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To the Graduate Council:

I am submitting herewith a thesis written by Katherine Hooper Benson entitled "Staffing Patterns of Dietetic Clinics." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Food Systems Administration.

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STAFFING PATTERNS OF DIETETIC CLINICS

A Thesis

Presented to

the Graduate Council of

The University of Tennessee

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

---

by

Katherine Hooper Benson

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ABSTRACT

Responsibilities and time demands of the dietetic clinic staff within institutions containing dietetic internships were investigated. Information was obtained from a questionnaire and observation of the diet instruction time records at the Dietetic Clinic at The University of Tennessee Memorial Research Center and Hospital (UTMRCH). The sample consisted of 45 dietetic clinics whose directors returned the completed instrument.

The staffing patterns of the dietetic clinics varied widely. There was a broad range of educational levels, man-hours worked, and defined responsibilities in the department, institution and community of the personnel in the participating clinics. Time averages are presented for some responsibilities.

Each selected dietetic clinic staff was responsible for the supervision of dietetic students as well as therapeutic diet instruction of the patients. The larger percent of the clients were outpatients who were referred clinic or private patients. Printed educational materials were utilized by all the clinics whereas movies and slides were used by less than one-half the reporting institutions.

Almost one-fourth of the directors reported that they modified the diet to the client following the physician's prescribed general diet; whereas no one reported that they prescribed the diet according to the physician's diagnosis as the solitary method of arriving at the prescription.

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CHAPTER I

INTRODUCTION

The trend in the delivery of health care is to provide comprehensive and continuous service to home based community members by a coordinated, professional team located in a hospital (Kocher, 1973). The inclusion and availability of dietetic services helps to achieve quality and economy in patient care with prevention of certain illnesses in the life cycle.

"A more sophisticated and enlightened society today contemplates, expects, and demands the quality health care services promised by federal legislation as an inalienable right of every citizen" (Perry, 1970). The most effective and efficient method of providing the demanded and necessary care is through extension of existing facilities. The orderly development of a dietetic clinic to provide the necessary food education and information requires expertise in all stages. The essential components of a systems approach for establishment of a food education clinic have been defined by Egan (1972):

1. Planning---decision of what is to be done.
2. Organizing---identification of available resources and designing utilization for accomplishing tasks.

3. Staffing and gathering the resources (people, funds, building, equipment).

4. Directing---provision of instruction to direct people.

5. Evaluating---measurement of end results against the planned results.

The Dietetic Clinic is a new clinic in The University of Tennessee Memorial Research Center and Hospital, and at the present time provides diet instructions to referred patients from the Family Practice Clinic or private physicians. With forethought, the Clinic can effectively serve the hospital and the community; but responsibilities in relation to time demands must be defined early so that the orderly growth of this department will enable it to serve as an important component of a preventive, comprehensive health service.

The objectives of this study were to: (1) survey other dietetic clinics to identify the duties and responsibilities of their personnel; and (2) summarize certain characteristics of the assorted dietetic clinics that can provide information to be used in the development of the UTMRCH Dietetic Clinic.

CHAPTER II

REVIEW OF LITERATURE

In some sectors of our own economy, 50 to 60 percent of a family's income is spent for food which is likely to be nutritionally incomplete and not desirable from the standpoint of preference (Hiemstra, 1972). The situation is most critical in the lower socio-economic sector of the population due to poverty and the inability to obtain essential food. Malnutrition can be due to lack of basic knowledge as to what foods are necessary for good health and appears in all segments of our population. This chronic undernutrition can result in stunted growth, reduced physical activity, lower productivity, and lesser contribution to society (Stiebeling, 1964).

Recent emphasis on comprehensive health care has produced a need for integration of a variety of health services under one service mechanism. The prime ideas of the health maintenance organizations are to cut medical cost and to provide better health care. Comprehensive care personnel render necessary services when needed and cannot afford to economize in ways which are deleterious to the patient for that increases expenses. The dietetics functional area

serves as part of the spectrum of complete and continuous health care delivery (Dahl, 1972).

Few patients who have been hospitalized, and fewer private patients treated by physicians during office visits, receive dietary instruction by qualified dietitians. In reviewing dietetic clinics historically, McHenry (1947) reported the establishment of a clinic in 1929 in cooperation with the outpatient department of The Veterans Administration Hospital in Hines, Illinois; however, a limited amount of work was done until 1944 due to economy measures. A pilot study was conducted in 1954-1956 in New York State to: provide dietary counseling for the community, to determine physicians' utilization of the service, to research problems which patients face when following a diet regime at home, and to determine the time required to give the patients the individual care they needed (Meredith, 1957). Dietetic services in New Jersey have been established in various agencies: a public health nursing agency, hospital outpatient department, a college, and a county health association (Brunini, 1972). Some of these dietetic services have functioned since 1960, and eight were in existence in 1972.

A greater awareness of the importance of the diet and dietary supplementation to the patient's sense of well-being would encourage hospitals to provide continuity of dietary care in the same sense it now recommends the continuity of the physician's care (Graning, 1970). Rapport is established

when the patient retains the same dietitian and this can result in the utilization of effective phone communications when necessary (Spodnik, 1972). The dietitian can gear the instruction to the client's readiness to learn, ability to cooperate, and his motivation. The hospital's responsibility does not end when the patient is ready for discharge; a professional team associated with the hospital should be concerned about the individual's complete restoration to health (Graning, 1970).

I. STAFFING NEEDS

The following services were considered by Kocher (1973) to be basic for comprehensive dietary care: assessment of food practices and dietary status, food education and individual diet counseling, and referral to food assistance programs where indicated. Identification of the type and intensity (severe dietary modification, moderate dietary modification, and no severe dietary modification) of warranted nutritional care and delegation of specific activities to appropriate personnel was proposed by Walters et al. (1972a). The three skill levels of personnel are: registered dietitian, dietary technician, and dietary hostess. Guidelines were developed to deliver the necessary quantity of care to each patient, and a graph was presented that indicated the percentage of time spent by dietary personnel in each classification for each group of patients. A mathematical equation was

formulated to compute the entire procedure into annual labor cost for the performance of specified services for the patient.

In a study of nursing requirements, Ramey (1973) warned that difficulties arise with the variations in the capabilities of the individual staff member. She suggested that functions not presently being performed but are to be instituted should be specified and time allowed for a systems approach. This seems applicable to dietetic services.

The Dietitian

The role of the dietitian as defined by Mead (1967), Caggiula (1972), and Walters et al. (1972b) is to: (1) function as a member of the comprehensive health team and to contribute the specific help and instruction they are capable of rendering; (2) evaluate, translate and interpret the dietary prescription so that the proper diet order and care is provided for each patient; (3) instruct and guide patients in selection and adjustment of food intake so that maintenance or change of a given bodily state can be accomplished within the patient's life style; and (4) direct and teach auxiliary personnel. The dietitian, whether in administration or therapeutics, should utilize the latest managerial techniques (Huenemann and Peck, 1971). The dietitian helps team mates to recognize the cultural, economic, social, emotional, physiologic and pathologic problems involved in feeding the patient, and applies current scientific knowledge to everyday life (Mead, 1967). In order for the

dietitian to be able to provide the above services the minimum educational level has been established by The American Dietetic Association (ADA) which is a Bachelor of Science degree with ADA membership (Anonymous, 1972).

The Dietary Technician

The dietary technician is prepared to conduct patient interviews; to assist in choice of balanced meals; to give routine dietary instruction; to arrange meal plans for modified diets; to assist patient in meal planning and food purchasing for entire family with consideration of each member's needs and requirements; and to assist the dietitian in preparation of educational material for various teaching programs. Doherty (1973) stated that the dietary technician is a professional because of possession of the identifying characteristics: a body of knowledge, a set of attitudes, and a body of skills. The two year associate degree program should equip the dietary technician to function in the dietetic clinic and share increasing responsibility with the dietitian; this should provide more meaningful roles and strengthen efforts and images (Piper, 1970; Woodward, 1972).

The Dietary Aide

The dietary aide with undetermined qualifications and education can be trained to work under guidance and close supervision to perform such duties as working with families or groups in food planning, purchasing, and preparation.

One desirable qualification is to be indigenous to the cultural group and communities served; the dietary aide can furnish ideas to the professional personnel on how to work within the prevailing culture (Huenemann and Peck, 1971; Phillips, 1969).

Other Dietary Staff Members

The nonprofessional staff members of the Dietetic Clinic do routine tasks and meet the responsibilities which have been delegated to them. The assistance provided by the secretaries and clerks amplify, strengthen and extend services which the professional dietitian is able to offer (Marteney and Ohlson, 1964).

The volunteer is usually a member of the "middle-aged bridge set" and possesses a college degree. In one facility, 20 women were selected out of 100 applicants for a food education course which met for a five week period for a total of 30 hours. The subject matter included: basic concepts of nutrition, consumer buying, and human relations and sensitivity. Following the training period, the volunteers were involved in a one to one relationship with patients in all areas of the hospital (in and out) (Balsley, 1972).

Existing Staffing Patterns

With the increasing emphasis on comprehensive care services, food education should be an integral component of every outpatient department (Kocher, 1973). In New York

State, there are 18 full-time dietitians in the 145 hospitals with organized outpatient departments, and about one-fourth of the hospitals provide part-time dietitians for specialized clinics. A most positive contribution is made by a hospital to a community with the provision of services of a dietitian in both rehabilitation and preventive services. All of the hospital-based health centers in New York employ full-time dietitians who serve as consultants to the other health team members and teach through the community aides.

Several dietitians offered dietary consultations through one-man offices opened at their and the patients' convenience. D'Amato (1972) was in her office six half-days a month with additional time available for evening programs; and Niedermeier (1972) provided dietary consultations in a hospital outpatient department two afternoons a week.

The Nutrition Clinic in the University of Chicago Hospitals and Clinics is staffed with six full-time nutritionists who work in three outpatient specialty areas: one in pediatrics, two in obstetrics and gynecology, and three in adult medicine. The clinic is responsible for seeing eight to ten thousand patients annually, including many follow-up visits (Slowie, 1971).

II. DIET HISTORY AND INSTRUCTIONS

The utilization of a good dietary history provides: limited evaluation of nutritional status of the patient,

identification of accepted foods and food habits for basis of an appropriate dietary prescription; basis for counseling for home diet; and diagnostic aid in physician's diagnosis. A complete dietary history should be included as part of the medical history, and is usually the responsibility of the therapeutic dietitian in a competently staffed dietary department (Young, 1965). Robinson (1973) said that the dietary evaluation should be the study of the past dietary history, present food habits with particular references to socio-economic and psychologic factors, the typical daily intake of food, and determination of nutritive adequacy according to some standard such as the Recommended Dietary Allowance.

Diet Instruction

The qualifications for a diet counselor as presented by Niedermeir (1972) included an excellent background in diet therapy, an understanding and empathy with the patient to assure that a normal life may be led, patience to deal with psychological symptoms, personalized care so that the patient is treated in his situation, and flexibility. The dietitian interviews the patient and evaluates the appropriateness of the prescription for continuing use in terms of the patient's clinical status, life style, the ability to cooperate, personal motivation, and prejudices. Change takes time, repetition, and good teaching methods that are related to the learner's problems (Neff, 1964). If any change comes about it will

result from the patient's conviction that there is no great danger in experimenting with a new situation and that it is his free choice (Leach, 1953).

The follow-up of the diet instruction is important in learning how the diet is accepted, to aid in its acceptance, and to help the patient to understand the purposes of the diet and how it may be adapted to usual living conditions (Egan, 1964).

Time Allowances

An effective diet instruction takes time, patience, and understanding of the total situation by the patient and the dietitian; only then can the patient be expected to follow the diet with some degree of satisfaction and a minimum of inconvenience to himself and his family. In a pilot study reported by Meredith (1957), the initial conferences averaged an hour and a quarter with a range of 45 minutes to two and one-half hours. Subsequent conferences averaged approximately 15 minutes with individual variation. Revell (1971) stated that the time spent with the patient varied according to the need. Her patients could call her as often as necessary with diet related questions; and there were follow-up diet instructions, especially with diabetic and obese patients. Brunini (1972) noted that the initial patient interview and counseling session averaged 60 minutes or longer, and subsequent interview lengths depended on the patient's progress.

In MacRae's (1967) private dietary consultant office in Seattle, one to one and one-half hours were allowed for the first visit and one-half hour for the follow-up visit. The time varied for a diabetic patient depending upon the amount of knowledge about diabetes and diet desired by the patient. MacRae allowed a 50:50 ratio of time: fifty percent of the time was spent with the patient and 50 percent of the time was required for progress reports to the physicians, contact with team members, and bookkeeping. In a study of diabetic patients, one hour was spent with a controlled group (conventional type of instructions). The range for programmed instruction was 45 minutes for Part I which included dietary treatment, food exchange list and meal plans, and 30 to 50 minutes for Part II which included a brief review and additional information (Tani, 1972).

III. CLIENTS AND SELECTED SERVICES

In an attempt to identify individuals in particular need of nutritional guidance according to standards based on current practices in diet therapy, Walters et al. (1972b) found that 43 percent of the patients had need for services of a dietetic clinic. These patients were further divided into two groups: one needed only food economic information or mild diet modification (30 percent) whereas 13 percent of the patients in the second group possessed severe nutritional problems and inborn errors of metabolism. Recommendations made were: expansion of current physician only

referrals to include periodical screening of charts by the dietitian, and participation of the dietitian in team conferences where the patient's needs for nutritional services become apparent. Most of D'Amato's patients (1972) were referred by physicians with some seeking help individually.

IV. RESPONSIBILITIES OF STAFF

Few responsibilities within the department and institution other than instructing patients have been discussed to any extent in the literature. In a larger organization, the clinic personnel audited pertinent literature on nutrition and diet treatment, and was responsible for distribution of the information through conferences and in mimeographed forms to physicians, dietitians, and other concerned parties. The clinic also provided a teaching center for students; the student dietitians taught patients under the supervision of the clinic dietitian (McHenry, 1947).

Inservice training for nurses was listed as a responsibility of the dietitian by McCarthy (1972) and Goldberg (1973). Training in normal and therapeutic diets was provided for office nurses of private physicians by Melick (1972). One diet counseling service offered a college course in home economics (field experience) for the student to understand the changing role of the professional team members in social, educational and health agencies in the community.

V. EDUCATIONAL MATERIALS AND FACILITIES FOR CLIENTS

The learning experience should be selected in terms of the medical goal and preliminary assessment of the patient's ability and interest. Among the learning experiences listed by Slowie (1971) are patient interview, group sessions and peer teaching peer. The dietitian amplifies the motivation which the client possesses and uses the most effective tools and procedures to foster client involvement and learning. The tools listed by Slowie (1971) were: kitchen facilities, films, programmed books, tape recorders, food diaries and questionnaires. She stated that a graduate student audited 1,000 medical records and noted that the patients who kept food diaries and returned to the clinic each week were more successful in following their diet regime. Patient involvement is most important and obtaining directions from the patient regarding his intentions and planning for meals (pencil and paper in hand to write food selections) may produce the desired results (Vargas, 1971).

Programmed instruction with the covered answers on the same page as the questions permits instantaneous evaluation for the patient. The use of the tape recorder was suggested for patients unable to read (Damron and Olson, 1973). The repetitive dietary information reinforces learning, is available at times when the dietitian is busy, and can be administered by supporting personnel. Food models were used for

patients who required caloric restriction: a sample meal was shown, an equivalency system visualized, and the patient involved in the arrangement of the models (Burns, 1973). The same clinic also used an album of colored photographs of sample meals for various diets. Brunini (1972) used standard texts, materials from the Dietetic, Diabetes, and Heart Associations, government publications, and other non-commercial materials. Some health education literature is written for above ninth grade level whereas the majority of the patients who would use the materials has only 6.9 to 8.8 years of schooling (Lanese and Thrush, 1963). The problem of existing media for working with all cultures is that it is orientated toward the middle class in terms of reading ability, complexity of concepts, presentation, and food represented. The government, universities and food industry agencies are moving rapidly to produce tools for effective teaching of subcultures (Wagner, 1970). Sipple (1971) suggested that it is important to develop good materials, make definite arrangement for the use of the materials, and have adequate follow-up.

VI. DIET PRESCRIPTIONS

A good dietary order is based on present food habits, is nutritionally adequate, meets therapeutic requirements, is acceptable, is possible in the patient's economic circumstances, and can be understood by the patient. At this time,

the physician may have little knowledge concerning the dietary requirements of the patients and the food available to patients for meeting their needs. A beginning toward giving the dietitian the opportunity to play an appropriate role in the care of the patient would be made if responsibility is placed on the dietitian for individual diet appraisal of each patient (Graning, 1970). The dietitian would then recommend the number of feedings and content of the diet. In a contrasting opinion, Young (1965) reminded us that the physician is the logical captain of the medical team as the person legally and morally responsible for the whole patient, and is the only person who understands all phases of the patient's problems. The physician may accept help in arriving at a satisfactory diet prescription after developing confidence in the dietitian's ability.

In Massachusetts General Hospital the physician prescribes the diet, but the dietitian is asked to specify the diet when the physician orders "diet as tolerated" (Galbraith and Hatch, 1973). The dietitian is expected to indicate the caloric, carbohydrate, protein, and fat level needed by the patient in the Metabolism service at the University of Chicago Hospital and Clinics (Slowie, 1971). Physicians in internal medicine are more likely to specify the exact diets than other physicians (Revell, 1971). The responsibility of the dietitian is to assist the patient apply current scientific knowledge of nutrition and diet therapy to everyday life

(Kaufman, 1967). The dietitian should assess the patient's dietary needs; interpret these to the physician and other members of the team; and implement this aspect of patient care. Another contribution of the dietitian is to aid in reducing the number of therapeutic diets prescribed by helping the physician to see the value of establishing consumption of an adequate, normal diet in certain patients (Young, 1965).

CHAPTER III

PROCEDURE

The Dietetic Clinic at The University of Tennessee Memorial Research Center and Hospital (UTMRCH) will be involved in the training of dietetic students, and basic information is needed for its initial establishment and future expansion. A survey of dietetic clinics within dietary internship institutions or coordinated undergraduate programs and identified dietetic clinics in the literature was conducted by means of a mailed questionnaire. The questionnaire consisted of five parts which included topics on: staffing patterns, time allowances for patient instruction, composition of clients and types of instructions, responsibilities (departmental, institutional, and community), educational materials and facility utilization, and diet prescription responsibility (Appendix A). The objectives of this questionnaire were to identify the duties and responsibilities of the personnel of the individual dietetic clinics from which certain characteristics could be summarized to provide data for the development of the Dietetic Clinic at UTMRCH. The questionnaire was pretested by the personnel at UTMRCH's Dietetic Clinic before being mailed with a cover letter (Appendix A) to the selected institutions.

The records of the Dietetic Clinic at UTMRCH were analyzed to obtain the types and time lengths of the individual diet instructions to further identify time demands on the staff of a dietetic clinic.

I. SELECTION OF SAMPLE

The list of dietetic internships published annually by The American Dietetic Association (Anonymous, 1972) was the primary source for the addresses of the questionnaire. Administrative internships which indicated the absence of therapeutic instruction were eliminated; and only one instrument was mailed to each institution. Additional institutions containing a dietetic clinic described in the literature were selected. The total sample used in this study consisted of 81 institutions with dietetic internships and five other institutions.

In order to evaluate the time demands for the primary responsibility (instruction of patients), the records of the Dietetic Clinic of UTMRCH from January 15, 1973 to May 15, 1973, were examined to determine the time requirements for initial and follow-up diet instructions.

II. SURVEY OF DIETETIC CLINICS

The questionnaire with cover letter (Appendix A) requesting completion of the instrument by the director of the dietetic clinic was mailed to the directors of the internships.

The questionnaire contained the request for enclosure of job descriptions when available. The dietetic clinic director was asked to indicate for each position (director of clinic, director of dietary staff, dietitian, home economist, dietary technician, volunteer, secretarial, and other) the existing staffing patterns with educational level, defined responsibilities, and hours worked in the dietetic clinic each week. Responsibilities outside the dietetic clinic were divided into departmental, institutional, and community. The clinic director was asked to designate which duties within each group were included in the job descriptions for the dietetic clinic staff and the time allotments for each. The degree of delegation by the physician to the dietitian in prescribing diets was interpreted by the clinic director in one part of the questionnaire.

A question pertaining to the composition of the clients and the type of instructional information supplied was included. The time required for each diet interview (broken into diet history and instruction) and time differentiation for specific diets was asked. Questions were asked concerning the utilization of educational materials and facilities, and the allotted time to develop the educational material. The Dietetic Clinic's records at UTMRCH were utilized to obtain the time lengths of the initial and follow-up instructions for clients at the Clinic.

Data obtained from the Dietetic Clinic questionnaire and the Dietetic Clinic at UTMRCH were tabulated. Selected existing responsibilities for the Dietetic Clinic staff were identified, and average time allotments were calculated.

CHAPTER IV

RESULTS AND DISCUSSION

A questionnaire was mailed to a total of 86 institutions in order to identify the duties and responsibilities of the personnel of the individual dietetic clinics. Of the 58 respondents, 13 (22 percent) reported that a dietetic clinic did not exist in their institution. Forty-five questionnaires (78 percent) were included in parts of the tabulation.

I. EXISTING STAFFING PATTERNS

Of the 45 dietetic clinics included in the sample, 38 (84 percent) questionnaires contained information pertaining to the staffing patterns. Seventeen (45 percent) of these dietetic clinics were staffed by one person who worked 40 hours per week, and in six of the 17 clinics (35 percent) the total responsibility of one person was instruction of outpatients (Table VIII, Appendix B). Eleven of the clinical dietitians (65 percent) who worked alone were assigned the following additional responsibility: inpatient instruction (35 percent), counseling employees with diet modification prescriptions (six percent), emergency department diet

instructions (six percent), students other than dietetic (12 percent), and responsibility in the dietary department (24 percent). Twenty-one of the dietetic clinics were staffed by more than one dietitian even though the hours served in some of the clinics each week totaled less than full time (40 hours). The range of manpower in the dietetic clinics was from two dietitians who served a total of 16 hours per week to seven dietitians who served 271 hours per week. The latter clinic functions only to dispense food and nutrition education. The average man-hours in the 38 clinics were 62 hours per week.

Educational Level

The educational level of the staff (Table VIII, Appendix B) ranged from one dietitian, possessing a Bachelor's degree and preplanned experience to seven dietitians: six with Master's degrees and one with a Bachelor's degree. The educational level varied so widely that no pattern could be established. A total of 77 dietitians (42 with Bachelor's degrees and 35 with Master's degrees) serviced the 38 clinics (Table VIII, Appendix B). This educational level may be necessary because many units function with just one staff member who performs with minimum supervision. Close supervision is impossible to provide if the physical location of the dietetic clinic is removed from the premises of the dietary department. There was no difference in types of responsibilities of dietitians with a Bachelor's or a Master's degree (Table I).

TABLE I

RESPONSIBILITIES AND EDUCATIONAL LEVEL OF PROFESSIONAL STAFF OF 38 DIETETIC CLINICS

Responsibilities	Educational Level	
	Bachelor's Degree No.	Master's Degree No.
1. No additional responsibilities	15	22
2. Departmental responsibilities	3	1
3. Institutional responsibilities	6	1
4. Emergency department diet instruction	1	
5. Student health diet instruction	1	
6. Supervision of students other than dietetic students	1	
7. Instruction for employees on modified diets	2	5
8. Combination of 2 and 3	11	6
9. Combination of 3 and 4	2	—
TOTALS	42	35

Auxiliary Workers

The staffing pattern at only one dietetic clinic listed a technician. The duties of this technician were defined as clerical and not professional, and was contrary to those described by Piper (1970) and Doherty (1973). One dietetic clinic reported one volunteer and two community workers involved in food education. One clinic listed a full-time nurse with a Bachelor's degree on the staff. Seven dietetic clinics listed secretaries: two full-time, three part-time (two worked 30 hours per week and one worked 20 hours per week), and two clinics used other units' clerical help. One clinic needed bi-lingual clerical workers to type and translate diets. The absence of volunteer workers and aides may indicate the limited scope or resources of the existing dietetic clinics. The few full-time secretaries may further indicate clinics with limited personnel.

Dietetic Interns

Six dietetic clinics (16 percent) listed dietetic interns and students as members of the staff. Interns worked from an average of two hours per week over a 12 month period to 40 hours per week. All dietetic clinics listed supervision of dietetic interns under departmental responsibility; therefore, the students were eliminated from the staffing pattern.

II. OTHER RESPONSIBILITIES OF THE DIETETIC CLINIC STAFF

Forty-four of the 45 questionnaires (98 percent) were completed to some extent in the section on responsibilities (Appendix A). Several directors indicated that it was impossible to estimate time required to fulfill the responsibilities and indicated that time varied. One dietetic clinic director stated that the clinic cooperated with the dietary department although separate.

Departmental Responsibilities

The one responsibility checked by all the directors was the supervision of the dietetic interns (Table II). This was the only departmental duty checked by eight participants (18 percent). The selection of the sample has a direct bearing on this statistic: that is, the institutions containing dietetic internships were included in the sample. Continuing education was the next most frequently checked responsibility (60 percent) which might indicate interest in retention of registration by American Dietetic Association members. The combination of supervision of dietetic interns and continuing education was the other responsibility of seven clinics (16 percent). Other responsibilities listed were supervision of diabetic conferences (six hours per week); updating instructional materials and development of professional knowledge and skill (one hour each day); newsletter (one hour each week); diet seminars for medical and pharmacy

TABLE II

DEPARTMENTAL RESPONSIBILITIES OF DIETETIC CLINIC STAFFS[a]

Responsibility	Clinics Indicating Time Dietetic Clinic Pct.	Clinics Indicating Time No.	Average Time/Clinic Hrs./Wk.
Supervisory duties in dietary department	13	5	5.3
Therapeutic duties in dietary department	33	11	5.7
Relief dietitian in dietary department	16	3	12.3
Department training	13	3	4.2
Supervision of dietetic interns	100	23	13.9
Supervision of student nurses	18	2	0.8
Continuing education	60	15	1.6
Other responsibilities	24	3	6.2

[a]Sample included 45 dietetic clinics within dietary internship institutions.

students (one and one-half hours each week preparation time); menu board (one to two hours each week); research for nutritional information; revision of diet manual; supervision of public health nutritionist interns and dietitians who come from South America for special training; Allied Health and Dietetic Journal conferences; and members of Dietetic Internship Council.

The time for departmental responsibilities ranged from 0.8 hours per week for supervision of student nurses to 13.9 hours per week for supervision of dietetic interns.

The dietetic clinics' professional staff members were participants in a wide variety of assigned responsibilities in relationship to the dietary department or the larger organization. These duties must be defined early and time to effectively perform the assigned duties should be allotted.

Institutional Responsibilities

Of the 45 respondents, 39 (87 percent) replies were usable in defining institutional responsibilities. Seventeen of the 39 directors of dietetic clinics (44 percent) indicated that they had the duty of abstracting professional literature for dietitians and physicians with the time averaging 1.8 hours per week (Table III). One director reported that 20 journals and magazines on clinical dietetics, food production and service were read each month. The staff of 14 of the clinics (36 percent) participated in specific

TABLE III

INSTITUTIONAL RESPONSIBILITIES
OF DIETETIC CLINIC STAFFS[a]

Responsibilities	Dietetic Clinic Pct.	No. of Clinics Indicating Time	Average Time/Clinic Hrs./wk.
Ward rounds	30	9	2.0
Participation in specific clinics (other than Dietetic Clinic)	36	15	6.2
Monitoring of patients in specific clinics	38	11	3.5
Abstract professional liberature for others	44	13	1.8
Other responsibilities	13	4	3.1
No responsibilities	17		

[a]Sample included 39 dietetic clinics within dietary intership institutions.

clinics taking 6.2 hours per week; and six (15 percent) reported that the dietitians were members of the specialty clinic teams in the different clinics and that they did not gather the outpatients into one clinic. Five dietetic clinic directors (13 percent) reported that they were responsible for other institutional duties which included discharging planning conferences, nursing home inspections, and orientation of the house staff to nutritional procedures and routines. The directors of seven dietetic clinics (17 percent) reported that they had no responsibility in the institution.

Community Responsibility

Fourteen directors (13 percent) out of 45 dietetic clinics did not answer questions pertaining to community responsibility. The directors of two clinics (4 percent) indicated that the staff did community services during their off duty hours.

Directors of 23 clinics (51 percent) did not answer the question concerning speeches before groups in the community. The staff of 14 clinics out of the reporting 22 (64 percent) were responsible for speeches before groups but stated that they did so on requests only and the time varied (Table IX, Appendix B). Definite time commitments reported by eight directors (36 percent) ranged so widely that averages of the totals would be meaningless. The times given varied from one hour to three hours per month for five clinics (23 percent); eight hours a month for one clinic and six hours

a year for another; and ten hours a week for one institution involved in a Community Outreach Project.

Participation in public health clinics were reported by seven directors (16 percent) of the total 45 questionnaires utilized in this study. The five time allotments varied: one reported 16 hours weekly in a neighborhood clinic; two hours weekly was reported by two institutions; and two to three hours monthly was indicated by two directors. Other community responsibilities stated on 12 questionnaires or 27 percent of the 45 answering the question were: Diabetic Association meetings (three hours per month); Community Nutrition Council meetings (three hours per month); liaison with city, county, and state departments of health; Girl Scouts; home visits for sanitation check of the home as well as food education problems; contact with agencies serving clinic patients (nursing homes, day care centers, U.S. Government Food Stamp agencies); inservice classes for Public Health; supervision of dietetic interns' planning and teaching nutrition classes in elementary schools (four hours each week). Community responsibilities were defined in nine job descriptions returned. One institution sent descriptions of four positions which contained the words "community" and "ambulatory" in the title. The team concept was emphasized in the descriptions which encompassed agencies outside the institution. The lack of participation of dietetic clinic

staffs in community dietetics might indicate limited resources or a lack of commitment to the community by the staff and hospital administration.

II. TIME ALLOWANCE FOR DIET INSTRUCTIONS

Of the 45 questionnaires which were utilized in this study, six (13 percent) were returned with no time allotments for the diet history or instructions with the explanation that the variables involved were the clients, the specific diets, and the interviewer. Six clinic directors combined the diet history and the instruction for an average of 49 minutes per interview or conference. Thirty three directors (73 percent) presented varying times for diet histories and instructions which averaged 18 minutes and 33 minutes respectively. There were 37 respondents who gave time for the follow-up instruction, averaging 22 minutes. The average time for the diet interview (history and instruction combined) at six dietetic clinics was 49 minutes.

One director stated that 90 minute group instructions were utilized whenever possible, and that individual appointments were made only when the patient could not comprehend the diet during the group instruction or could not make a clinic appointment. There were 17 affirmative answers (41 percent) stating that specific types of diets required different amounts of time (41 answered this question). Diabetic diets were mentioned by 10 directors (24 percent) as one of

the diets which required the most time: six directors stated that the time ranged from one half to one and one half hours with the average of one hour. The other diets mentioned that took longer instructional time were hyperlipidemia, calorie restricted and renal. One director indicated that one hour was allowed for a diabetic instruction, 45 minutes for sodium restriction, and 30 minutes for weight reduction; and another stated that 40 minutes were allowed for the quantitative diets while 20 minutes were allowed for the modified diets. Six directors indicated that the time depended upon factors such as: ability, understanding, interest, motivation and educational level of the patient. One clinic allowed one hour for a new patient and 15 minutes between instructions for charting.

Observation of records at the Dietetic Clinic at UTMRCH revealed that there were 286 initial visits in the period of January 15, 1973 to May 15, 1973 with the average time of 37 minutes (Table IV). There were 78 follow-up diet instructions which averaged 13 minutes (Table IV). The most frequently prescribed diet was the 1000 calorie diabetic instruction to 48 patients and an average presentation time of 37 minutes (Table X, Appendix B). Actual instruction time lengths averages in the Dietetic Clinic were less than estimates by participating directors of clinics. Many variables influence diet instruction times including patient comprehension to expertise of the instructor. There might

TABLE IV

TIME AVERAGES FOR DIET INSTRUCTIONS AT THE DIETETIC CLINIC AT THE UNIVERSITY OF TENNESSEE MEMORIAL RESEARCH CENTER AND HOSPITAL[a]

	Initial Visit		Follow-Up Visit	
Type of Data	No. of Visits	Avg. Time Min.	No. of Visits	Avg. Time Min.
Reduction Diets	119	38	24	15
Diabetic Diets	122	38	48	13
Other Diets	45	35	6	14
	286	37	78	13

[a]January 15, 1973 to May 15, 1973

be a difference in actual instruction time and estimated time in the participating dietetic clinics due to these variables, and the only true comparison would be analysis of the individual records of the clinics.

III. CLIENT COMPOSITION

The directors reported that their clinics served only outpatients (21 out of 40 replies or 53 percent) or a combination of inpatients and outpatients in 19 clinics (47 percent). Some dietetic clinics described in the literature (Meredith, 1957; Brunini, 1972) served outpatients only. Four (10 percent) specified other duties such as student health, and diet counseling for the employees and the emergency department. There were no specified clients on five questionnaires (11 percent) of the total 45 included in this study (Table V).

Ten (22 percent) of the 45 directors did not indicate whether clinic and/or private patients were instructed. Referred clinic patients only were clients at 16 of the 35 reported clinics (46 percent); referred private and clinic patients were seen in 18 dietetic clinics (51 percent); and only one clinic (3 percent) saw only referred private patients.

Directors indicated that nine clinics out of 43 (21 percent) served patients who were inpatients and outpatients, and referred clinic clients. Seven (16 percent) clinics

TABLE V

COMPOSITION OF CLIENTS AND INSTRUCTIONAL INFORMATION[a]

Composition of Clients or Instructional Information	Pct. Dietetic Clinics
Clients are composed of:	
Hospital patients only	--
Outpatients only	47
Inhospital patients and outpatients	42
Not reported	11
Referred clinic patients	36
Referred clinic and private patients	40
Referred private patients	2
Not reported	22
Clients were instructed in:	
Therapeutic diets (prescribed)	100
Normal diets (no prescription)	82
Food purchasing	73
Meal preparation	71
Meal service	29
Food preservation	44

[a]Sample included 45 dietetic clinics within dietary internship institutions.

served outpatients only who were referred private and clinic patients. One director reported that all discharge diets for hospitalized diabetics were planned by the dietetic clinic staff. Another director indicated that the hospital therapeutic dietitian cared for all hospital patients after their discharge.

Instructions

All 45 reporting directors stated that prescribed therapeutic diets were taught in their dietetic clinic. Normal diets without prescription were taught in 37 (82 percent) of the clinics; and clients were instructed in food purchasing in 33 (73 percent) of the institutions (Table V). Thirty-two directors (71 percent) reported that meal preparation was taught in the clinic; 13 clinic staff members (29 percent) instructed the patients in meal service; and 20 directors (44 percent) indicated that food preservation was taught. Selection of food in a restaurant was taught in one dietetic clinic (2 percent). Eleven dietetic clinics (24 percent instructed their clients in all of the listed services: prescribed therapeutic diets, normal diets (no prescription), food purchasing, meal preparation, meal service and food preservation. Therapeutic diet instructions were primary responsibility of the dietetic clinic staffs described by Brunini (1972) and Slowie (1971). This agrees with the results of this study.

IV. EDUCATIONAL MATERIALS AND FACILITIES FOR CLIENTS

All 45 directors reported various visual aids were used in their dietetic clinics while only 20 (44 percent) utilized facilities such as home type kitchens, supermarkets, clients homes, cafeteria lines and private dining room (Table VI). Printed materials were used in some form in all 45 institutions while 17 (38 percent) utilized all forms: the commercially printed, the non-commercial type, and institutional developed materials. Twenty-one directors (47 percent) reported that they did not utilize programmed instruction while 19 units (42 percent) developed their own material. Directors of 26 dietetic clinics (58 percent) indicated that they did not use movies; commercial and non-commercial movies were each utilized by 12 (27 percent) of the clinics with only one clinic (2 percent) making its own movies. Slides were not used by 26 of the reporting clinics (58 percent) while 10 clinics (22 percent) used commercial slides, seven (16 percent) utilized non-commercial slides, and 14 clinic staffs (31 percent) developed their own slides. Food models were reported in use in 44 clinics (98 percent). Among other teaching materials used were videotape, filmstrip and record, and filmstrip with cassette.

Ten dietetic clinic staffs (22 percent) taught their patients how to select food from a cafeteria line or private dining room, and eight clinic personnel (18 percent) utilized

TABLE VI

EDUCATIONAL MATERIALS AND FACILITIES FOR CLIENTS[a]

Material or Facility	Dietetic Clinic Use Pct.
Printed Material	
Commercial	73
Noncommercial	56
Developed by institution	93
Utilization of all three types (above)	38
Utilization of none	--
Programmed Instructional Materials	
Purchased	24
Developed by institution	42
Utilization of both methods	13
Utilization of none	47
Movies	
Commercial	27
Noncommercial	27
Developed by institution	2
Utilization of all three types (above)	--
Utilization of none	58
Slides	
Commercial	22
Noncommercial	16
Developed by institution	31
Utilization of all three types (above)	4
Utilization of none	56
Food Models	98
Facilities	
Kitchen facilities	16
Supermarkets	18
Client's home	11
Cafeteria line	22
Utilization of no facilities	56
Other Materials or Facilities	9

[a]Sample included 45 dietetic clinics within dietary internship institutions.

supermarkets in the teaching of their clients. Seven dietetic staffs used home type kitchen facilities and five taught in the clients' homes. The directors of eight clinics (17 percent) reported that they utilized between one and three educational materials; 22 clinics (44 percent) used between four to six materials; and only four (nine percent) reported the use of between 11-12 types of educational materials.

Seventeen directors reported that an average of 3 hours per week were allotted to development of educational materials. One director reported that one clinic dietitian was placed on a special project for 40 hours each week for six months to develop materials.

Use of educational materials and facilities involves major investment of money and personnel. The prevalence of utilization of printed materials indicates limited involvement in presentation and preparation of multimedia materials.

V. DIET PRESCRIPTIONS

The directors of all 45 dietetic clinics (100 percent) responded to the question VI (Appendix A) that pertained to diet prescriptions. No dietitian prescribed diets according to the physician's diagnosis, but 11 directors (24 percent) indicated that they modified diet to client following the physician's prescribed general diet (TableVII). Eight (18 percent) dietitians modified the diet to the client following

TABLE VII

DIET PRESCRIPTIONS

Responsibility	Dietetic Clinic Use[a] Pct.
A. Dietitian prescribes diet according to physician's diagnosis	--
B. Dietitian modifies diet to client following physician's prescribed general diet (ex.: diabetic diet)	24
C. Dietitian modifies diet to client following physician's exact diet order (ex.: CHO[b], protein, fat given in grams)	18
D. All three of the above methods	21
E. Combination of A and B	13
F. Combination of B and C	24
G. Combination of A and C	--

[a]Sample included 45 dietetic clinics within dietary internship institutions.

[b]CHO (Carbohydrate).

the physician's exact diet order. Directors of nine clinics (21 percent) indicated that they were responsible for all three ways (above) of prescribing diets; six (13 percent) were responsible for prescribing the diet according to the physician's diagnosis or modifying the diet following the prescribed general diet; and 11 (24 percent) directors reported that they either modified the diet following the physician's prescribed general or the exact diet order. The questionnaire was designed for one selection only, but there existed a clear decision to only 19 of the respondents (42 percent). This was one of the few questions that received total participation. The results of this survey indicated that dietary prescriptions were the physician's responsibility as stated by Young (1965). The delegation or sharing of this responsibility (suggested by Graning, 1970) existed in few dietetic clinics.

VI. IMPLICATIONS OF THIS STUDY

Many types of educational materials can be utilized in a dietetic clinic. Various techniques of presenting the information to the client need to be explored in order to provide the most effective food and nutrition education. Personnel with varying types of training can be used in appropriate capacities to extend the services of the professional staff. The technician, the diet aide, and the volunteer have not been delegated the responsibilities that they can fulfill in the dietetic clinic.

The data contained in this document indicate existing trends and patterns of selected essential services in participating dietetic clinics. This information can be used in the development of a dietetic clinic.

CHAPTER V

SUMMARY

This study was undertaken to furnish data for the development of the Dietetic Clinic at The University of Tennessee Memorial Research Center and Hospital (UTMRCH). A questionnaire was prepared, pretested, and mailed to the 81 directors of dietetic internships and five directors of dietetic clinics described in the literature. Questions were included which asked for time allotments, assigned responsibilities, staffing patterns, educational level of staff, utilization of educational materials and facilities, composition of clients, and type of instructional information supplied. Of the 86 institutions receiving the questionnaire, 58 responded and 45 questionnaires were complete enough to be included in the study.

The staffing patterns varied widely with number, educational level, assigned responsibilities, and hours worked. The main responsibility (other than instructing patients) was the supervision of dietetic students, and continuing education was indicated as a duty by the next largest group of respondents. There was less participation in institutional responsibilities although several stated that they operated within specific clinics rather than gather all

of the patients into one clinic. Few directors indicated participation in community responsibilities; and one director stated that this was done during off-duty hours.

The clients were mainly composed of outpatients who were referred clinic and private patients. Directors of 42 percent of the clinics indicated that they instructed both inpatients and outpatients. All of the clinics' staff provided therapeutic diet instruction and 82 percent instructed patients in normal diets without a prescription.

All directors indicated that printed educational materials were utilized by their clinics whereas food models were reportedly used by 98 percent. Movies and slides were utilized by less than 50 percent of the clinic staffs. Facilities such as home type kitchens, cafeteria lines and supermarkets were utilized by 44 percent of the clinic staffs.

No director reported prescribing the diet according to the physician's diagnosis. Definite answers (the physician's general or exact diet orders were followed) were indicated by 42 percent. The other dietetic clinic directors reported that a combination of methods for establishing a diet prescription existed at their institution.

The average time for the diet instructions for the initial patient visit at the Dietetic Clinic at UTMRCH averaged 37 minutes (286 visits) and 13 minutes for the follow-up (78 visits). The dietetic clinic directors who answered

the questionnaire estimated an average of 18 minutes were allowed for the diet history and 33 minutes for the instruction which totaled 51 minutes for each patient. The time for the follow-up diet instruction was estimated to be 22 minutes by the directors.

This study indicated that the demands on the staff of a dietetic clinic varied with each individual unit. The defined responsibilities and time allotments have been researched in some existing dietetic clinics. These time averages and defined responsibilities can provide initial information for the development of a dietetic clinic following the formulation of its objectives and goals.

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APPENDICES

APPENDIX A

We are establishing a Dietetic Clinic at The University of Tennessee Memorial Research Center and Hospital and would appreciate your help in our determination of the staffing requirements. If your department has an association with a dietary clinic or a similar unit, would you or the director of the clinic please complete the enclosed questionnaire?

A self-addressed, stamped envelope is enclosed for your convenience. Thank you for your participation and help.

Sincerely,

Mary A. Bass
Assistant Professor
Food Science and Inst. Admin.
College of Home Economics

Charles Brooks
Director of Dietary Services

MAB:CB:tgb

April 1973
M. Ann Bass
C. Brooks
K. Benson

Food Science and Institution Administration
College of Home Economics
The University of Tennessee
Knoxville, Tennessee 37919

Date_____

Institution_____ Name_____
(Reporting Official, Position)

1. STAFFING: Please include copies of job descriptions for your Dietary Clinic Staff if possible. This would be of immeasurable help in the establishment of our Dietary Clinic.

   A. Please record number of staff members in each position under column A in chart below.

   B. Please select number that describes educational level of each staff member and record in chart under B (Educational Level):
   1--higher than MS; 2--MS; 3--BS, Internship; 4--BS, Preplanned Dietary Experience; 5--BS; 6--2 yr. Jr. College; 7--HEIFFS; 8-- Vocational School; 9--Other.

   C. Please select number that describes primary responsibility of each Dietary Clinic Staff member and record number by position in chart under C (Primary Responsibility): 1--teach therapeutic diets; 2--teach food information; 3--teach food information and therapeutic diets; 4--administrative responsibilities; 5--therapeutic responsibilities; 6--other.

   D. Please select number that describes hours worked in Dietary Clinic each <u>week</u> by each staff member and record under D (Hours worked):
   1--40 hours in Clinic; 2--32 hours in Clinic; 3--30 hours in Clinic; 4--24 hours in Clinic; 5--20 hours in Clinic; 6--16 hours in Clinic; 7--12 hours in Clinic; 8--8 hours in Clinic; 9--Other hours

Position	A. Number of Staff	B. Educational Level	C. Primary Responsibility	D. Hours Worked in Dietary Clinic Each Week
Director of Clinic				
Director of Dietary Staff				
Dietitian				
Home Economist				
Dietary Technician				
Volunteer				
Secretarial Position				
Other (please specify)				

II. During an average day please state the time allowance for:

A. The first appointment for client_____minutes for diet history _____minutes for instruction
B. Follow-up appointment for client_____minutes
C. Is there an allowed time differentiation for specific types of diets? (ex.: 1 hour for diabetic, 45 minutes for sodium restricted):
Yes_____no_____. If so, please specify:

III. CLIENTS are composed of (please check phrases that decribe your clients):

hospital patients only ____
outpatients only ____
in hospital & outpatients____
other (please specify) ____
referred clinic patients___
referred private and clinic patients ____
referred private patients ____

CLIENTS are instructed in following (please check phrase describing service provided by your Clinic):

therapeutic diets (prescribed)____
normal diets (no prescription)____
food purchasing____
meal preparation____
meal service____
food preservation____

IV. RESPONSIBILITIES. Please check and give time allotment in hours or minutes (please specify which is used) if job description for Dietetic Clinic staff includes:

Department:

supervisory duties in dietary department_____time_____
therapeutic duties in dietary department outside of Dietetic Clinic (Ex.: visiting hospital patients) _____time_____
relief dietitian in dietary department_____time_____
department training_____time_____
supervision of dietetic interns_____time_____
supervision of student nurses_____time_____
continuing education_____time_____
other department responsibilities (please specify and give time allotment):

Institution:

ward rounds_____time_____ participation in specific clinics (other than Dietetic Clinic)_____time_____

monitoring of patients in specific clinics (Ex.: checking lab reports for diabetics)_____time_____
abstract professional literature for dietitians and physicians_____time_____ other institutional responsibilities (please specify and give time allotment):

Community:

speeches before groups in community_____time_____
participation in public health clinics_____time_____
other community responsibilities (please specify and give time allotments):

V. EDUCATIONAL MATERIALS AND FACILITIES FOR CLIENTS (please check if you utilize):

printed material (commercial)_____
(non-commercial)_____
(developed by your institution)_____
programmed instructional material
(purchased)_____
(developed by your institution)_____
movies (commercial_____
(non-commercial)_____
(developed by your institution)_____
slides (commercial)_____
(non-commercial)_____
(developed by your institution)_____
food models_____
kitchen facilities (home type)_____
super market_____
client's home_____
cafeteria line (to select allowed foods)_____

Time allotted to develop educational material_____
(specify hours or part of hours)

VI. Please check responsibility which applies to your institution:

_____A. Dietitian prescribes diet according to physician's diagnosis.

_____B. Dietitian modifies diet to client following physician's prescribed general diet (Ex.: Diabetic Diet).

_____C. Dietitian modifies diet to client following physician's exact diet order (Ex.: CHO, protein, fat given in grams).

THANK YOU

QUESTIONNAIRES WERE SENT TO

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APPENDIX B

TABLE VIII

EXISTING PROFESSIONAL STAFFING PATTERNS IN DIETETIC CLINICS WITH EDUCATIONAL LEVEL AND RESPONSIBILITY

Institution Code	Education Levels[a] 1	2	3	4	5	6	Duties[b]	Total Man-hours/ Wk./Clinic
1				1			1	40
2			2				8	16
3			1			1	1	56
4	1		1				3	60
5			1				8	20
6				1			6	40
7[c]				1		1	3	120
8				1			8	40
9						1	1	40
10	1					6	1	271
11				1			3	40
12					1		2	32
13			2	1			1	88
14				1			8	40
15						1	8	40
16					1		8	30
17						1	1	40
18			1				3	20
19					1	1	8	34
20[d]	2	1		3		2	8	120
21			2			2	1	111
22				1		1	1	80
23			2				2	36
24			2		2	2	7	144
25				1			9	40
26				1			4	40
27						3	1	120
28				1			9	40
29						1	1	40
30			4		1		1	156
31				1		1	1	80
32						1	7	40
33					2		1	46
34					1	1	1	41
35		1					3	40
36				1			1	40
37				1			2	40
38				1			5	40

TABLE VIII (Continued)

[a]Educational Levels and hours worked in Dietetic Clinic are:

1. Bachelor's degree with no internship or preplanned American Dietetic Association (ADA) experience; full time
2. Bachelor's degree with preplanned ADA experience; full time
3. Bachelor's degree with ADA internship; part-time
4. Bachelor's degree with ADA internship; full-time
5. Master's degree; part-time
6. Master's degree; full-time.

[b]All Dietetic Clinics Instructed outpatients and provided supervision for dietetic students. The numbers stated under Duties defines other responsibilities:

1. No additional responsibility
2. Departmental responsibility
3. Inpatient responsibility
4. Emergency department diet instructions
5. Student health instructions
6. Supervision of students other than dietetic students.
7. Instructions for employees on modified diets
8. Combination of 2 and 3
9. Combination of 3 and 4.

[c]One educational level not stated.

[d]Total hours not stated.

TABLE IX

COMMUNITY RESPONSIBILITIES OF DIETETIC CLINIC STAFFS[a]

Responsibility	Dietetic Clinics[b] No.	Time
Speeches before groups	1	10 Hrs./Wk.
	5	1-3 Hrs./Mo.
	1	8 Hrs./Mo.
	1	6 Hrs./Yr.
	14	No time stated
Participation in Public Health Clinics	2	2 Hrs./Wk.
	1	16 Hrs./Wk
	2	2-3 Hrs./Mo.
	2	No time stated
Other responsibilities	1	4 Hrs./Wk.
	1	6 Hrs./Mo.
	10	No time stated

[a]Sample varied.

[b]Respondents to the individual questions.

TABLE X

TIME FOR DIET INSTRUCTIONS AT THE DIETETIC CLINIC AT THE UNIVERSITY OF TENNESSEE MEMORIAL RESEARCH CENTER AND HOSPITAL

Diet	Initial Visit		Follow-up	
	Visits	Avg. Time (min.)	Visits	Avg. Time (min.)
Diabetic Diets:				
800 Calorie ADA	1	25		
900 Calorie ADA	1	65	2	23
1000 Calorie ADA	48	37	12	13
1000 Calorie ADA No Salt	3	38		
1000 Calorie ADA 500 mg. NA[b]	1	55		
1200 Calorie ADA	33	37	6	13
1200 Calorie ADA Bland	1	40		
1200 Calorie ADA Low Na	2	72	1	20
1400 Calorie ADA 2 gm. Na	1	50		
1500 Calorie ADA	19	36	3	13
1500 Calorie ADA Type IV	2	40		
1600 Calorie ADA	2	35		
1800 Calorie ADA 2 gm. Na	4	35		
2000 Calorie ADA	1	25		
Other Diets:				
Low Protein, Low Fat, High CHO[c]	2	30	2	15
20 gm. Protein, 500 gm. Na	1	65		
50 gm. Protein	1	100		
High Protein, Low CHO	1	55		
High Potassium	2	20		
Type II	1	55		
Low Residue	4	38		

TABLE X (continued)

Diet	Initial Visit Visits	Initial Visit Avg. Time (min.)	Follow-up Visits	Follow-up Avg. Time (min.)
Other Diets (Continued):				
High Residue	2	25	1	15
Bland Low Na	1	35		
Bland IV, 2 mg. Na	1	40		
Bland IV	18	29		
Bland Low Fat	1	30		
Bland I 4 meals	1	40		
1 gm. Na	4	25	2	10
2 gm. Na	4	42	1	20
Bland II	1	35		
Reduction Diets:				
800 Calorie	19	42	6	17
800 Calorie Low Na	2	45	1	10
800 Calorie Bland	1	50	2	15
800 Calorie Bland IV	1	40		
800 Calorie Low Fat	1	35		
900 Calorie	1	50		
1000 Calorie Reduction	30	36	14	13
1000 Calorie 1 gm. Na	3	38		
1000 Calorie Bland IV	5	34	1	15
1000 Calorie Low Na	1	30		
1000 Calorie Low Fat	1	60	1	10
1200 Calorie Reduction	33	38	16	11
1200 Calorie Soft	1	60		
1200 Calorie Bland	1	30		
1200 Calorie Low Na	1	35	1	20
1200 Calorie 1 gm. Na	1	30		
1200 Calorie 2 gm. Na	1	35		

TABLE X (continued)

Diet	Initial Visit: Visits	Initial Visit: Avg. Time (min.)	Follow-Up: Visits	Follow-Up: Avg. Time (Min.)
Reduction Diets (Continued):				
1200 Calorie Bland IV	1	45	1	10
1200 Calorie 6 Feedings	1	35		
1200 Calorie Low CHO, High Protein, 6 Feedings	1	30	1	10
1200 Calorie Low Na, High Potassium	1	50		
1400 Calorie Low Na	1	30		
1500 Calorie	6	41	3	11
1500 Calorie Low CHO	1	30		
1500 Calorie Bland IV	1	30		
1500 Calorie Low Na	2	60	1	10
1800 Calorie	2	28		
1800 Calorie 6 Feedings	1	25		
1800 Calorie Low Fat	1	30		
TOTAL DIETS	286	37	78	13

[a]January 15, 1973 to May 15, 1973
[b]Na (Sodium)
[c]CHO (Carbohydrates)

VITA

Katherine Hooper Benson was born in Robbinsville, North Carolina. In 1948 she entered The University of Tennessee, College of Home Economics and was graduated in 1951 with a major in Institution Management. She accepted a dietary internship at the Indiana University Medical Center which was completed August, 1952.

Since that time she has held positions as dietitian in Florence, Alabama and Greenville, Mississippi; and as a consultant dietitian in Blytheville, Arkansas and Knoxville, Tennessee.

She will complete requirements for a Master of Science Degree with a major in Food Systems Administration in August, 1973. She is a registered member of The American Dietetic Association.

She is married to Narsh Dewayne Benson and they have three children: Narsh Dewayne, II, Amy Elizabeth, and Sarah Hooper.