

RESEARCH

The role of nutrition support dietitians as viewed by chief clinical and nutrition support dietitians: Implications for training

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ABSTRACT

Objectives To determine current and ideal frequencies with which nutrition support dietitians perform each item on a list of 15 tasks and evaluate dietitian preparation for the practice of nutrition support.

Design Data were collected using two questionnaires, one completed by the chief clinical dietitian and the other completed by the nutrition support dietitian at each hospital surveyed. Both versions of the questionnaires contained a list of 15 tasks that had been validated as being related to advanced nutrition support by a panel of 20 nutrition support experts using a modified Delphi method. Follow-up telephone calls were made to increase the number of responses.

Sample Questionnaires were mailed to the chief clinical dietitian at 300 randomly selected, general medical/surgical hospitals with 300 or more beds in the United States and Puerto Rico. A total of 134 chief clinical dietitians (45%) and 129 nutrition support dietitians (43%) responded to the surveys; 124 (41%) and 120 (40%) questionnaires, respectively, were usable for statistical analyses.

Statistical analyses The Wilcoxon matched-pairs signed-ranks test was used to determine differences between nutrition support dietitian actual and ideal frequencies and between chief clinical dietitian actual and ideal frequencies for each of the 15 tasks. The Mann-Whitney U-Wilcoxon rank sum W test was used to determine differences between nutrition support dietitian and chief clinical dietitian actual frequencies and between nutrition support dietitian and chief clinical dietitian ideal frequencies for each of the 15 tasks.

Descriptive statistics were used to analyze the questions regarding educational preparation for nutrition support practice and demographic data.

Results The ideal frequency for each of the 15 tasks was significantly greater ($P < .0001$) than the actual frequency reported by nutrition support dietitians and chief clinical dietitians. Whereas chief clinical dietitians and nutrition support dietitians agreed on the ideal frequency for most tasks, the nutrition support dietitian ideal frequency indicated for the tasks "determines macronutrient composition of parenteral nutrition" and "performs physical examinations related to nutritional status, fluid status, and gastrointestinal function" was significantly greater ($P < .001$, $P < .05$, respectively) than the ideal frequency indicated by chief clinical dietitians. Of the nutrition support dietitians, 79% agreed and 16% somewhat agreed that experiences beyond those required for becoming a registered dietitian are needed to provide nutrition support dietitians with specialized clinical skills.

Applications/conclusions Nutrition support dietitians desire increased responsibility for delivering nutrition support to their patients and this desire is largely supported by chief clinical dietitians. Nutrition support dietitians appear to have a strong interest in postregistration qualifying experiences that would provide a foundation for expanding their roles. According to the results of this study, programs designed to provide practical, clinical experience in nutrition support are needed. *J Am Diet Assoc. 1997;97:1255-1260,1263.*

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Since the first description of the role of dietitians in nutrition support service (1), the activities of these dietitians have been studied (2-5). The specialized nature of nutrition support dietetics was formally recognized by the establishment of the certified nutrition support dietitian (CNSD) credential and later the metabolic nutrition care credential. Standards of practice for nutrition support dietitians have been developed by the American Society for Parenteral and Enteral Nutrition (ASPEN) and accepted by The American Dietetic Association (ADA) (6). However, re-

Assessment of nutritional status

1. Performs physical examinations related to nutritional status, fluid status, and gastrointestinal function

Therapeutic plan

2. Determines the content of specially formulated tube feedings (modular feedings)
3. Determines the route of delivery of nutrition support
4. Determines the macronutrient composition of parenteral nutrition
5. Determines the micronutrient/electrolyte composition of parenteral nutrition

Implementation

6. Coordinates transitional feedings
7. Prescribes enteral formulas
8. Prescribes therapeutic amounts of vitamins, minerals, and trace elements
9. Establishes nasoenteric feeding access at the bedside
10. Prescribes and manages intravenous fluid therapy
11. Prepares complete parenteral nutrition order for physician cosignature

Patient monitoring

12. Orders laboratory tests to monitor nutrition therapy
13. Relates medication to nutrition care

Professional activities

14. Participates in medical rounds
15. Participates in research

List of nutrition support tasks from the chief clinical and nutrition support dietitian questionnaires.

cent communications in the literature, as well as our practice at Rush-Presbyterian-St Luke's Medical Center, indicate that many nutrition support dietitians perform at a level more advanced than these standards (7-9). Thus, questions remain as to activities currently performed by nutrition support dietitians. We conducted a survey of the current and ideal role of nutrition support dietitians, and an evaluation of currently available training for the practice of nutrition support.

METHODS

A list of 15 nutrition support tasks requiring specialized clinical skills was developed on the basis of a review of the literature (1-6,10-16) and from discussion among the members of the Nutrition Consultation Service at Rush-Presbyterian-St Luke's Medical Center (Figure). This list was validated by 20 experts in the area of nutrition support selected from around the United States. A modified Delphi method was used and two mailings were completed to achieve consensus. Two questionnaires were developed according to the Dillman method (17). The first section of both questionnaires included the list of 15 tasks, and was rated using a 5-point scale (1=never, 5=always) for indicating the actual and ideal frequency with which each task is performed by a nutrition support dietitian at a given hospital. The second section of the nutrition support dietitian questionnaire contained questions regarding the quality of nutrition support dietitians' education and training experiences for nutrition support. Both questionnaires collected demographic data. All questions were closed-ended. The questionnaires were coded for follow-up purposes only and the anonymity of all participants was protected during data analysis. The forms for the questionnaires were developed so that data could be tabulated via computerized scanning (Scanning Concepts, Inc, Chicago, Ill).

Drafts of the questionnaire were pretested by 10 clinical dietitians at Rush-Presbyterian-St Luke's Medical Center. The questionnaires were reviewed and revised, as needed, on the basis of the feedback of those participating in the pretest.

The sample population was defined by a random sample of 300 general medical/surgical hospitals with 300 or more beds in the United States and Puerto Rico. The random list of hospitals was generated by Medical Marketing Service Inc, Wood Dale, Ill, from the membership list of the American Hospital Association. A random sample of hospitals of a certain size was chosen rather than a random sample of members of a professional organization to avoid bias toward a greater interest in specialized nutrition support skills than exists in the nutrition support dietitian population. An ASPEN publication reported that the percentage of hospitals with nutrition support teams and fewer than 300 beds is small (18). Therefore, larger hospitals were chosen to increase the likelihood of identifying nutrition support dietitians.

A cover letter addressed "Dear colleague" was mailed to the chief clinical dietitian at each of the 300 hospitals as were two questionnaires, one for the chief clinical dietitian and one to be given to a nutrition support dietitian. In the cover letter the nutrition support dietitian was defined as a dietitian who spends at least 50% of her or his time managing patients receiving enteral and/or parenteral nutrition. In an effort to complete the chief clinical dietitian/nutrition support dietitian pair at all responding hospitals, follow-up telephone calls were made to hospitals that returned only one of the questionnaires. Follow-up telephone calls were also made to participants who returned the questionnaires but omitted questions or filled in the form incorrectly.

Data were scanned into a computer database, printed out, and corrected. Statistical analyses were performed using the

SAS program (PC version 6.09, 1989, SAS Inc, Cary, NC). Differences between actual and ideal frequencies for the 15 tasks were determined using the Wilcoxon matched-pairs signed-ranks test. Differences between nutrition support dietitian and chief clinical dietitian actual and nutrition support dietitian and chief clinical dietitian ideal frequencies were determined using the Mann-Whitney U-Wilcoxon rank sum *W* test. Descriptive statistics were used to report demographic data and responses to section two of the nutrition support dietitian questionnaires.

RESULTS

Response Rate and Demographic Data

A total of 134 chief clinical dietitians (45%) and 129 nutrition support dietitians (43%) responded to the surveys; 124 (41%) of the chief clinical dietitian and 120 (40%) of the nutrition support dietitian questionnaires were usable for statistical analyses. Questionnaires were excluded from the data analyses if they were incomplete or if the study participant was not available for follow-up.

Most respondents had been in their jobs for 10 or fewer years. Eleven percent of chief clinical dietitians and 48% of nutrition support dietitians had earned the CNSD credential. Approximately 40% of chief clinical dietitians and nutrition support dietitians had a nutrition support team at their hospitals. Additional demographic data are summarized in Table 1.

Actual and Ideal Task Frequencies

The chief clinical dietitians' and nutrition support dietitians' responses to the task portion of the questionnaire are reported in Tables 2 and 3. There was agreement between the chief clinical dietitians and nutrition support dietitians on how frequently all of the tasks are performed. Some of the most frequently performed tasks included "coordinates transitional feedings," "determines macronutrient composition of parenteral nutrition," and "relates medication to nutrition care." The difference between actual and ideal frequencies for each task was significant ($P < .0001$) for both groups. For two of the tasks, "determines macronutrient composition of parenteral nutrition" and "performs physical examinations related to nutritional status, fluid status, and gastrointestinal function," the ideal frequency rating was significantly greater ($P \leq .001$ and $P \leq .05$, respectively) for the nutrition support dietitians than for the chief clinical dietitians.

Assessment of Preparation for Practicing Nutrition Support

Six questions were asked of nutrition support dietitians regarding their assessment of the preparation for the practice of nutrition support they received during undergraduate, registration qualification, and graduate work experiences (Table 4). Eighty-five percent rated on-the-job training as the experience that enhanced their skills the most. Of the nutrition support dietitians, 95% either somewhat agreed or agreed that "additional postregistration clinical and didactic experiences are needed to provide nutrition support dietitians with specialized clinical skills."

DISCUSSION

Our response rate was lower than that of a similar study performed by Jones et al (79%) (2). Jones and colleagues sent questionnaires directly to nutrition support dietitians listed in a nutrition support team directory. Our study was sent to a random sampling of hospitals that may or may not have had a nutrition support dietitian. A small number of blank questionnaires

Table 1
Demographic data of respondents

Characteristic	Chief clinical dietitians (N=124)		Nutrition support dietitians (N=120)	
	No.	%	No.	%
Years of experience as a chief clinical or clinical dietitian				
0 to 3 y	37	30	23	19
4 to 10 y	55	44	48	40
11 to 20 y	26	21	41	34
>20 y	6	5	8	7
Years of experience in current job				
0 to 3 y	39	32	42	35
4 to 10 y	53	43	55	46
11 to 20 y	26	21	20	17
>20 y	6	5	3	3
Route to registration				
Internship	71	57	44	37
Coordinated undergraduate program	20	16	30	25
Master's degree plus experience	23	19	26	22
Other	9	7	19	16
Highest degree attained				
Baccalaureate	47	38	65	54
Master's	72	58	54	45
Other	4	3	1	1
Specialty credentials attained				
Certified nutrition support dietitian	14	11	57	48
Certified diabetes educator	6	5	4	3
Specialist in metabolic care	0	0	3	3
Specialist in pediatric nutrition	1	1	1	1
None	99	80	58	48
Other	3	2	1	1
Member of The American Dietetic Association				
	118	95	103	86
Member of American Society for Parenteral and Enteral Nutrition				
	40	32	73	61
Type of hospital				
Teaching	54	44	48	40
Community	61	49	63	53
Other	7	6	5	4

Table 2Chief clinical dietitians' (N=124) perceptions of the actual and ideal frequency of performance of nutrition support tasks by nutrition support dietitians^a

Task	Actual frequency (%)						Ideal frequency (%)***					
	1	2	3	4	5	Mean±SD ^b	1	2	3	4	5	Mean±SD
1. Physical examinations	54.0	26.6	11.3	7.3	0.8	1.74±1.0	10.5	12.1	32.3	29.0	14.5	3.20±1.2
2. Specially formulated tube feedings	11.3	16.1	14.5	19.4	35.5	3.42±1.5	1.6	4.0	8.9	13.7	67.7	4.30±1.3
3. Route of nutrition support	13.7	21.0	35.5	25.8	4.0	2.86±1.1	1.6	0	15.3	58.9	24.2	4.04±0.7
4. Macronutrients in parenteral nutrition**	12.1	9.7	26.6	31.5	19.4	3.34±1.3	0	0	6.5	34.7	56.5	4.40±0.9
5. Micronutrients in parenteral nutrition	29.0	26.6	21.8	18.5	4.0	2.42±1.2	1.6	4.0	18.5	51.6	22.6	3.85±1.0
6. Transitional feedings	2.4	10.5	31.5	38.7	16.1	3.53±1.0	0.8	0	0.8	28.2	69.4	4.63±0.7
7. Prescribes enteral formulas	14.5	4.8	31.5	38.7	10.5	3.26±1.2	0.8	0	4.0	40.3	54.8	4.48±0.7
8. Therapeutic vitamins	45.2	21.8	17.7	15.3	0	2.03±1.1	3.2	8.1	26.6	42.7	19.4	3.67±1.0
9. Nasoenteric access	86.3	9.7	1.6	0.8	0.8	1.18±0.6	34.7	12.1	28.2	15.3	6.5	2.37±1.4
10. Intravenous fluid therapy	73.4	16.1	8.1	2.4	0	1.40±0.7	21.0	14.5	41.9	16.1	6.5	2.73±1.2
11. Complete parenteral nutrition order	37.9	17.7	27.4	13.7	3.2	2.27±1.2	1.6	5.6	21.8	37.9	33.1	3.95±1.0
12. Laboratory tests	44.4	21.8	16.1	16.1	0.8	2.05±1.2	2.4	2.4	17.7	40.3	35.5	3.99±1.1
13. Medications and nutrition	8.1	12.1	34.7	29.8	15.3	3.32±1.1	0	0.8	19.4	33.1	46.0	4.22±0.9
14. Medical rounds	18.5	16.9	21.0	25.0	16.9	3.00±1.4	0.8	0.8	3.2	37.9	55.6	4.42±0.9
15. Research	46.0	31.5	15.3	4.0	1.6	1.79±1.0	6.5	3.2	35.5	37.9	16.1	3.52±1.1

^aPercentage of respondents for each ranking is indicated below the number corresponding to the ranking (1=never, 2=rarely, 3=sometimes, 4=often, 5=always).^bSD=standard deviation.*Nutrition support dietitian ideal (see Table 3) was significantly greater than chief clinical dietitian ideal ($P<.05$).**Nutrition support dietitian ideal (see Table 3) was significantly greater than chief clinical dietitian ideal ($P<.001$).***Ideal frequency was significantly greater than actual frequency for all tasks ($P<.0001$).**Table 3**Nutrition support dietitians' (N=120) perceptions of the actual and ideal frequency of performance of nutrition support tasks^a

Task	Actual frequency (%)						Ideal frequency (%)***					
	1	2	3	4	5	Mean±SD ^b	1	2	3	4	5	Mean±SD
1. Physical examinations*	52.5	26.7	14.2	4.2	2.5	1.78±1.0	7.5	5.0	32.5	32.5	21.7	3.53±1.2
2. Specially formulated tube feedings	24.2	14.2	10.8	14.2	34.2	3.13±1.7	0	2.5	8.3	21.7	65.8	4.46±1.0
3. Route of nutrition support	16.7	27.5	27.5	22.5	5.8	2.73±1.2	0.8	1.7	10.0	54.2	33.3	4.18±0.7
4. Macronutrients in parenteral nutrition**	15.8	5.8	17.5	26.7	34.2	3.56±1.4	0.8	0	5.0	17.5	76.7	4.69±0.7
5. Micronutrients in parenteral nutrition	34.2	31.7	15.8	11.7	6.7	2.25±1.2	0.8	3.3	22.5	35.8	35.8	3.98±1.0
6. Transitional feedings	0.8	15.0	38.3	30.8	15.0	3.44±1.0	0.8	0	0.8	30.0	68.3	4.65±0.6
7. Prescribes enteral formulas	14.2	10.0	27.5	34.2	14.2	3.24±1.2	1.7	0	4.2	28.3	65.8	4.57±0.7
8. Therapeutic vitamins	40.0	28.3	16.7	11.7	2.5	2.06±1.1	4.2	8.3	20.8	40.0	25.8	3.73±1.1
9. Nasoenteric access	95.0	2.5	0.8	1.7	0	1.09±0.5	47.5	12.5	20.8	11.7	6.7	2.15±1.3
10. Intravenous fluid therapy	71.7	11.7	10.8	5.8	0	1.51±0.9	15.0	18.3	36.7	20.0	10.0	2.92±1.2
11. Complete parenteral nutrition order	43.3	20.8	19.2	12.5	2.5	2.05±1.2	4.2	6.7	15.0	40.0	33.3	3.89±1.2
12. Laboratory tests	45.8	18.3	18.3	13.3	4.2	2.12±1.3	1.7	0.8	10.0	41.7	44.2	4.21±1.0
13. Medications and nutrition	4.2	10.0	33.3	36.7	15.8	3.50±1.0	0.8	0.8	9.2	37.5	50.8	4.34±0.9
14. Medical rounds	27.5	20.8	20.0	15.8	15.0	2.68±1.4	0.8	0.8	2.5	32.5	61.7	4.48±0.9
15. Research	46.7	30.8	15.8	2.5	3.3	1.83±1.0	3.3	3.3	37.5	35.8	20.0	3.66±1.0

^aPercentage of respondents for each ranking is indicated below the number corresponding to the ranking (1=never, 2=rarely, 3=sometimes, 4=often, 5=always).^bSD=standard deviation.*Nutrition support dietitian ideal was significantly greater than chief clinical dietitian ideal (see Table 2) ($P<.05$).**Nutrition support dietitian ideal was significantly greater than chief clinical dietitian ideal (see Table 2) ($P<.001$).***Ideal frequency was significantly greater than actual frequency for all tasks ($P<.0001$).

naires were received from institutions that had been incorrectly categorized by our mailing list as acute-care facilities. We did not collect data on hospitals without nutrition support dietitians because there was no way of ascertaining how many surveys were not returned because a nutrition support dietitian was not on the staff. We also chose to risk decreasing our response rate by using a truly random sample, avoiding any bias that could be created by surveying dietitians who were members of either the ADA Dietitians in Nutrition Support dietetic practice group or ASPEN. Previous studies have drawn from these groups (3,5,7), so comparisons between our results and those of other studies must be evaluated in light of a different approach to sampling.

In 1984, Nestle (11) surveyed 75 students taking a clinical nutrition course and found agreement among participants that physicians are responsible for the physical examination and ordering laboratory tests. Participants named either the dietitian or the physician as the health care professional responsible for selecting the method of nutrition support, and four health professionals (physician, dietitian, nurse, and pharmacist) were named as being primarily responsible for selection of enteral and parenteral formulas. Our results showed a strong desire among nutrition support dietitians to be more involved in all four of the aforementioned tasks. Tasks 3, 5, 6, and 8 from our survey all received an ideal mean score of greater than 4 (often). Tasks 7 and 11 received lower scores (see Table 3).

In 1990, Skipper (5) found that fewer than 10% of respondents reported that determining the enteral feeding route was a dietitian responsibility. More than 55% of respondents in our study indicated involvement in determining the route of nutrition support. This may reflect a difference in the populations surveyed, or dietitians in the earlier survey may have been more involved with parenteral nutrition than enteral nutrition. The increased involvement with enteral nutrition seen in our study may also be a reflection of the current emphasis on early nutrition support using the gastrointestinal tract.

In Skipper's study (5), 74% of respondents reported that either the nutrition support dietitian or staff registered dietitian was responsible for selecting the enteral formula. We asked the frequency with which a nutrition support dietitian "prescribes" an enteral formula, which would include not only choosing the product but also determining the rate and the advancement schedule, if needed. Although 76% of our respondents had a role in prescribing enteral products, it is impossible to ascertain if there were differences in the responses between the two studies because of the use of the verb "select" in the previous study vs the verb "prescribe" in our study. The verbs "prescribe" and "order" were used in our study to reflect ideal practice.

In 1988, Schiller (3) reported that 54% of ASPEN dietitians were not involved in research. Our study found that 47% of nutrition support dietitians never participate in research. Slightly more than half (52%) of our respondents were employed in community hospitals where research may not be a priority. Data similar to employment data were not presented by Schiller; therefore, we cannot speculate on what, if any, changes in nutrition support dietitian research involvement have occurred.

In developing the list of tasks for our study, we specifically chose some of the tasks surveyed by Jones (2). The tasks from her study that had a large difference (>25%) between actual and ideal frequencies, that is, with an ideal "always or almost always" score being given to the tasks by >45% of the respondents, were included in our study (tasks 1 to 11, see Figure) in an effort to evaluate changes in practice over time. A comparison of our data with Jones' does not reveal increases in actual

Table 4

Nutrition support dietitians' evaluation of educational preparation for practicing nutrition support; results are expressed in percentage of respondents for each question assigning a given rank to each statement^a

	No.	1	2	3	4	5
My undergraduate education provided adequate basic science preparation for the practice of nutrition support	120	23.3	24.2	10.0	18.3	23.3
My supervised practice experience required for the RD ^b credential provided adequate experiences in nutrition support dietetics	120	24.2	26.7	11.7	20.8	15.8
My advanced degree provided additional knowledge and skills that enhanced my practice in nutrition support dietetics ^c	58	19.0	7.0	15.5	32.8	25.9
My formal dietetics education (undergraduate plus RD eligibility experience) provided adequate training to become an effective nutrition support dietitian	120	29.2	24.2	17.5	18.3	10.0
My nutrition support knowledge and skills were most enhanced by on-the-job training	120	0	0	1.7	13.3	85.0
Additional post-RD clinical and didactic experiences are needed to provide nutrition support dietitians with specialized clinical skills	120	0.8	0	4.2	15.8	79.2

^a1=disagree, 2=somewhat disagree, 3=neither agree or disagree, 4=somewhat agree, 5=agree.

^bRD=registered dietitian.

^cNutrition support dietitians without advanced degrees were instructed to leave this question blank.

Table 5

Difference in nutrition support dietitian performance of tasks: 1986 vs 1996^a

Task	1986 (N=255)	1996 (N=120)
Physical examinations	16	7
Specially formulated tube feedings	46	48
Route of nutrition support	34	28
Macronutrients in parenteral nutrition	34	61
Micronutrients in parenteral nutrition	17	18
Transitional feedings	59	46
Prescribes enteral formulas	55	48
Laboratory tests	27	18
Medications and nutrition	23	53
Medical rounds	56	31
Research	21	6

^aComparison of data from Jones et al (2) and data collected in our study. Results are expressed in percentage of participants who responded that they actually perform the tasks often or always.

roles across all tasks during the past 10 years (see Table 5). However, because 61% of our respondents were not members of a nutrition support team, and 100% of Jones' respondents were, one could argue that nonteam nutrition support dietitians are performing some tasks perhaps previously restricted to nutrition support dietitians associated with a nutrition support team.

Section two of our survey asked nutrition support dietitians to evaluate their training for the practice of nutrition support. A hint of the need for specialization came in 1919, when the founders of ADA divided practice into four sections: dietotherapy, teaching, administration, and social welfare. Specialization was addressed with the formation of the ad hoc Committee to Study the Feasibility of Establishing Board Certification for Specialty Groups in 1975. Several sets of recommendations were developed from 1975 to 1979, when a motion in favor of specialty boards was debated, then defeated by ADA's House of Delegates (19). The 1984 Study Commission on Dietetics recommended that "All dietitians who seek proficiency in a special field should participate in some form of advanced education beyond the baccalaureate level. Completion of such education may not necessarily lead to a graduate academic degree but should be recognized by some credential, perhaps certification" (19, p 1056).

The first calls for postbaccalaureate training for registered dietitians in nutrition support came more than 10 years ago. In 1983, Luther (20) stated that education for allied health care personnel must be reevaluated to allow for adequate training in nutrition support. He added that dietitians are a crucial part of the nutrition support team, but "they have not made many moves to prepare for what is happening" (p 4). Several investigators (2,4,10,11,16) have documented that dietitians need some form of formalized training in nutrition support.

Christie and Kight (21) surveyed 120 dietitians attending a clinical nutrition conference regarding a proposed practice doctorate for clinical dietitians. Fifty-five percent of respondents expressed interest in obtaining such a degree. Mueller et al (7) found that dietitians believed on-the-job experience was the most valuable means of learning how to write parenteral nutrition orders. Although fellowship training was ranked lower as a means of training, the authors attributed this ranking to the fact that few fellowship programs exist. The desire for specialized training beyond traditional dietetics seems to persist among the nutrition support dietitians that we surveyed. Only 10% of respondents agreed that their formal dietetics education (undergraduate degree and registration-eligibility experience) provided adequate training to become an effective nutrition support dietitian.

Although surveys of nutrition support dietitians indicate that many think an advanced degree is necessary preparation for a position in nutrition support (2,10), the two credentials available to nutrition support dietitians required advanced practice instead. Nevertheless, traditional advanced degree programs far outnumber those programs based on practice. Thus, opportunities for advanced training for dietitians are in contrast to advanced training programs for other health care professionals. For example, pharmacy, medicine, and nursing rely heavily on advanced-level clinical training. These and other professions have well-defined career ladders based on residency and fellowship experience.

APPLICATIONS

Results of this study suggest that dietitians are interested in expanding their role, and are supported in this desire by chief clinical dietitians. Because dietitians can have a positive influence on nutrition support outcomes (22,23), it is appropriate

to pursue opportunities to decrease the gap between actual and ideal patient care roles.

An essential component of role expansion is training. However, a large percentage of practitioners in the survey thought current training is insufficient to prepare for specialized practice in nutrition support. When queried about experiences that would most contribute to improved skills, nutrition support dietitians preferred practical, clinical training at the level beyond that required for registration.

Other professions have based advanced practice credentials on clinical training beyond entry level. Fellowships in nutrition support are available for pharmacists and physicians (24). However, similar opportunities for dietitians have been limited (25). As a result of the findings of this study, a fellowship in nutrition support has been developed at Rush-Presbyterian-St Luke's Medical Center. (For more information about the fellowship program, contact Annalynn Skipper, MS, RD, FADA, Department of Food and Nutrition, Rush-Presbyterian-St Luke's Medical Center, 1653 W Congress Pkwy, Chicago, IL 60612.) The fellowship provides hands-on experience with parenteral and enteral nutrition in a setting where dietitians are professionally privileged to write nutrition orders.

We anticipate that other fellowships will be developed and that graduates of these programs will expand the role of nutrition support dietitians. We also anticipate that existing credentials will be modified or new credentials developed to reflect changes in practice. As dietitians expand into new roles, accompanying research should be conducted to document improved efficiency and effectiveness of medical nutrition therapy that result from changes in practice. ■

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