distribution of responses for the following eight activities:

- Attends medical rounds
- Gives nutrition seminars
- Gives nutrition information
- Recommends diets
- Follows diet orders
- Takes nutrition histories
- Seeks causes for diet problems
- Visits patients during meals

In the second determination, chi-square measurements were made to test significance of differences between positive and negative responses to each item by physicians in each area of specialization. Using this criterion no significant difference was found in the distribution of responses for 28 (82%) of the 34 inventory items. Distribution of responses to the following six items differed significantly (P = .05) between medical specialties:

- Attends medical rounds
- Discusses during rounds
- Recommends diets
- Follows diet orders
- Charts dietary information
- Seeks causes for diet problems

The first four of these six activities were characterized by a lack of consensus among all physicians. Low (Level III) consensus existed among all physicians for the last two of these activities. Among physicians representing different specialties, internists and pediatricians attribute greater responsibility and participation in health
team activities to the dietitian than do physicians in specialties of general practice and family medicine (Figure 4).

Dietitians

Role Conceptions and Consensus

Hypothesis 2.1: There is lack of consensus in the role conception of the therapeutic dietitian among role incumbents. The hypothesis is rejected. Dietitians were of a consensus that 91% of the inventory items should be included in a role definition of the therapeutic dietitian (Table 7). All consensus was positive with the exception of negative consensus for "follows diet orders"—the single inventory item which the group rejected with low consensus as incongruent to the role of the dietitian. A high consensus (Level I) was achieved on 22 (64.7%) of the items. A Level II consensus was exhibited for six and low consensus for three activities. Lack of consensus was evident for the following activities:

- Recommends diets
- Makes home visits
- Checks trays

Dietitians lacked agreement on the propriety of the dietitian "recommending diets" but reached Level III consensus for "initiating dietary prescriptions." The group failed to accept the progressive activity of "making home visits" or reject the traditional function of "checking trays."
FIGURE 4
PERCENTAGE OF POSITIVE RESPONSES OF PHYSICIANS TO SIX ACTIVITIES CLASSIFIED BY MEDICAL SPECIALTY
FIGURE 4 (CONTINUED)
PERCENTAGE OF POSITIVE RESPONSES OF PHYSICIANS TO SIX ACTIVITIES
CLASSIFIED BY MEDICAL SPECIALTY
Sample variances were used to identify distribution of responses around the mean or to show conformity of opinion on each of the inventory items. Dietitians exhibited high conformity among responses on 22 (64.7%) of the items (Table 11). Moderate conformity was observed on seven and low conformity among responses was apparent for only one item. A very high variance value was indicative of a lack of agreement on the following four items:

- Makes home visits
- Follows diet orders
- Initiates dietary prescriptions
- Checks trays

Two of these four items, "make home visits" and "initiate dietary prescriptions" are advocated (8, 19, 29, 114, 116) for liberalization of role for the dietitian. The other two activities, "follow diet orders" and "check trays" connote a restriction of responsibility for the dietitian. Dietitians failed to indicate a conformity of opinion in accepting or rejecting either of these types of activities.

The degree of conformity among responses was closely associated with the level of consensus for the respective items. All items with low variance values (high conformity) were marked by high consensus among dietitians. Sample variances indicated a lack of conformity of responses to two items, "initiates dietary prescriptions" and should not "follow diet orders without question," which were marked by Level III consensus. Sample variance
<table>
<thead>
<tr>
<th>Item</th>
<th>Sample Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Degree of Conformity Among Responses:</strong></td>
<td></td>
</tr>
<tr>
<td>Relates diet and disease</td>
<td>0.074</td>
</tr>
<tr>
<td>Has good rapport</td>
<td>0.077</td>
</tr>
<tr>
<td>Exercises ethics</td>
<td>0.090</td>
</tr>
<tr>
<td>Is self-confident</td>
<td>0.101</td>
</tr>
<tr>
<td>Is competent</td>
<td>0.124</td>
</tr>
<tr>
<td>Questions physician</td>
<td>0.149</td>
</tr>
<tr>
<td>Is open and cordial</td>
<td>0.155</td>
</tr>
<tr>
<td>Gives diet instructions</td>
<td>0.217</td>
</tr>
<tr>
<td>Contributes to team</td>
<td>0.220</td>
</tr>
<tr>
<td>Is aware of current topics</td>
<td>0.231</td>
</tr>
<tr>
<td>Charts information</td>
<td>0.232</td>
</tr>
<tr>
<td>Motivates patients</td>
<td>0.238</td>
</tr>
<tr>
<td>Knows effects of disease</td>
<td>0.255</td>
</tr>
<tr>
<td>Is team member</td>
<td>0.257</td>
</tr>
<tr>
<td>Is readily available</td>
<td>0.259</td>
</tr>
<tr>
<td>Gives nutrition information</td>
<td>0.311</td>
</tr>
<tr>
<td>Knows food composition</td>
<td>0.320</td>
</tr>
<tr>
<td>Gives patients nutrition information</td>
<td>0.336</td>
</tr>
<tr>
<td>Knows bases of disease</td>
<td>0.386</td>
</tr>
<tr>
<td>Knows patient dietary status</td>
<td>0.419</td>
</tr>
<tr>
<td>Knows psychology of illness</td>
<td>0.448</td>
</tr>
<tr>
<td>Delegates non-technical tasks</td>
<td>0.489</td>
</tr>
<tr>
<td><strong>Moderate Degree of Conformity Among Responses:</strong></td>
<td></td>
</tr>
<tr>
<td>Applies research findings</td>
<td>0.584</td>
</tr>
<tr>
<td>Discusses during rounds</td>
<td>0.626</td>
</tr>
<tr>
<td>Takes nutrition histories</td>
<td>0.677</td>
</tr>
<tr>
<td>Visits patients during meals</td>
<td>0.708</td>
</tr>
<tr>
<td>Seeks causes for diet problems</td>
<td>0.708</td>
</tr>
<tr>
<td>Attends medical rounds</td>
<td>0.749</td>
</tr>
<tr>
<td>Gives seminars</td>
<td>0.822</td>
</tr>
<tr>
<td><strong>Low Degree of Conformity Among Responses:</strong></td>
<td></td>
</tr>
<tr>
<td>Recommends diet</td>
<td>1.100</td>
</tr>
<tr>
<td><strong>Lack of Conformity Among Responses:</strong></td>
<td></td>
</tr>
<tr>
<td>Makes home visits</td>
<td>1.657</td>
</tr>
<tr>
<td>Follows diet orders</td>
<td>1.876</td>
</tr>
<tr>
<td>Initiates dietary prescriptions</td>
<td>1.976</td>
</tr>
<tr>
<td>Checks trays</td>
<td>3.206</td>
</tr>
</tbody>
</table>
indicated a significant clustering of responses for the item "recommends diet" around the positive area of indecision or neutrality causing a lack of consensus for the activity.

Consensus and Status Behaviors

The thrust of the dietitian toward upward mobility and professionalization cited in the literature (19, 52, 107, 125, 146) connotes the anticipation of increased responsibility and status for the dietitian as a member of the health care team.

Hypothesis 2.2: Dietitians have high positive role consensus on those items which encompass professional responsibility and high status behaviors. The hypothesis is rejected. Only three (37.5%) of the eight items indicating high levels of responsibility (p. 102) were shown as having high consensus among dietitians (Table 12). Dietitians exhibited Level II or moderate consensus for "discussing during ward rounds." Low consensus was observed for "giving seminars" and "initiating dietary prescriptions." Less than 60% (lack of consensus) of respondents agreed the dietitian should "recommend diets." Dietitians almost unanimously subscribed to general statements indicating high levels of responsibility. But the group showed less consensus for assuming the specific tasks by which participation on the health team is effected.
Dietitians did, however, exhibit high consensus for "charting information," a task which is generally practiced in some hospitals and for which specific procedures have been published by the American Dietetic Association and the Joint Commission on Accreditation of the American Hospital Association.

**TABLE 12**

**DIETITIAN RESPONSES TO ACTIVITIES ASSOCIATED WITH HIGH RESPONSIBILITY OR STATUS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Responses</th>
<th>Category A (%)</th>
<th>Category C (%)</th>
<th>Level of Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attends medical rounds</td>
<td></td>
<td>79.8</td>
<td>1.1</td>
<td>II</td>
</tr>
<tr>
<td>Gives seminars</td>
<td></td>
<td>68.7</td>
<td>1.4</td>
<td>III</td>
</tr>
<tr>
<td>Discusses during rounds</td>
<td></td>
<td>86.5</td>
<td>0.7</td>
<td>II</td>
</tr>
<tr>
<td>Initiates dietary prescriptions</td>
<td></td>
<td>67.0</td>
<td>10.4</td>
<td>III</td>
</tr>
<tr>
<td>Recommends diets</td>
<td></td>
<td>58.8</td>
<td>3.8</td>
<td>..</td>
</tr>
<tr>
<td>Is team member</td>
<td></td>
<td>97.5</td>
<td>0.1</td>
<td>I</td>
</tr>
<tr>
<td>Charts information</td>
<td></td>
<td>96.7</td>
<td>..</td>
<td>I</td>
</tr>
<tr>
<td>Contributes to team</td>
<td></td>
<td>98.1</td>
<td>0.1</td>
<td>I</td>
</tr>
</tbody>
</table>

Consensus and Restrictive Activities

**Hypothesis 2.3:** Dietitians have high negative consensus for items which suggest restrictions on
responsibility of the dietitian. This hypothesis is rejected. The two items which were considered to restrict the responsibilities of the dietitian, "follow diet orders" and "check trays," were found to have a low level or be lacking in consensus (Table 13). Dietitians were not in strong agreement that the restrictive activities should be eliminated from the role definition of the dietitian. Both of these items were found to have high variance values illustrating a lack of conformity on opinions about these activities.

Consensus and Hospital Size

Professional literature (21, 87, 102, 123) implies that dietitians who are employed in hospitals with different bed capacities have similar role expectations. Therefore, dietitians representing different size hospitals were not expected to show differences in their perceptions of role for the dietitian. The significance of differences in distribution of responses for the 34 inventory items was measured by the chi-square statistic.

Hypothesis 2.4: There is no difference in role conception of dietitians perceived by role incumbents employed in hospitals of different bed capacities. This hypothesis is not rejected. No significant differences in role conception were observed on 30 (88%) items. Differences in responses were significant for the following
four items:

- Attends medical rounds
- Checks trays
- Knows food composition
- Follows diet orders

**TABLE 13**

RESPONSES OF DIETITIANS TO RESTRICTIVE ACTIVITIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Response Category</th>
<th>Number</th>
<th>Percentage</th>
<th>Level of Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follows diet orders</td>
<td>Definitely should</td>
<td>25</td>
<td>9.0b</td>
<td>d</td>
</tr>
<tr>
<td></td>
<td>Should</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Possibly should</td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Possibly should not</td>
<td>155</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Should not</td>
<td>174</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Definitely should not</td>
<td>242</td>
<td>60.3c</td>
<td>III</td>
</tr>
<tr>
<td>Checks trays</td>
<td>Definitely should</td>
<td>179</td>
<td>38.6b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Should</td>
<td>84</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Possibly should</td>
<td>136</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Possibly should not</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Should not</td>
<td>113</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Definitely should not</td>
<td>100</td>
<td>31.2c</td>
<td></td>
</tr>
</tbody>
</table>

*aSee Figure 3.*

*bCategory A (See Figure 2).*

*cCategory C (See Figure 2).*

*dNo consensus.*
Responses to two activities were particularly dissimilar among dietitians from different sized hospitals. First, high intensity of opinion was directly related to large bed capacity for the activity "attend medical rounds" (Figure 5). Second, inverse relationships were found between hospital bed capacity and the number of dietitians who related positively the dietitian should "check trays" (Figure 6). As hospital size increases, the percentage of dietitians who assign the dietitian to "check trays" decreases.

Consensus Between Dietitians and Physicians

Physicians were expected to show less consensus than dietitians in role expectations for the dietitian. This anticipation was derived from the research in other disciplines which indicates greater agreement on role delineation among position incumbents than among others in the role set (16, 48, 50).

Hypothesis 3.0: There is no difference between role expectations of the dietitian perceived by dietitians and physicians. The hypothesis is rejected. Consensus shared between the groups indicated 79.5% of listed items should be functions of the dietitian. Dietitians and physicians shared high consensus on 14 (41%) of the inventory items (Table 7). The groups shared moderate and low consensus each on one item. Dietitians had a higher consensus than
FIGURE 5
RESPONSES OF DIETITIANS TO "ATTENDING MEDICAL ROUNDS"
CLASSIFIED BY HOSPITAL BED CAPACITY
RESPONSES OF DIETITIANS TO "CHECKING TRAYS"
CLASSIFIED BY HOSPITAL BED CAPACITY

FIGURE 6
physicians on 11 (32%) items and one or neither group had consensus for the remaining seven items.

When inventory items were classified as "activities" (items 1-25, Table 7) and "qualities" (items 26-34), shared consensus of the two groups was of a different pattern than when all items are considered as a single unit. Dietitians had high consensus on all items related to qualities; physicians shared the high consensus on only five (55.5%) of these items and exhibited Level II consensus on the remaining qualities. Dietitians exhibited a higher level of consensus than physicians for the following qualities:

Knows bases of diseases  
Knows psychology of illness  
Delegates non-technical tasks  
Exercises ethics

Items classified as activities showed less consensus within each group and between the professions when only "activity" items are considered. Dietitians showed high consensus on 52% and moderate and low consensus on 24% and 12% of the activity items (Table 7). Physicians demonstrated high consensus for 36%, moderate and low consensus for 12% and 28% of the activity items. Agreement existed among dietitians for a total of 88% and among physicians for 76% of the "activities" in the role conception inventory. The two professional groups shared a high consensus on 36%, a low consensus on 20% and a high/low consensus on
16% of the activity items. Thus, physicians and dietitians were in agreement that 72% of the inventory activities should be included in the role of the dietitian.

A lack of consensus among one or both groups was observed for the following activities:

- Attends medical rounds
- Discusses during rounds
- Initiates dietary prescriptions
- Recommends diets
- Follows diet orders
- Makes home visits
- Checks trays

When consensus was not shared but existed for one of the professional groups, the level of consensus was low. Neither group showed high consensus for any item on which a lack of consensus existed among the counter group.

The significance of differences between responses of physicians and dietitians was measured by the chi-square statistic. Two chi-square evaluations were made to determine the significance of differences in responses of the groups. In the first calculation the responses in each of the six response categories, definitely should to definitely should not, were tested for significant differences between the groups for all 34 items. A significant difference ($P = .05$) was found for all items with the exception of "is readily available for consultation."

In the second chi-square evaluation differences were measured between all positive and all negative responses
(Figure 2) given by physicians and dietitians. A significant difference in the distribution of responses was observed between the two groups for 23 items (Table 14). The activities for which dietitians and physicians show least agreement in their role conceptions ranked in a descending order of chi-square values are as follows:

More than 35 times the significant chi-square value:
- Attend rounds
- Initiate dietary prescriptions
- Check trays
- Discuss during rounds

More than 5 times the significant chi-square value:
- Chart information
- Full and equal team member
- Follow diet orders
- Recommend diets
- Take nutrition histories

**Role Performance**

**Disparity Rated by Physicians**

**Hypothesis 4.1:** Physicians perceive no difference between ideal and actual role performance of the therapeutic dietitian. The hypothesis is rejected. Confidence intervals indicated physicians perceived differences between role expectations and performance of the dietitian for all items (Figure 7). All discrepancies indicated deficiencies in performance except "follows diet orders" in which instance positive behavior was linked with negative expectations.

A low role disparity, indicated by confidence
### TABLE 14

**TWENTY-THREE ITEMS AND LEVELS OF CONSENSUS WITH SIGNIFICANT DIFFERENCES IN POSITIVE AND NEGATIVE RESPONSES BETWEEN PHYSICIANS AND DIETITIANS**

<table>
<thead>
<tr>
<th>Item</th>
<th>$X^2=3.841$</th>
<th>Physicians</th>
<th>Dietitians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attends rounds.</td>
<td>327.649</td>
<td>III</td>
<td>II</td>
</tr>
<tr>
<td>Gives seminars.</td>
<td>6.326</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>Gives nutrition information.</td>
<td>9.731</td>
<td>II</td>
<td>I</td>
</tr>
<tr>
<td>Discusses during rounds.</td>
<td>142.610</td>
<td></td>
<td>II</td>
</tr>
<tr>
<td>Is aware of current topics.</td>
<td>15.372</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Initiates dietary prescriptions.</td>
<td>245.603</td>
<td></td>
<td>III</td>
</tr>
<tr>
<td>Recommends diets.</td>
<td>25.567</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Questions physician.</td>
<td>4.415</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Follows diet orders.</td>
<td>38.873</td>
<td>II</td>
<td>III</td>
</tr>
<tr>
<td>Is team member.</td>
<td>57.668</td>
<td>III</td>
<td>I</td>
</tr>
<tr>
<td>Charts information.</td>
<td>84.873</td>
<td>III</td>
<td>I</td>
</tr>
<tr>
<td>Makes home visits.</td>
<td>11.722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes nutrition histories.</td>
<td>21.431</td>
<td>III</td>
<td>II</td>
</tr>
<tr>
<td>Seeks causes for diet problems.</td>
<td>19.859</td>
<td>III</td>
<td>II</td>
</tr>
<tr>
<td>Knows patient dietary status.</td>
<td>6.826</td>
<td>II</td>
<td>I</td>
</tr>
<tr>
<td>Gives patients nutrition information.</td>
<td>9.300</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Visits patients during meals.</td>
<td>5.006</td>
<td>III</td>
<td>II</td>
</tr>
<tr>
<td>Checks trays.</td>
<td>157.888</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>Gives diet instructions.</td>
<td>4.110</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Knows bases of diseases.</td>
<td>13.060</td>
<td>II</td>
<td>I</td>
</tr>
<tr>
<td>Knows psychology of illness.</td>
<td>10.143</td>
<td>II</td>
<td>I</td>
</tr>
<tr>
<td>Delegates non-technical tasks.</td>
<td>13.168</td>
<td>II</td>
<td>I</td>
</tr>
<tr>
<td>Relates diet and disease.</td>
<td>4.023</td>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

---

**a** See Figure 2.

**b** Negative consensus.
<table>
<thead>
<tr>
<th>Items</th>
<th>Confidence Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attends rounds</td>
<td></td>
</tr>
<tr>
<td>2. Gives seminars</td>
<td></td>
</tr>
<tr>
<td>3. Gives nutrition information</td>
<td></td>
</tr>
<tr>
<td>4. Discusses during rounds</td>
<td></td>
</tr>
<tr>
<td>5. Is aware of current topics</td>
<td></td>
</tr>
<tr>
<td>6. Initiates dietary prescriptions</td>
<td></td>
</tr>
<tr>
<td>7. Recommends diets</td>
<td></td>
</tr>
<tr>
<td>8. Questions physician</td>
<td></td>
</tr>
<tr>
<td>9. Knows food composition</td>
<td></td>
</tr>
<tr>
<td>10. Follows diet orders</td>
<td></td>
</tr>
<tr>
<td>11. Is readily available</td>
<td></td>
</tr>
<tr>
<td>12. Is team member</td>
<td></td>
</tr>
<tr>
<td>13. Charts information</td>
<td></td>
</tr>
<tr>
<td>14. Is open and cordial</td>
<td></td>
</tr>
<tr>
<td>15. Contributes to team</td>
<td></td>
</tr>
<tr>
<td>16. Applies research findings</td>
<td></td>
</tr>
<tr>
<td>17. Makes home visits</td>
<td></td>
</tr>
<tr>
<td>18. Motivates patients</td>
<td></td>
</tr>
<tr>
<td>19. Takes nutrition histories</td>
<td></td>
</tr>
<tr>
<td>20. Seeks cause for diet problems</td>
<td></td>
</tr>
<tr>
<td>21. Knows patient dietary status</td>
<td></td>
</tr>
<tr>
<td>22. Gives patients nutrition information</td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 7**

COMPARISON OF CONFIDENCE INTERVALS OF PHYSICIAN AND DIETITIAN RESPONSES ILLUSTRATING PERCEIVED DISPARITY BETWEEN IDEAL AND ACTUAL PERFORMANCE
<table>
<thead>
<tr>
<th>Items</th>
<th>Confidence Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. Visits patients during meals</td>
<td>□</td>
</tr>
<tr>
<td>24. Checks trays</td>
<td>□</td>
</tr>
<tr>
<td>25. Gives diet instructions</td>
<td>□</td>
</tr>
<tr>
<td>26. Knows effects of disease</td>
<td>□</td>
</tr>
<tr>
<td>27. Knows bases of disease</td>
<td>□</td>
</tr>
<tr>
<td>28. Knows psychology of illness</td>
<td>□</td>
</tr>
<tr>
<td>29. Delegates non-technical tasks</td>
<td>□</td>
</tr>
<tr>
<td>30. Is self-confident</td>
<td>□</td>
</tr>
<tr>
<td>31. Exercises ethics</td>
<td>□</td>
</tr>
<tr>
<td>32. Is competent</td>
<td>□</td>
</tr>
<tr>
<td>33. Has good rapport</td>
<td>□</td>
</tr>
<tr>
<td>34. Relates diet and disease</td>
<td>□</td>
</tr>
</tbody>
</table>

**FIGURE 7 (CONTINUED)**

COMPARISON OF CONFIDENCE INTERVALS OF PHYSICIAN AND DIETITIAN RESPONSES ILLUSTRATING PERCEIVED DISPARITY BETWEEN IDEAL AND ACTUAL PERFORMANCE
intervals closest to "0" and therefore evincing less incongruity between ideal and actual performance, was observed for eight of the 34 items as follows:

**Activities:**
- Knows food composition
- Is readily available

**Qualities:**
- Delegates non-technical tasks
- Is self-confident
- Exercises ethics
- Is competent
- Has good rapport
- Relates diet and disease

Physicians perceived dietitians as exhibiting moderate role disparity for 18 of the 25 "activities" and 3 of the 9 "qualities." High disparity between role expectations and role performance was apparent for five following activities:

- Gives seminars
- Discusses during medical rounds
- Makes home visits
- Takes nutrition histories
- Seeks causes for diet problems

**Disparity Rated by Dietitians**

**Hypothesis 4.2:** Dietitians perceive no difference between ideal and actual role performance of the dietitian. The hypothesis is rejected. Confidence intervals indicated differences between ideal and actual performance were perceived by dietitians for all items (Figure 7). The perceived disparity was low (confidence intervals 0-1) for 22 (64\%) of the items comprising 89\% of the
"qualities" and 56% of "activities." Moderate disparity, the second level of incongruity, was indicated for eight "activities" and the one "quality" item "delegates clerical duties." Dietitians' responses evinced, as did replies from physicians, dietitians should not but often do "follow diet orders without question or adaptation." The highest level of disparity between expected and actual performance was found for three activities:

- Attends medical rounds
- Gives seminars
- Makes home visits

Progressive Role Conception and Role Disparity

Dietitians whose responses in Column A of the questionnaire to at least six of the nine progressive items fell in Category A ("definitely should" or "should") were considered to perceive the role of the dietitian as progressive. Six hundred nineteen or 88.3% of the sample population satisfied definition requirements. The large percentage of dietitians in the sample who satisfied criteria for selection was not anticipated and the results of the calculations were not markedly different from the totality of the sample population. Confidence intervals were obtained for the dietitians who perceive the ideal role as progressive. These intervals were compared with the confidence intervals obtained from all dietitians.
Hypothesis 4.3: There is no difference in perception of role disparity between dietitians who perceive the role of the dietitian as progressive and all dietitians. The hypothesis is rejected. The intervals indicated greater disparity between role performance and role expectations on all progressive items among the "progressive" dietitians than among all dietitians in the sample.

Comparison of Role Disparity Perceived by Dietitians and Physicians

Hypothesis 4.3: There is no difference in role disparity perceived by dietitians and physicians. The hypothesis is rejected. In 30 (88%) items physicians indicated greater role disparity than dietitians (Figure 7). Dietitians perceived more incongruity between performance and role expectations than did physicians for the following four items:

- Attends medical rounds
- Initiates dietary prescriptions
- Is team member
- Delegates non-technical tasks

Confidence intervals indicate disparity between role expectations and role performance but do not allude to responses which affirm or deny the item as appropriate to the role definition of the dietitian nor the nature of the role disparity. The mean responses of physicians and dietitians (Figure 8) for ideal and actual performance illustrate the real differences in perception between
## MEAN RESPONSES - IDEAL AND ACTUAL PERFORMANCE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SHOULD/DOES</th>
<th>SHOULD NOT/DOES NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give Seminars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss during rounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make home visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take nutrition histories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seek causes for diet problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend rounds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 8**

MEAN RESPONSES OF PHYSICIANS AND DIETITIANS FOR IDEAL AND ACTUAL ROLE PERFORMANCE
<table>
<thead>
<tr>
<th>ITEM</th>
<th>SHOULD/DOES</th>
<th>SHOULD NOT/DOES NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give nutrition information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of current topics</td>
<td></td>
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</tr>
<tr>
<td>Initiate dietary prescription</td>
<td></td>
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<tr>
<td>Recommend diets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question physician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow diet orders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relate diet and disease</td>
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</tbody>
</table>

**FIGURE 8 (CONTINUED)**

MEAN RESPONSES OF PHYSICIANS AND DIETITIANS FOR IDEAL AND ACTUAL ROLE PERFORMANCE
<table>
<thead>
<tr>
<th>ITEM</th>
<th>SHOULD/DOES</th>
<th>SHOULD NOT/DOES NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform as team member</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chart dietary information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be open and cordial</td>
<td></td>
<td></td>
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<tr>
<td>Contribute to team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply research findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivate patients</td>
<td></td>
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</tr>
<tr>
<td>Know patients nutritional status</td>
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</tbody>
</table>

**FIGURE 8 (CONTINUED)**

MEAN RESPONSES OF PHYSICIANS AND DIETITIANS FOR IDEAL AND ACTUAL ROLE PERFORMANCE
### MEAN RESPONSES – IDEAL AND ACTUAL PERFORMANCE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SHOULD/DOES</th>
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<tr>
<td>Nutrition information to patient</td>
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<td></td>
</tr>
<tr>
<td>Visit during meals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check trays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give diet instructions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know effect of disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know bases of disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know psychology of illness</td>
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</table>

**FIGURE 8 (CONTINUED)**

MEAN RESPONSES OF PHYSICIANS AND DIETITIANS FOR IDEAL AND ACTUAL ROLE PERFORMANCE
### MEAN RESPONSES - IDEAL AND ACTUAL PERFORMANCE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SHOULD/DOES</th>
<th>SHOULD NOT/DOES NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know food composition</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Readily available</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Delegate non-technical tasks</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Be self-confident</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Exercise ethics</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Be competent in profession</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Have good rapport</td>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

**FIGURE 8 (CONTINUED)**

**MEAN RESPONSES OF PHYSICIANS AND DIETITIANS FOR IDEAL AND ACTUAL ROLE PERFORMANCE**
groups based on response categories in the questionnaire. These graphic illustrations clarify differences in the high, moderate and low disparity between ideal and actual performance which were found in calculations of the confidence intervals.

Reasons for Role Disparity

Suggestions in the literature implicated the physician as inhibiting role performance of allied health professionals (19:75, 142).

Hypothesis 4.5: In those behaviors where the physician is a role partner, role disparity perceived by dietitians is primarily attributed to a lack of cooperation from physicians. This hypothesis is rejected. Prohibitions imposed by physicians were listed as primary or secondary deterrents to ideal performance for only 6 (37%) of the 16 items which were directly related to the function of the physician. In only two of the 16 activities related to the physician, "initiating dietary prescriptions" and "recommending diets," did dietitians perceive the physician as the primary deterrent (Table 15). Prohibitions made by physicians and lack of time were of approximate importance as deterrents to ideal performance of two other items, "follows diet orders" and "has open and cordial communication with physicians." The physician was implicated secondarily to limitations of time in deterring
<table>
<thead>
<tr>
<th>Item</th>
<th>Lack of Education (%)</th>
<th>Hospital Policy (%)</th>
<th>Lack of Time (%)</th>
<th>Personnel Shortage (%)</th>
<th>Physician Prohibits (%)</th>
<th>Not Interested (%)</th>
<th>Not Relevant (%)</th>
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<tr>
<td>Attend rounds</td>
<td>20.25</td>
<td>45.00</td>
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<td>Give seminars</td>
<td>15.28</td>
<td>34.41</td>
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<tr>
<td>Give nutrition</td>
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<td>37.62</td>
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<tr>
<td>Discuss during rounds</td>
<td>28.63</td>
<td>39.94</td>
<td></td>
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<td>Aware of current topics</td>
<td>38.41</td>
<td>53.55</td>
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<tr>
<td>Initiate dietary prescriptions</td>
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<td>42.92</td>
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<td>Recommend diet</td>
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<td>Question physician</td>
<td>39.94</td>
<td>33.84</td>
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<tr>
<td>Know food composition</td>
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<td>32.85</td>
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<tr>
<td>Follow diet orders</td>
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<td>40.98</td>
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<td>Readily available</td>
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<td>Team member</td>
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<td>32.85</td>
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<td>Chart information</td>
<td>29.94</td>
<td>45.02</td>
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<tr>
<td>Open and cordial</td>
<td>32.60</td>
<td>43.02</td>
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<tr>
<td>Contribute to team</td>
<td>34.07</td>
<td>44.02</td>
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<tr>
<td>Apply research findings</td>
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<td>43.02</td>
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<tr>
<td>Make home visits</td>
<td>38.36</td>
<td>43.02</td>
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<td>Motivate patients</td>
<td>63.19</td>
<td>70.12</td>
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<tr>
<td>Take nutrition histories</td>
<td>75.31</td>
<td>10.27</td>
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<td>Seek causes for diet problems</td>
<td>64.08</td>
<td>12.64</td>
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<td>Know patient dietary status</td>
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<td>Give patients nutrition information</td>
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<td>Visit patients during meals</td>
<td>70.71</td>
<td>20.12</td>
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<td>Check trays</td>
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<td>44.02</td>
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<td>Give diet instructions</td>
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<td>32.85</td>
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<td></td>
</tr>
<tr>
<td>Know effects of disease</td>
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<td>44.02</td>
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<tr>
<td>Know bases of diseases</td>
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<td>10.27</td>
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<td>Know psychology of illness</td>
<td>11.90</td>
<td>70.54</td>
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<td>Delegate non-technical tasks</td>
<td>74.34</td>
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<td>Self-confident</td>
<td>67.00</td>
<td>70.54</td>
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<td>Exercise ethics</td>
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<td>Competent</td>
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<td>15.10</td>
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<td>Good rapport</td>
<td>37.33</td>
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<tr>
<td>Relate diet and disease</td>
<td>72.60</td>
<td>12.55</td>
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</table>
"discussion during rounds" and "questioning diet orders."

Lack of time was a major deterrent for 14 (87.5%) of the inventory items related to the physician. Lack of education was indicated as a primary deterrent in five (31%) and restrictions of hospital policy in seven (43.7%) of the physician-related items.

Lack of time was given either as the first or second reason for deficiencies in ideal performance of 88% of inventory items. Hospital policies and insufficient numbers of trained personnel were implicated in 26% and 20% of all items. Lack of education was given as the most important deterrent in 23% of items and of secondary importance in four other items, making this a major deterrent in over one-third of the inventory items.
CHAPTER V

INTERPRETATION OF FINDINGS

Introduction

A revised role definition is imperative as the dietitian relinquishes some traditional, restrictive and clerical tasks to assume greater responsibility for direct patient nutritional care. The dietitian cannot define an expanded health team role independently of the physician since quality dietary care of patients entails a role partnership between these two professions. The literature was searched for empirical evidence of cooperative action among dietitians and physicians in delineating an expanded role of the dietitian.

No empirical research was found which would substantiate expressed opinions about physicians' views of the health team role for the dietitian. The role of the clinical dietitian propounded by leaders in the dietetics profession, by physicians and other authors appears to be based on the opinions of a few individuals. Moreover, no data were found to show the willingness of dietetic practitioners to accept decision-making responsibilities advocated as appropriate to the role of the dietitian.
Assuming the dietitian aspires toward a new level of responsibility, no evidence was found to indicate the willingness of physicians to ascribe greater responsibility and decision-making activities of nutritional care to the dietitian.

The Mailed Questionnaire

The number of returns from dietitians in this study (73.8%) compares favorably with the results of similar investigations. Lindsey (81) obtained responses to a mailed questionnaire from 69% of therapeutic dietitians from a sample representing members of the Ohio Dietetic Association and Johnson (69) received replies from 54% of a population sample of hospital therapeutic or clinic dietitians. Seventy-two per cent of dietitians employed in selected Wisconsin hospitals responded to a mailed questionnaire (130) and a 40% return was reported from a questionnaire mailed to all members of the Michigan Dietetic Association (140). A return of 63% was realized in an American Dietetic Association survey of all members of the Association (11). A return of completed questionnaires from 70.1% of the population sample in this investigation is considered to provide sufficient data from which to make generalizations about dietitians from the research findings.

Responses to questionnaires mailed to physicians
generally are less representative than returns reported for dietitians. Herron (58) obtained answers from 67% of a sample drawn from local doctors in a role consensus study of the registered nurse. Spangler (127) reported a questionnaire return of 83% from physicians nominated by dietitians and 59% from randomly selected physicians in a study of hospital dietetics in Michigan. An overall return of 32% was reported in a survey of physicians in Washington, D.C. (25). Responses by specialty reported in the Washington study are similar to those received in the present investigation. Although the return of completed questionnaires from 36.4% of the sample is considerably less than that reported in studies of local interest to physicians, responses in this investigation represent a large number (728) of physicians and therefore provide an adequate indication of physician attitudes and views regarding the role of the dietitian.

The large percentage of questionnaires returned from physicians and the many unsolicited personal comments of respondents are indications of a deep interest in the role definition of dietitians. Several physicians requested copies of the survey results and others expressed anticipation of their publication. The apparent interest shown by physicians minimizes the importance of generalizations in which a lack of concern for allied health professionals
is reported as a universal characteristic among physicians.

The mailed questionnaire has been criticized as a technique for data collection. Objections are based in large part on the bias imposed by those in the sample who fail to respond. Non-respondents are said to nurture negative attitudes and therefore data from questionnaires are likely to favor positive attitudes of the sample (38). Any bias which may be inherent in this study reflects the interest of the respondents. Physicians and dietitians with intense interest in and definite attitudes about the role of the dietitian took the time and effort to respond to the questionnaire (44:52). Presumably then, the findings in this study were expected to reflect positive attitudes and strong viewpoints of the two professional groups.

Role Conception

Role of Dietitian Perceived by Physicians

Findings in this study indicate physicians are not opposed in principle to a health team role for the dietitian. Physicians showed high consensus of opinion dietitians should make a definite contribution to the health care team. Responses to the allegation the dietitian be a full and equal member of the health care team were less intense and strong opinions were not shared by all, but
positive replies were of sufficient numbers to warrant a low level of consensus.

Physicians do not agree, however, on the method by which health team participation can be actuated. Nutrition-related activities which are commonly considered as components of health team participation can be divided into two classifications: those relating primarily to the patient and those related directly to functions of the physician. Generally, patient-related health team activities of the dietitian were endorsed. Physicians also agreed on a role for the dietitian in providing information for the physician to utilize in assessing needs of patients. Physicians affirmed that dietitians should assist the team effort primarily by contributing informational expertise.

On the other hand, physicians showed a lack of consensus on those activities which imply a direct role for the dietitian in decision-making or assuming authority for nutritional care. However, insufficient negative responses opposing decision-making and autonomous activities prevented ascription of negative consensus to these functions. Interpretation of responses suggests physicians are somewhat neutral, though not generally unfavorably oriented toward ascribing to the dietitian some decision-making activities.
Perhaps physicians differ in their basic perceptions of these activities and therefore do not agree on the part to be played by the dietitian. For example, more than 75% of physicians felt the dietitian could "offer information of clinical interest during rounds" but only 58% of the group indicated the dietitian might attend routine ward rounds. A large percentage of responding physicians represented Medical Centers. Physicians in larger hospitals may routinely lead medical rounds where presence of the dietitian would be an asset. To illustrate, the dietitian might provide valuable information and insights regarding nutritional needs, dietary status and nutritional patterns of a patient or the availability of foods or nutritional supplements of unusual composition during clinical conferences, grand rounds or at nutrition-related seminars. However, the dietitian would have little or no contribution to make at rounds in which the physician rapidly notes the progress of patients, makes prescriptions, examines surgical wounds, etc. When the dietitian offers comments, nutritional recommendations or suggestions during rounds or clinical conferences, these would normally be perceived as consultative and the physician would remain in a position of authority with the freedom to accept or reject counsel. Hence, it is not surprising many physicians agree the dietitian might contribute to the
achievement of goals in the aforementioned activities.

The nature of health team participation appropriated to the dietitian is influenced by medical specialty of the physician. In general, internists and pediatricians favored participation of the dietitian in what were specified as high status or decision-making activities: attending rounds, recommending an appropriate diet after diagnosis is confirmed and recording dietary progress on medical charts. General practitioners and specialists in family medicine gave fewer positive responses than other specialties indicating less eagerness for the dietitian to participate in decision-making activities.

Discussions of differences among medical specialties in the role conceived for the dietitian were not found in the literature. The obvious differences may be attributed to closer communication and joint efforts in nutritional care between dietitians and those physicians who entertain more favorable attitudes toward her, or the differences may be the result of a nutritional competence recognized by the physician who has had the opportunity to note the level of expertise achieved by the dietitian. Also, the apparent lack of acknowledgement of expertise of the dietitian by general practitioners may be due to the concern and interest of the dietitian in dietary modifications. Patients hospitalized by physicians of family
medicine are often not prescribed dietary modifications; dietitians do not as a rule devote their energies to nutrition education of patients on selective menus or general diets. As a consequence, general practitioners and physicians specializing in family medicine do not perceive the dietitian as making important contributions to routine rounds, charting dietary information, recommending dietary prescriptions or analysis of reasons for failures of patients to follow a prescribed diet.

Findings in this study clearly indicated many physicians desire a role for the dietitian far removed from the traditional concept of a "place near the kitchen." There were responses, though, which intimated some physicians are not prepared for the dietitian to assume a judgmental or participative role. Almost one-third of physicians said the dietitian should follow diet orders without question or adaptation. Several unsolicited remarks from individual physicians provided insight into reasons for these apparently conservative and resistant attitudes. A few of these comments are given below.

"... Little interest has been expressed by our dietary department in meeting the patient's nutritional let alone therapeutic needs."

"All I expect of a dietitian is that she or he see that certain foods are avoided in a patient's diet, if I have so ordered."

"... Dietitians ... are an integral part of the ward staff. Their main role is to prepare palatable diets
within the medical constrictions and to teach the patients a practical way to continue the diet at home."

"Everyone wants to make rounds with the physician when in fact physician rounds have a very specific medical purpose. There is no need for a dietitian . . . to make rounds with me when I am examining and treating my patients. I am very willing to consult with these people when the need arises."

"I never see her. I never talk to her. Orders are written; nurses do the rest."

"I have generally found dietitians not patient oriented in any respect. They remain in their headquarters by their desks."

"We believe in Adelle Davis, that food intake and regulation can erase many 'medical' problems, and that everybody should fast at least once a week!"

"In the eight major hospitals of my personal experience the level of professional competence of dietitians, as contemplated in these questions, has been so low that it is not possible for me to say what dietitians should do. If they could do these things they would constitute a profession entirely different from that now extant."

"I think the dietitian should understand what the physician is trying to accomplish with diet and help him accomplish it. I don't think a detailed study of physiology, clinical medicine and biochemistry is needed."

Despite a willingness among physicians to award the dietitian a place on the health care team, most physicians resist giving the dietitian an autonomous position with regard to patient nutritional care. Physicians showed least agreement on the statement the dietitian "take the initiative in making or changing diet orders." The largest percentage of negative responses (54.5%) on any function was given for this item. This finding insinuates doctors are generally not willing to ascribe to the
dietitian the freedom to assess the patient's nutritional needs and make an independent judgment on the dietary care to be provided. Even physicians of medical specialties who ascribe high responsibility to the dietitian in other activities, lack agreement that she should take the initiative in prescribing dietary regimens. These data indicate physicians agree the dietitian, as an allied health professional, should not be given total autonomy and authority in patient nutritional care. Her paramedical status obligates her, in the opinion of physicians, to work under medical direction and initiative.

Role Perceived by Dietitians

Dietitians shared with physicians the role conception of functions related to informational and direct patient services. The mean responses of dietitians were higher than physicians for all activities indicating stronger opinions among role incumbents. Familiarity with the dynamic changes in dietary and nutritional care and health delivery systems, and the desire for more professionalization explain the greater role expectations of the dietitian.

More than 50% of dietitians regarded the routine duty of checking trays as a function of the dietitian. A large percentage (17%) contended, too, the dietitian should "follow diet orders without question or
adaptation." Such responses as these would indicate not all dietitians are willing to relinquish traditional activities to aspire toward a decision-making role in nutritional care and attain recognition on the health team. Attitudes which connote strong convictions for performing restrictive activities seem to be incompatible with a participative health team role which has been set forth for the dietitian in the professional literature. Spangler (127) questioned the genuine ambition of dietitians to abandon the security of a routine and relatively non-responsible but autonomous role in the dietary department. The small representation of intense affirmative responses to the activities which connote high levels of responsibility for the dietitian indicate all dietitians do not perceive health team participation and decision-making activities as part of their ideal role.

Contrarywise, conservative responses may be the result of role deprivation and a revision of role expectations to coincide with those of the role partner. Spangler (127) found dietitians perceived physicians as believing the dietitian should perform routine and clerical duties much more frequently than the dietitian does or thinks she should. This perception was found to be true in this study. But at the same time more than 90% of physicians indicated the dietitian should be a full and
equal member of the health team and almost half responded in the strong affirmative she should recommend modified diets for patients.

Inaccuracies in perception of the expectations of physicians could explain why a large number of dietitians said the dietitian should follow orders without question and perform habitual, non-technical procedures. Most of the unsolicited comments from dietitians were oriented to individual perceptions of physician's attitudes towards the dietitian. The general content and tone of remarks from dietitians give the impression of a defensive attitude, and a frequent mention of the physician or the health team suggests dietitians think these groups entertain negative attitudes towards dietitians. In contrast, remarks from physicians quoted earlier were less specific but more role-oriented and implied a genuine concern for improving nutritional care. Following are excerpts from some remarks made by dietitians.

"... Generally a therapeutic dietitian has a fairly good knowledge of her subject but is often afraid to discuss problems and ideas with physicians due to a lack of confidence in that knowledge. Perhaps our schools ought to stress the fact that physicians don't know everything and that we must be able to assert ourselves and share our knowledge. ... Dietitians have too long been educated to stand in awe of the physician and as a result have become meek and defensive to a degree."

"The physician will seldom come to you until you show him you have something to offer."
"I feel dietitians as a whole are both qualified as well as willing to become more involved as an accepted part of the medical team. However, dietitians are only slowly gaining this acceptance!"

"Many dietitians do not attend physicians' rounds. I feel the greatest reason is lack of coverage and time. Many are apprehensive for fear they will not be able to answer questions or will get too much extra work or projects as a result. I feel strongly we will not be able to function as a real member of the team without making ourselves available to the physicians. Rounds are one way."

"Physician prohibits because of lack of interest within himself and because of poor knowledge of nutrition."

"Most physicians are not interested. Dietitians lack initiative and perhaps self-confidence."

"Other professional members of the health team may underestimate the role of the therapeutic dietitian, e.g. 'dietitians are good cooks'!"

Despite some contradictory opinions, more than 90% of dietitians in the study asserted role incumbents should not only be full and equal members of the health team but should participate in decision-making activities related to nutritional care. Antithetical to the lack of consensus among physicians, more than 65% of dietitians evinced a strong positive opinion the dietitian should "take the initiative in making dietary prescriptions." This finding supports data reported by Spangler (127) which indicated dietitians want, in theory at least, to assume responsibility for full participation in decision-making activities and prescribing special diets.

Dietitians exhibited strong opinions about being
full and equal members of the health team but the power of conviction was missing from the rejection of tasks which devour much time without engaging the level of competence for which the dietitian was educated and is capable. Nor was there evidence of convincing attitudes to compel the assumption of functions by which health team participation can be actuated. This investigation did not provide insight into this seemingly dichotomous situation. Dietitians cannot pursue health team participation as a generality. The whole, and each individual member, of the profession of dietetics must accept common expectations and systematically engage in a program of self-education, communication of purpose and adaptation of obsolete and restrictive hospital policies to effect the attribution of desired roles.

Role Conceptions and Group Disharmony

Physicians and dietitians agree the dietitian should participate on the health team. The groups appear to be in disagreement on the activities which should comprise the health team role of the dietitian. To a large extent both agree on activities which are patient-oriented or provide dietary information for assessment of patient nutritional status or need. Differences in intensity of similar opinions in either a positive or negative direction which often occurred between the two groups are not
likely to create group conflict.

A majority of dietitians was strongly affirmative in role expectations for responsibilities at a decision-making level while most physicians failed to agree that such progressive functions should be relinquished to the dietitian. Differences between doctors and dietitians in the direction of consensus, such as opposing opinions observed for functions basic to a decision-making role for the dietitian, could be a key factor in group disharmony. Responsibilities or authority in matters of patient nutritional care cannot be assumed by the dietitian unless these rights are attributed to her by the physician who, in the order of social and medical roles, presently holds this authority.

Physicians who took the effort to participate in this study are considered to have the most favorable opinions of dietitians (38). These physicians whom we assume are supportive do not manifest even the lowest level of consensus that the dietitian should be given a role of participation in decision-making processes. In fact, the large percentage of negative responses to activities which indicate high levels of responsibility for the dietitian indicate many physicians are strongly convinced the dietitian should not participate in the decision-making activities. Findings in this study provide evidence the
dietitian who aspires toward autonomy will no doubt experience role deprivation and frustration in her role aspirations.

One solution for a lack of role satisfaction is to leave the situation, that is change positions. In this study, more than 50% of all dietitians had been in their current positions less than three years. More than 60% of physicians had been in their practices more than 10 years. Differences in mobility of these groups have been reported in the literature (79, 141) and have been attributed in part to differences in satisfactions in meeting role expectations.

Fifty-two per cent of dietitians in this study were less than 35 years of age and 70% were less than 45. In contrast, 65% of physicians were between the ages of 36 and 55. The differences in ages and the high mobility among dietitians indicates the aspirations for greater responsibility and health team participation are representative of a group of young, inexperienced dietitians. Recent dietetic graduates have no doubt been motivated in their academic milieu by the drive toward greater professionalization. The career aspirations of the relatively young dietitian may easily be thwarted by the more mature and professionally secure physician, educated in a less tumultuous era. Hence, differing philosophies of
professionalism, health care and functional health teams may form the inherent basis for the differences in role conceptions found in this study.

**Role Performance**

The dietitian has long been charged with activities relating to dietary instruction of patients, nutrition histories, charting dietary progress, adapting normal or modified nutritional patterns to meet individual needs of the patient. Findings in this study indicate these fundamental activities have not been executed to the satisfaction of physicians or dietitians. Physicians are even more critical of the level of performance than are dietitians. The dietitian is unwise to clamor for opportunities in decision-making activities when the evidence purports her performance falls short of expectations in other health team activities which are thought to demand less authority, competence and professional responsibility. It is not likely that physicians will ascribe to the dietitian functions he believes exceed her prerogatives when she does not meet his expectations on those functions which are known to be her obligations.

The question remains unanswered, though, do physicians' perceptions of dietitian performance coincide with actual behavior? Or are doctors unaware of the contributions made by the dietitian? Possibly, the activities
related to high quality nutrition care escape the notice of the physician, particularly if frequent positive stimulation of some type is lacking. If the dietitian is not visible to the physician or if patients have commented unfavorably about hospital food service, the doctor may succumb to the common tendency to evaluate all functions at a lower level of performance. Finally, the ubiquitous tradition of low status and lack of recognition for the dietitian by those outside the dietetics profession, may be reflected in the disparate ratings of physicians and dietitians. Assuming low performance ratings may be due to inaccuracies of perception, reform will come not as the result of increased productivity or better quality care but as the effect of improved public relations and communication.

Incongruity between role expectation and role performance of itself is insufficient basis on which to predict disharmony or conflict of opinion. The nature of the role disparity must be examined. For example, mean responses of ideal performance among dietitians for the item "attend rounds" was 1.77 (should) while actual performance was evaluated as 5.42 (usually does not). The mean response of doctors for that same item was 3.58 (should not) but the mean role performance score was 4.24 (often does not). In other words, the disparity of physicians for
this item is derived from the fact doctors assert dietitians should not, and usually do not, attend rounds while dietitians affirm they should, but often do not perform this function. A similar pattern of role disparity exists for the dietitian taking initiative in dietary prescriptions.

These two activities, attending rounds and taking the initiative in making dietary prescriptions, are likely to be the source of greatest conflict between physicians and dietitians. Many physicians think routine medical rounds should not even be attended by the nurse (58); it is not surprising that a greater number of physicians veto presence of the dietitian at "rounds." Indications are that "rounds" have been used by the dietitian as a tool by which to make her presence and expertise recognized by the physician. Physicians apparently resist this effort since attending daily medical rounds, in many cases, is a time consuming task without measurable results. Definite and specific objectives should be delineated for nutritional care of each patient; joining the physician at his daily rounds should have a definite purpose or should be avoided by the dietitian.

A second source of friction may arise from attempts of the dietitian to take initiative in dietary prescriptions. A large percentage of physicians has indicated a
strong belief the dietitian should recommend a modified diet after the patient has been medically evaluated. Such a practice appears not to be in general usage among dietitians. To avoid conflict the dietitian ought to contribute her expertise where deficiencies in professional nutritional care are observed and where her high level of competence is desired. She ought to prove herself in the present order before she attempts to revolutionize the established social order of medical care in which the physician is captain of the health team, takes the initiative in goal attainment and assumes legal responsibility for health care provided under his leadership.

Several other activities have been ascribed to the role of the dietitian by physicians and in every case role performance lags behind role expectations. Examples of activities where the dietitian can work to meet role expectations are making notations of nutrition on medical charts, providing physicians with reliable sources of nutrition information, developing open and cordial communications, and showing improvement in or making visible direct nutrition education and dietary care of patients.

This research indicates physicians believe dietitians are competent in matters relating to nutrition, have open and cordial communication with patients and are self-confident. Even though the dietitian rates herself higher
than do physicians in these characteristics, the dietitian can capitalize on these strong points as a first step toward assuming an expanded role on the health team.

Information contrary to some assertions and supportive of other generalizations found in the literature, has been accrued. Physicians and dietitians agreed the dietitian is readily available for consultation and has open and cordial communication and rapport with physicians and patients. These virtues are not compatible with the stigma of isolationism placed on the dietitian (113). The stereotype labeled "lack of initiative" may be confirmed by the fact that only half of physicians but more than 85% of dietitians were convinced the dietitian actually contacts the physician if she questions a diet order. Only half the physicians and 60% of the dietitians strongly agreed the dietitian does delegate clerical and routine tasks. This finding is consistent with the report of Kline and Dowling (75) which states dietitians delegate more duties in large than in medium sized institutions. The failure of the dietitian to relinquish some non-technical functions may account in part for failures to meet other professional role expectations.

The academic curriculum of dietitians requires revision if constructive and pertinent criticisms are to be incorporated and used for strengthening educational
preparation and producing graduates better prepared to meet the needs of modern and future-oriented health and nutritional care. Less than half the physicians affirmed the academic competence of the dietitian indicated by responses of the doctor in evaluating understandings of the "effects of disease on body metabolism," "the physical and biochemical bases of diseases" and the "psychological dimensions of illness." Over two-thirds of the physicians perceived the dietitian to understand the relationship between disease and specific diets. Dietitians showed greater confidence in their educational preparation than was attributed to them by physicians. However, dietitians gave lack of education as a major deterrent in over one-third of the items indicated in the Role Conception Inventory.

Restrictions or limitations set by physicians were not perceived as the main reason for role disparity among dietitians. To struggle with the physician alone to accept an expanded role definition would be an evasion. Perceived barriers to ideal performance were more often than not, lack of time, hospital policies and deficiencies in education and training. In some instances a shortage of technicians was given as the reason why the dietitian performs tasks which could be delegated. In any event, the deterrents to effective health team role performance
as perceived by the dietitian seem to be hedged primarily in the preparatory and continuing educational programs for the profession and in the hospital organization and management, not in the medical profession. Efforts for renovation in dietetic practice need to be concentrated in each of the three areas if the deterrents to effective health team participation are to be overcome.
CHAPTER VI

SUMMARY AND RECOMMENDATIONS

Summary

A study was undertaken to ascertain the agreement among and between physicians and dietitians on activities, responsibilities and qualities which are included in the role definition and actual performance of the health team dietitian. All data for the study were obtained from a Role Conception Inventory developed by the investigator for use in the study. Questionnaires were mailed to a population sample of 2000 physicians representing selected medical specialties and 1000 therapeutic dietitians in the United States. Completed questionnaires were returned from 728 (36.4%) physicians and 701 (70.1%) dietitians.

The data were analyzed by percentages of responses and sample variances to determine the levels of consensus for inventory items among physicians and dietitians. Chi-square measurements were used to test significance of differences in responses among physicians of different medical specialties and dietitians employed in different size hospitals. Data were also examined to determine consensus for conception of a progressive or traditional
role. Differences in role conception between the groups were determined by shared levels of consensus and chi-square tests of significance. Using role expectations as criteria, role performance was appraised among and comparisons made between evaluations of the two professional groups. Some causes of role disparity were identified by analyzing deterrents to ideal performance which were perceived as important by dietitians.

The specific objective of this study was to elicit answers to four questions. (a) Do physicians and dietitians agree on functions which comprise the role of the dietitian? (b) Is the role perceived by each group liberal or traditional? (c) To what extent do physicians and dietitians perceive the dietitian as performing the ideal role? (d) What factors do dietitians perceive as deterrents to ideal performance? Answers to these questions and conclusions drawn from the analyses of data are summarized below.

Role Conceptions

1. Physicians are of a consensus the dietitian should be a full and equal member of and make a positive contribution to the health team.

2. Strong support is given by physicians for activities related to an informational role for the health team dietitian. Physicians agree the dietitian should be
readily available for consultation, have cordial and open communication, be aware of and apply current nutrition information to daily situations, recommend reliable sources of information to physicians, have immediate and accurate information on food composition. Physicians welcome questions from the dietitian regarding a dietary prescription and charge the dietitian with adapting prescribed diets to the needs of patients.

Physicians are in less agreement the dietitian should note dietary information on medical charts. Doctors are not of a consensus on dietitian participation in decision-making activities: attendance at and contributions to discussions during medical rounds, taking initiative in or recommending dietary prescriptions. Physicians who specialize in internal medicine and pediatrics appear more willing than physicians of other specialties to permit the dietitian to share in decision-making activities.

3. Physicians agree the dietitian should provide instructional and informational services to patients, but there is less consensus the dietitian should take nutrition histories, examine behaviors for failures to follow a diet, and check meal trays for accuracy. Physicians and dietitians lacked agreement the dietitian should follow-up patients on modified diets after hospital discharge.

4. Many physicians do not see the need for the
dietitian to understand psychological, physiological and biochemical bases of disease or the necessity to delegate clerical and routine duties to technicians. The assumption may be made physicians who hold these opinions perceive the dietitian as totally dependent upon the doctor for assessment and planning all phases of dietary care.

5. Physicians tend to perceive the ideal role for the dietitian as moderately liberal but fail to ascribe to the dietitian participation in decision-making activities.

6. Dietitians generally share consensus in a liberal role for the dietitian. Dietitians strongly agree the dietitian should be a member of and make a definite contribution to the health team. Dietitians also perceive a responsibility in decision-making activities and in taking the initiative in making or changing diet orders. More dietitians in large hospitals than in small institutions believe attendance at rounds is appropriate to the role of the dietitian.

7. The perceived role of the dietitian includes direct patient educational and informational services. The need to check trays is generally rejected by dietitians in large hospitals and accepted as an important function by those employed in smaller facilities.

8. Dietitians give strong support to the development of qualities and attitudes perceived as necessary and
basic to quality performance in decision-making activities.

9. Lack of agreement between dietitians and physicians on participation of the dietitian in decision-making activities of the health team is likely to be a source of frustration for the dietitian and a factor in conflict between the groups.

Role Performance

1. Dietitians and physicians perceive incongruity between role expectations and role performance for all functions of the dietitian. Dietitians are inclined to appraise role incumbents more favorably than are physicians. Highest disparity is found in providing seminars, attending rounds, taking nutrition histories and seeking causes of patient dietary problems.

2. Physicians and dietitians agree the dietitian should but does not provide nutritional seminars. Dietitians indicated lack of time and restrictions of hospital policy as the major deterrents to ideal performance for this item.

3. Dietitians usually do not attend ward rounds but strongly contend this should be a part of the function of the health team dietitian. Reasons most often given for role incongruity are lack of time and restrictions of hospital policy.
4. Physicians observe highest role disparity for dietitians offering information of clinical interest during rounds, taking nutrition histories and probing behavior of patients for reasons of failure to follow a dietary regimen. For the first of these items dietitians think lack of time, prohibitions of physicians and lack of education are the greatest deterrents. Unsatisfactory performance at taking nutrition histories is attributed to lack of time and insufficient numbers of trained personnel. Lack of time and lack of interest are thought to be the greatest deterrents to ideal performance in examining with patients reasons for failure of dietary regimens.

5. Lack of time is the deterrent most commonly perceived by dietitians as the major cause for deficiencies in ideal role performance. Lack of education, restrictions of hospital policy and shortage of trained personnel are of more importance than prohibitions of physicians as chief deterrents to ideal performance.

Recommendations

Following are recommendations which have evolved from conclusions of this study on the role of the clinical dietitian.

Recommendations Related to Role Conception

1. Dietitians are urged to define specific
objectives for patient nutritional care as integrants of the goals established by the health team. Physicians are of a consensus the dietitian should be a member of the health team. Therefore, activities such as attendance at and exchange of information during rounds and clinical conferences, motivation and education of patients and dietary adaptations should be pursued in the framework of the contribution each activity makes to specific team objectives.

2. Educational curricula must be designed to incorporate training in preparation of nutritional objectives as part of the total health care plan to prepare the dietitian for participation as a member of the health team. Objectives for patient nutritional care have not ordinarily been outlined as part of the overall patient care plan.

3. Clinical dietitians should be assisted in delineating practical programs which can be undertaken to improve communication with the physician. Improved communication is particularly important since physicians perceive the dietitian primarily in an informational role. Dietitians might select excellence in an informational role to the physician and other allied health professionals as an immediate objective to be pursued in each local situation.

4. Leaders in the dietetics profession must
cooperate with all positions in the role set, but particularly with physicians, in the current effort to define a health team role for the dietitian. Lack of agreement between physicians and dietitians on the appropriation of a decision-making role to the dietitian emphasizes the need for cooperation. The physician is the one from whom the dietitian will attain the legitimate right to any participative health team activities and decision-making responsibilities.

5. Implementation of the American Dietetic Association Blueprint for Action should be revised to show cognizance of a lack of consensus among physicians for the decision-making role to be ascribed to the dietitian. The Blueprint now specifies the following efforts:

To assist the dietitian in expanding contributions to the health care team, and in consultation with the physician take an active role of making decisions concerning the dietary management of patients including prescriptions of the diet.1

Findings of this study indicate activities outlined in the Blueprint may emphasize factors which contribute to conflict between physicians and dietitians.

6. Objectives of the dietitian for professionalization must be realistically examined and evaluated in terms of the medico-sociological status of allied health

1Blueprint for Action. ADA Courier. 11:50, 1971.
professionals. Dietitians are reminded that occupational legitimacy of all medical allied professionals is derived from cooperation in contributing to achievement of health goals established by the health team under the leadership of the physician.

7. The American Dietetic Association and affiliated state and local dietetic associations should engage in a concerted and systematic effort to change the title and job description of the therapeutic dietitian. Results of this study indicate a necessity for emphasis in the role definition on participation as a member of the health care team, direct patient nutrition care and visibility of the clinical dietitian in patient wards. The job description should de-emphasize tasks which are of a supervisory, routine, clerical and non-technical nature.

8. A career ladder for upward mobility in clinical dietetics is required. This design for promotions should be developed to encourage graduate education in clinical nutrition and the employment of clinical nutrition specialists as integral members of health care teams for direct nutritional care of hospitalized patients.

9. A program is required for increasing the awareness of hospital administrators, personnel directors and administrative dietitians to the need for clinical dietitians to devote total efforts to health team activity and
direct patient nutrition care. An in-plant educational program may be necessary to orient all hospital personnel to the role of the clinical dietitian as a member of the health care team rather than a member of the kitchen staff.

10. Programs of dietetic education would do well to capitalize on making the expertise of the dietitian visible and fostering awareness of contributions the dietitian can make to health care, to physicians and other health professionals.

11. Programs of cooperation and communication with local Visiting Nurses Associations and Departments of Public Health are expedient to assure continued support and guidance of the patient on a modified diet. Community health and nutrition programs are gaining the attention of state and federal legislators but neither physicians nor dietitians are of the opinion dietitians should follow-up nutrition care of patients after hospital discharge. The position taken by the dietitian must be examined and evaluated in the context of total health goals for individual patients; there may be the need for some programs of home care in certain localities.

12. National, state and regional dietetic organizations need to cooperate in a systematic plan of public relations in hospitals; in universities, colleges and high
schools and in civic communities to create an awareness, understanding and appreciation of the role the clinical dietitian assumes in relationship to physicians, professional co-workers and the general public.

Recommendations Related to Role Performance

Physicians and dietitians perceived dichotomies between ideal and actual performance of dietitians. In addition to recommendations for making the dietitian and her contributions to the health team activities more visible in hospital wards and more integral in team goals, following are some suggestions for improvement in meeting role expectations.

1. Regional dietetic associations should make a definite effort to motivate dietitians in the area to participate in health team activities in which each has been deficient: charting dietary progress, recommending modified dietary treatments, delegating non-technical responsibilities to be free in patient wards for consultations and assessment and planning of dietary needs of patients, improving dietary counseling services, etc.

2. Clinical dietitians should be assisted by programs at the state and regional level to (a) prepare and present seminars for physicians and other health professionals, (b) make notations of dietary progress on medical charts, (c) improve diet counseling, (d) create awareness
of and ability to communicate current topics in nutrition and application of present knowledge in daily situations. Dietitians at the local level ought to take immediate steps to revise hospital policies which restrict activities in these areas.

3. The American Dietetic Association should continue strong support of educational programs for technical personnel with specialty in patient nutritional care and should spearhead a public relations effort to convince hospital administrators of the need for employment of technicians.

4. Topics of continuing education which would be especially helpful are those which focus on ways to improve contributions at clinical conferences and ward rounds, composition of new food products, application of research findings to daily situations, sources and contents of reliable nutrition education materials, current concepts in relevant principles of biochemistry, physiology, psycho-dietetics and dietary treatment in preventive and curative medical practice.

5. Clinical dietitians would do well to examine their priorities and career aspirations. Particular attention should be given to an evaluation of individual formal and continuing education programs based on the criteria of present and future needs of the health team and
revision of job descriptions with emphasis on participation and visibility of the dietitian as a member of the health care team.
APPENDIX A

LIST OF OCCUPATIONS CONSIDERED TO BE ALLIED HEALTH PROFESSIONS

---

ADMINISTRATION
  Health administrator
  Program analyst
  Program representative
  Systems analyst

BIOMEDICAL ENGINEERING
  Biomedical engineer

CLINICAL LABORATORY SERVICES
  Laboratory scientist
  Laboratory technologist

DIETETIC AND NUTRITIONAL SERVICES
  Dietitian
  Nutritionist

HEALTH EDUCATION
  Health educator

MEDICAL RECORD SERVICES
  Medical record librarian

OCCUPATIONAL THERAPY
  Occupational therapist

PHYSICAL THERAPY
  Physical therapist

RADIOLOGIC TECHNOLOGY
  Radiologic technologist

SPECIALIZED REHABILITATION SERVICES
  Corrective therapist
  Educational therapist
  Manual arts therapist
  Music therapist
  Recreation therapist
  Homemaking rehabilitation consultant

SPEECH PATHOLOGY AND AUDIOLOGY
  Speech pathologist
  Audiologist

VISION CARE
  Vision care technologist

MISCELLANEOUS HEALTH SERVICES
  Physician’s associate
  Extracorporeal circulation specialist
APPENDIX B

RESPONSIBILITIES OF THE DIETITIAN
The professionally qualified dietitian:
1. Is loyal to the physician as the director of the health team.
2. Serves as consultant to the physician in all areas of diet therapy and nutrition.
3. Suggests nutritional standards to maintain and/or improve the nutrition of the patient.
4. Consults with the physician concerning his dietary prescriptions.
5. Implements dietary prescriptions with meals adapted to the needs of the patient.
6. Informs the physician, both verbally and in writing, concerning the patient's food intake.
7. Teaches and assists patients satisfactorily to fulfill nutritional and diet therapy needs.
8. Informs the physician, both verbally and in writing, concerning progress in the patient's dietary instruction.
9. Meets with staff physicians who serve as an advisory committee on nutrition and diet therapy.
10. Refers recent research developments in nutrition and related subjects to the physician.

THERAPEUTIC RESPONSIBILITIES OF THE DIETITIAN

1. Maintaining or improving the nutritional status of patients by adapting menus, evaluating foods consumed, and counseling in principles of nutrition.

2. Interviewing, teaching, and assisting patients to satisfactorily fulfill nutritional needs in following prescribed diets at home.

3. Cooperating in patients' care by acting as consultant to physicians, nurses, medical social workers, and other paramedical persons in all areas of normal and therapeutic nutrition.

4. Consulting with physicians concerning dietary prescriptions and implementing these through meals adapted to the needs of individual patients.

5. Consulting with community agencies responsible for home or institutional care of patients following discharge from the hospital.

6. Recording on patients' charts, when indicated, appropriate information, including patients' dietary histories, food consumed in the hospital, and progress notes on patients' education.

7. Participating and contributing to over-all departmental planning.

8. Delegating duties and responsibilities to competent individuals.

9. Instructing, supervising, and evaluating dietetic interns, food service supervisors, and other food service personnel.

10. Participating in nutrition education of dietetic interns, nursing and medical students, and others.

11. Preparing, reviewing, and revising materials on modified diets for the department diet manual and for use in educational programs for professional students and department personnel.

APPENDIX C

QUESTIONNAIRES SENT TO PHYSICIANS AND DIETITIANS
### Background Data

<table>
<thead>
<tr>
<th>AREA OF SPECIALIZATION</th>
<th>SEX</th>
<th>TYPE HOSPITAL WHERE PATIENTS USUALLY ADMITTED</th>
<th>YEARS IN PRESENT PRACTICE</th>
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<tr>
<td>Family Medicine</td>
<td>Female</td>
<td>University or Medical Center</td>
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<tr>
<td>General Practice</td>
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<td>Federal Government</td>
<td>1-3</td>
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<tr>
<td>Internal Medicine</td>
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<td>Municipal</td>
<td>3-5</td>
</tr>
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<td>Other</td>
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<td></td>
<td></td>
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<tr>
<td>Gastroenterology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
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<tr>
<td>Surgery</td>
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</tr>
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</table>

### Items Which May Describe the Role and Function of the Therapeutic Dietitian

#### Functions Related to Physician
- Attends physicians routine rounds. (1)
- Gives seminars for physicians and professional personnel. (2)
- Recommends reliable sources of nutritional information. (3)
- Offers information of clinical interest during patient rounds. (4)
- Shows awareness of current nutrition topics and research. (5)
- Takes initiative in making or changing diet orders. (6)
- Recommends an appropriate diet after patient is diagnosed. (7)
- Contacts physician if questions a diet order. (8)
- Has ready and accurate information on food composition. (9)
- Follows diet orders without question or adaptation. (10)
- Is readily available for consultation. (11)
- Performs as a full and equal member of the health care team. (12)
- Makes appropriate notations on medical charts. (13)
- Has open and cordial communication with physicians. (14)
- Makes positive contributions to the health care team. (15)
- Applies current research findings to daily situation. (16)

#### Functions Related to Patient
- Makes home visits to patients after they leave the hospital. (17)
- Motivates patients to follow a diet. (18)
- Takes nutrition histories of patients. (19)
- Probes patients behavior for causes of failure to follow diet. (20)
- Knows nutritional status of patients. (21)
- Recommends reliable sources of nutrition information. (22)
- Makes routine visits to patients during mealtime. (23)
- Checks each tray for accuracy before it is served. (24)
- Instructs patients for whom modified diet is prescribed. (25)

#### Qualities and Attitudes
- Understands effect of disease on body metabolism. (26)
- Has grasp of physical and biochemical bases of diseases. (27)
- Understands psychological dimensions of illness. (28)
- Delegates clerical and routine duties to technicians. (29)
- Shows self-confidence in profession. (30)
- Exercizes professional ethics. (31)
- Is competent in matters relating to nutrition. (32)
- Has good rapport with patients and hospital personnel. (33)
- Understands the relationship between disease and specific diets. (34)
### DIETITIANS

**General Information Data:**

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<th>POSITION</th>
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<tr>
<td>Staff therapeutic dietitian</td>
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<td>1-3</td>
</tr>
<tr>
<td>Only dietitian</td>
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<td>3-5</td>
</tr>
<tr>
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<td>Other</td>
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</table>

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<th>SEX</th>
<th>Size Hospital (Beds)</th>
<th>Undergraduate Degree From:</th>
</tr>
</thead>
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<tr>
<td>Male</td>
<td>151-300</td>
<td>School of Allied Health</td>
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<table>
<thead>
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<th>AGE (YEARS)</th>
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<td>Less than 150</td>
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<td>Over 65</td>
<td>More than 800</td>
</tr>
</tbody>
</table>

**Column A:** Should this item be a part of the dietitian's function?  
**Column B:** Does the dietitian perform this function?  
**Column C:** Why does the dietitian fail to perform this function if it should be part of the role?

### ITEMS WHICH MAY DESCRIBE THE ROLE AND FUNCTION OF THE THERAPEUTIC DIETITIAN

**FUNCTIONS RELATED TO PHYSICIAN**

1. Attends physicians routine rounds.  
2. Gives seminars for physicians and professional personnel.  
3. Recommends reliable sources of nutritional information.  
4. Offers information of clinical interest during patient rounds.  
5. Shows an awareness of current nutrition topics and research.  
6. Takes initiative in making or changing diet orders.  
7. Recommends an appropriate diet after patient is diagnosed.  
8. Contacts physician if question a diet order.  
9. Has ready and accurate information on food composition.  
10. Follows diet orders without question or adaptation.  
11. Is readily available for consultation.  
12. Performs as a full and equal member of the health care team.  
13. Makes appropriate notations on medical charts.  
14. Has open and cordial communication with physicians.  
15. Makes positive contributions to the health care team.  
16. Applies current research findings to daily situation.  
17. Functions related to patient.  
18. Makes home visits to patients after they leave the hospital.  
19. Motivates patients to follow a diet.  
20. Takes nutrition histories of patients.  
22. Knows nutritional status of patients.  
23. Recommends reliable sources of nutritional information.  
24. Makes routine visits to patients during mealtime.  
25. Checks each tray for accuracy before it is served.  
26. Instructs patients for whom modified diet is prescribed.  
27. Qualities and attitudes.  
28. Understands effects of disease on body metabolism.  
29. Has grasp of physical and biochemical bases of disease.  
30. Understands psychological dimensions of illness.  
31. Delegates clinical and routine duties to technicians.  
32. Shows self-confidence in profession.  
33. Exercises professional ethics.  
34. Is competent in matters relating to nutrition.  
35. Has good rapport with patients and hospital personnel.  
36. Understands the relationship between disease and specific diets.
APPENDIX D

COVER LETTERS AND DIRECTIONS WHICH ACCOMPANIED THE FIRST QUESTIONNAIRES
October 8, 1971

Dear Physician:

Because of your area of specialization I know that you are interested in the nutritional care of your hospitalized patients. We are conducting a study to determine how the therapeutic or clinical dietitian can best serve you and your patients, and the extent to which the expected function is now being fulfilled. This information is vital in developing and revising dietetics curricula suited to meet the needs of changing health care.

The enclosed questionnaire is the data collection instrument for this doctoral dissertation research. Will you be willing to take 10 minutes from your rigorous schedule to complete and return this form? If you are not able to do so, may I ask that you or your receptionist complete the general data information and return the blank questionnaire to me. Your responses will not be identified in any way and will be used only as group evaluations.

Will you complete this short form and return it to me by November 1, 1971? The enclosed self-addressed envelope is for your convenience.

Many thanks for your cooperation and time in responding to this questionnaire.

Sincerely yours,

Sister Mary Rosita Schiller
Doctoral Candidate
Food and Nutrition Division
DIRECTIONS

1. This questionnaire is related to the role and function of only the therapeutic or patient nutritional care dietitian. Do not rate a particular person but therapeutic (clinical) dietitians generally as you see the role that they should play in patient care.

2. Please be sure to complete the general information at the head of the form.

3. In the first column you are asked to rate each item on the 6-point scale as it corresponds to your opinion about the function. Mark the number which best agrees with your opinion about that item being a part of the dietitian's role.

   (1) Definitely should
   (2) Should
   (3) Possibly should
   (4) Possibly should not
   (5) Should not
   (6) Definitely should not

4. In the second column please evaluate the extent to which you perceive dietitians generally act with regard to that item. Rate according to your opinion about the frequency with which the dietitian performs each function.

   (1) Always or almost always
   (2) Usually
   (3) Sometimes
   (4) Often does not
   (5) Usually does not
   (6) Never or almost never

5. Return the questionnaire using the enclosed self-addressed, stamped envelope.

Sister Rosita Schiller
1524 Neil Ave., Apt. 24
Columbus, Ohio 43201
October 8, 1971

Dear Dietitian:

As a dietitian I know that you are interested in optimum nutritional care of hospitalized patients. We are conducting a study to determine how practicing therapeutic or clinical dietitians can best serve the patient in cooperation with the physician and the extent to which the expected function is now being fulfilled. This information is vital in developing and revising dietetics curricula suited to meet the needs of changing health care.

The enclosed questionnaire is the data collection instrument for my doctoral dissertation research at The Ohio State University, Columbus. Will you be willing to take 10 minutes from your schedule to complete and return this form? If you are not able to do so, may I ask that you or your secretary complete the general information data at the top of the form and return the blank questionnaire to me.

If you are an administrative dietitian please give this form to one of the therapeutic or patient nutritional care dietitians at your hospital.

Will you complete this short form and return it to me by November 1, 1971? The enclosed self-addressed envelope is for your convenience.

Many thanks for your cooperation and time in responding to this questionnaire. Your responses will not be identified in any way and will be used only as part of group evaluations.

Sincerely yours,

Sister Mary Rosita Schiller
Doctoral Candidate
Food and Nutrition Division
Directions

1. This questionnaire is related to the role and function of only the therapeutic or patient nutritional care dietitian. If you are an administrative dietitian please give this form to one of the therapeutic dietitians at your hospital.

   Do not rate a particular person but therapeutic (clinical) dietitians generally as you see the role that they should and do play in patient care.

2. Please be sure to complete the general information at the head of the form.

3. In the first column you are asked to rate each item on the 6-point scale as it corresponds to your opinion about that function. Mark the number which best agrees with your opinion about that item being a part of the dietitian's role.

   (1) Definitely should
   (2) Should
   (3) Possibly should
   (4) Possibly should not
   (5) Should not
   (6) Definitely should not

4. In the second column please evaluate the extent to which you perceive dietitians generally act with regard to that item. Rate according to your opinion about the frequency with which the dietitian performs each function.

   (1) Always or almost always
   (2) Usually
   (3) Sometimes
   (4) Often does not
   (5) Usually does not
   (6) Never or almost never

5. For each item, if there is a discrepancy between what you think should be and what actually is the role of the dietitian, indicate in column 3 why you think this discrepancy exists:

   (1) Lack of education
   (2) Hospital policy restricts
   (3) Lack of time
   (4) Shortage of dietitians or dietary technicians
   (5) Physician prohibits
   (6) Not interested
   (7) Consider not relevant to job

APPENDIX E

FOLLOW-UP LETTERS WHICH ACCOMPANIED THE QUESTIONNAIRES
November 10, 1971

Dear Physician:

Within the past month you received a questionnaire related to the expected activities of the dietitian who provides nutritional care for your patients. This study is essential for subsequent development or revision of dietetic educational programs which foster achievement of knowledge, skills and attitudes commensurate with changing health delivery systems.

Your response to this questionnaire is critical to assure unbiased representation within the research population. May I again request that you make a few minutes within your busy schedule to complete the questionnaire and return it to me? A second copy of the questionnaire is enclosed for your convenience.

If you are unable to complete the form, please ask your secretary or receptionist to complete ONLY the background data section of the form and return it to me.

Responses will not be identified in any way; only the envelopes of the original mailing were coded so that follow-up of non-respondents would be possible. If you have already responded, please disregard this request. Questionnaires should be returned to me at 1524 Neil Avenue, Apt. 24, Columbus, Ohio 43201 by December 1, 1971.

Your participation in this dissertation study is essential for valid generalizations to be drawn from the data; I deeply appreciate your cooperation in completing and returning the questionnaire.

Sincerely yours,

Sister Mary Rosita Schiller
Doctoral Candidate
Food and Nutrition Division
November 12, 1971

Dear Dietitian:

Within the past month you received a questionnaire related to the expected and actual activities of dietitians who, like yourself, provide nutritional care for patients. This study is essential for subsequent development or revision of dietetics educational programs which foster achievement of knowledge, skills and attitudes commensurate with changing health delivery systems.

Your response to this questionnaire is critical to assure unbiased representation within the research sample. The first mailing was later than anticipated so that you may not have had time to respond by the date indicated. May I again request that you make a few minutes within your busy schedule to complete the questionnaire and return it to me? A second copy of the questionnaire is enclosed for your convenience.

If you are unable to complete the form, please ask your secretary to complete ONLY the background data section of the form and return it to me.

Responses will not be identified in any way; only the envelopes of the original mailing were coded so that follow-up of non-respondants would be possible. If you have already responded, please disregard this second request. Questionnaires should be returned to me at 1524 Neil Ave., Apt. 24, Columbus, Ohio 43201 by December 10, 1971.

Your participation in this dissertation study is essential for valid generalizations to be drawn from the data; I deeply appreciate your cooperation in completing and returning the questionnaire.

Sincerely yours,

Sister Mary Rosita Schiller
Doctoral Candidate
Food and Nutrition Division
LITERATURE CITED


126. Smith, Harvey L. Two lines of authority are one too many. Mod. Hosp. 84:59, 1955.


