Standards of practice for the nutrition support dietitian: Importance and value to practitioners

MARION FEITELSON WINKLER, MS, RD

ABSTRACT

Objective To determine whether the American Society for Parenteral and Enteral Nutrition (ASPEN) standards of practice for nutrition support dietitians reflect current practice.

Design A mailed survey questionnaire was used to determine how important nine functions of the nutrition support dietitian are to the practice of nutrition support dietetics, how important the ASPEN standards are to practitioners, the frequency of application of each standard to patients, and demographic data of the respondents.

Sample The survey was sent to 1,048 randomly selected dietitian members of The American Dietetic Association’s Dietitians in Nutrition Support dietetic practice group and ASPEN. The final sample included 460 dietitians, a return rate of 44%. For purposes of comparison, dietitian respondents were categorized into three groups: nutrition support dietitians (n = 286); non-nutrition support dietitians (n = 136); and supervisors of nutrition support dietitians (n = 38).

Statistical analyses performed Descriptive data are reported as frequency or mean ± standard deviation. Differences in importance ratings of the standards by nutrition support dietitians, non-nutrition support dietitians, and supervisors of nutrition support dietitians were compared with one-way analysis of variance ANOVA and Scheffe post hoc tests. χ² Analysis was used to compare group differences in the frequency of application of each standard to patients. Probability was set at the .05 level.

Results Nutrition support functions rated as very important included performing nutrition assessments, identifying high-risk patients, implementing and monitoring parenteral and enteral nutrition, supervising transitional feeding, and documentation. The standards of practice were all rated as very important by nutrition support dietitians, non-nutrition support dietitians, and supervisors, and there was no difference in perceived importance. More than half of the respondents applied each standard with 75% to 100% of their patients; however, there was a higher frequency of application by nutrition support dietitians.

Applications/conclusions The findings give validity to the standards of practice. Practitioners evaluate them as being important in practice and in theory. The standards of practice for nutrition support dietitians were approved for use by the House of Delegates of The American Dietetic Association in October 1992. J Am Diet Assoc. 1993;93:1113-1116.

S tandards of practice for the nutrition support dietitian, which were developed by the American Society for Parenteral and Enteral Nutrition (ASPEN), were first published in 1986 (1), and were subsequently revised in 1990 (2). The standards represent a consensus of ASPEN’s multidisciplinary Standards Committee and Board of Directors as to the minimal level of practice necessary to ensure safe and effective enteral and parenteral nutrition care. Practitioner competencies have been established on the basis of the standards (3), but, to date, there has been no validation of the applicability, practicality, importance, or frequency of use of the standards.

The purpose of this collaborative study of the Dietitians in Nutrition Support (DNS) dietetic practice group of The American Dietetic Association (ADA) and the ASPEN Dietitian’s Committee was to determine whether the standards of practice for nutrition support dietitians (NSDs) actually reflect current practice. Use of these standards is expected to promote quality patient care and improve the effectiveness of health care activities.

METHOD

A three-part survey questionnaire was developed conjointly by a working group of dietitians from DNS and ASPEN. Demographic data included length of time in practice, job title, educational background, place of employment, dietetic practice group affiliation, and percentage of time spent providing direct care to patients receiving enteral and parenteral nutrition support. On a scale of 1 to 3, where 1 = not important, 2 = somewhat important, and 3 = very important, respondents were asked to indicate how important each of nine functions of the NSD are to the practice of nutrition support dietetics. Respondents also rated the importance of each standard and specified the percentage of patients for which each standard is used. The survey tool was pilot tested at the 1992 ASPEN Clinical Congress. Nine dietitians representing different geographic areas participated in the pilot test. Five of these dietitians were members of both DNS and ASPEN. Each participant completed the questionnaire independently. The author then held a discussion to identify any problems in interpretation of the questions or suggestions for improvement. The survey was subsequently revised for greater clarity, reliability, and relevance.

The overlap membership between DNS and ASPEN was calculated before the appropriate sample size was determined. Of the 3,415 members of DNS, 31% were also members of ASPEN. Of the 2,627 dietitian members of ASPEN, 40% belonged to DNS. A total of 1,100 randomly generated names were initially requested from both organizations (600 from DNS, 500 from ASPEN). After a volunteer eliminated 52 duplicate names, the survey was sent to a random sample of 1,048 dietitian members of DNS and/or ASPEN along with a

M. F. Winkler is a surgical nutrition specialist in the Department of Surgery and Nutritional Support Service, Rhode Island Hospital, Providence, RI 02903.
cover letter describing the purpose of the project. A postage-
paid envelope was provided. The final sample included 460
dietitians, a return rate of 44%. For purposes of comparison,
dietitian respondents were categorized into three groups on the
basis of reported job titles: NSDs (n = 286), non-NSDs
(n = 136), and supervisors of NSDs (n = 38). Data were numeri-
cally coded and entered into the Statistical Package for Social
Sciences (version 10, 1988, SPSS, Chicago, Ill.) (4). Descriptive
data are reported as frequency or mean ± standard deviation.
One-way analysis of variance ANOVA and Scheffe post hoc tests
were used to compare differences in importance ratings by
NSDs, non-NSDs, and supervisors of NSDs for each function and
standard. χ² Analysis was used to compare differences
between NSDs, non-NSDs, and supervisors of NSDs in the
frequency of application of each standard to patients. Probabili-
ty was set at the .05 level.

RESULTS
Of the sample of 460 registered dietitians, 54% were members
of both DNS and ASPEN. More than half (57%) had been in
practice for 10 or more years. Only a fraction (3%) were entry-
level dietitians. Of the sample, 62% specified nutrition support
dietetics as their current area of practice and most had been
practicing as an NSD for 2 to 5 years. Eight percent had
supervisory responsibilities for NSDs whereas 30% indicated a
variety of other non-NSD job titles, including chief clinical
dietitian or clinical nutrition manager; clinical dietitian; direc-
tor, assistant director or associate director of nutrition or
patient services; clinical specialist (eg, in the areas of renal,
pediatrics, trauma, surgery, intensive care, oncology, cardiology,
medicine, geriatrics); marketing and sales; or instructor, intern-
ship director, or educator. Educational background was at the
baccalaureate (45%) and master’s (45%) degree levels. Few

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Functions of the nutrition support dietitian (2) and perceived level of importance by 460 dietitians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function</td>
<td>Mean rating*</td>
</tr>
<tr>
<td>Performance of periodic nutrition assessments of patients receiving nutrition support</td>
<td>3.0</td>
</tr>
<tr>
<td>Identification of patients at nutritional risk</td>
<td>2.9</td>
</tr>
<tr>
<td>Participation in design, implementation, and monitoring of parenteral and enteral nutrition regimens</td>
<td>2.9</td>
</tr>
<tr>
<td>Assurance of trouble-free and nutritionally complete transitional feedings</td>
<td>2.9</td>
</tr>
<tr>
<td>Documentation of nutrition care plans</td>
<td>2.9</td>
</tr>
<tr>
<td>Provision of education to patients, families, and health care professionals</td>
<td>2.8</td>
</tr>
<tr>
<td>Participation in design, implementation, and monitoring of home enteral and home parenteral nutrition programs</td>
<td>2.7</td>
</tr>
<tr>
<td>Participation in local, regional, and national education programs</td>
<td>2.4</td>
</tr>
<tr>
<td>Participation in research studies</td>
<td>2.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Standards of practice for nutrition support dietitians (2) and their perceived importance according to 460 dietitians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Mean rating*</td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td>A.1. Established criteria are used for identifying a patient who is, or may become, malnourished</td>
<td>2.9</td>
</tr>
<tr>
<td>A.2. Individual plans for provision of specialized nutrition support are used that are appropriate for the patient’s clinical status</td>
<td>2.9</td>
</tr>
<tr>
<td>A.3. A quantitative and qualitative evaluation of nutrient needs precedes initiation of nutrition support</td>
<td>2.8</td>
</tr>
<tr>
<td>Therapeutic plan</td>
<td></td>
</tr>
<tr>
<td>B.1. A nutrition care plan is established based on the results of the comprehensive nutrition assessment</td>
<td>2.9</td>
</tr>
<tr>
<td>B.2. The objectives and indications for nutrition support are determined and documented before initiating therapy</td>
<td>2.8</td>
</tr>
<tr>
<td>B.3. The route recommended to provide nutrition support is appropriate to the medical condition, provides the assessed nutrient requirements, and achieves therapeutic objectives safely and effectively</td>
<td>3.0</td>
</tr>
<tr>
<td>B.4. The feeding formulation recommended or selected is appropriate for the disease process and estimated nutrient needs and is compatible with the route of access</td>
<td>3.0</td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
</tr>
<tr>
<td>C.1. There is verification that enteral formulations are prepared according to established guidelines for safe and effective nutrition therapy</td>
<td>2.8</td>
</tr>
<tr>
<td>C.2. There is verification that specialized nutrition support is administered in accordance with the prescribed therapeutic plan and consistent with patient tolerance</td>
<td>2.9</td>
</tr>
<tr>
<td>C.3. Established protocols for nutrition support are implemented to ensure safe and effective delivery</td>
<td>2.9</td>
</tr>
<tr>
<td>Patient monitoring</td>
<td></td>
</tr>
<tr>
<td>D.1. The clinical and metabolic response to nutrition support is monitored to provide a basis for modifying nutrition support therapy</td>
<td>3.0</td>
</tr>
<tr>
<td>D.2. The patient is monitored for physical, social, psychological, cognitive, and environmental factors that may influence the response to nutrition support</td>
<td>2.7</td>
</tr>
<tr>
<td>Transitional feeding</td>
<td></td>
</tr>
<tr>
<td>E.1. Established criteria are used for transitional feeding from parenteral to enteral nutrition and from enteral tube feedings to oral diet</td>
<td>2.7</td>
</tr>
<tr>
<td>E.2. Adequacy of intake is documented before discontinuing parenteral or enteral nutrition support</td>
<td>2.9</td>
</tr>
</tbody>
</table>

*Rating scale: 1 = not important, 2 = somewhat important, 3 = very important.
Nutrition support functions specifically related to patient care received the highest importance ratings; a great deal of congruence was found between ratings of importance and actual application of the standards to patient care.

Nutrition Support Responsibilities
The majority of respondents (79%) were responsible for managing patients receiving enteral nutrition therapy; 69% managed patients receiving parenteral nutrition support. Although only 3% of the dietitians were employed in home care, 22% reported that they were responsible for managing patients receiving home enteral or home parenteral nutrition. The average time spent in the provision of care to patients receiving enteral and parenteral support was 45 ± 31%. The most frequently reported percentage was 50%. A large segment (68%) of the respondents reported using the ASPEN standards of practice.

Functions of the Nutrition Support Dietitian
Nine previously published functions of the nutrition support dietitian (2) and their perceived level of importance are shown in Table 1. Survey respondents were asked to indicate how important each function is to the practice of nutrition support dietetics. Overall, the functions specifically related to patient care received the highest ratings. More than 90% of the respondents ranked identification of patients at nutritional risk; performance of nutrition assessment; and participation in design, implementation, and monitoring of enteral and parenteral nutrition regimens as very important. Monitoring transitional feeding and documenting nutrition care plans were ranked very important by 87%. Participating in the provision of home nutrition support and providing education to patients and families were considered very important by three quarters of the group. Participation in research studies and in local, regional, and educational programs were considered less important by comparison; almost half of the respondents rated them as somewhat important. There was no difference by one-way ANOVA in the ratings of the nutrition support dietitian functions by NSDs, non–NSDs, and supervisors of NSDs.

Standards of Practice
The standards of practice for nutrition support dietitians are divided into five areas: assessment, therapeutic plan, implementation, patient monitoring, and transitional feeding. Respondents were asked to indicate how important each standard is to the practice of nutrition support dietetics and to specify how frequently they use each standard in their own practice. The perceived importance ratings are shown in Table 2. The results were overwhelmingly consistent and similar—all mean ratings were close to the highest value of 3.0. No differences were found by one-way ANOVA in importance ratings by NSDs, non–NSDs, and supervisor of NSDs.

A great degree of congruence was found between ratings of importance and actual application of the standards to patients. More than half of the respondents applied the standards with 75% to 100% of their patients. This was especially true for the standards of assessment, therapeutic plan, implementation, and patient monitoring. In contrast, the standards for transitional feeding were applied to patients less frequently. No difference was found among NSDs, non–NSDs, and supervisors of NSDs in the application of standards for identifying malnourished patients (A.1), quantitative and qualitative evaluation of nutrient needs (A.3), documentation of objectives and indications for nutrition support (B.2), and recommendation of appropriate route to provide nutrition support (B.3) (Table 3). For the standards that were more procedural in nature—such as use of appropriate individual plans for provision of nutrition support (A.2), establishment of nutrition care plans according to results of nutrition assessment (B.1), and verification that enteral formulations are prepared according to guidelines (C.1)—a greater percentage of supervisors reported more frequent application than either NSDs or non–NSDs. Finally, for the standards of B.4, C.2, C.3, D.1, E.1, and E.2, there was a higher frequency of application by NSDs than by non–NSDs. (See Table 2 for a definition of each standard.) These standards are all very specific to implementation and monitoring of enteral and parenteral formulations and prescriptions, clinical and metabolic response, and transitional feeding, whereas the standards for identifying malnourished patients, documenting objectives and indications for nutrition support, and evaluating nutrient needs appear to have more widespread applicability to all patients regardless of type of nutrition intervention.

DISCUSSION
The demographic data obtained in this study compare favorably with findings of others in which NSDs were surveyed. Schuller (5) surveyed 424 ASPEN dietitians, 58% of whom were also members of DNS; 63% were members of a nutrition support team, one third had baccalaureate degrees, 47% held master's...
Table 3

Frequency with which dietitians apply the standards of practice to 75% to 100% of their patients

<table>
<thead>
<tr>
<th>Standard</th>
<th>NSD* (n = 286)</th>
<th>non-NSD (n = 136)</th>
<th>Supervisors of NSDs (n = 38)</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.1</td>
<td>91%</td>
<td>81%</td>
<td>92%</td>
<td>8.6</td>
</tr>
<tr>
<td>A.2</td>
<td>89%</td>
<td>77%</td>
<td>97%</td>
<td>16.6**</td>
</tr>
<tr>
<td>A.3</td>
<td>66%</td>
<td>59%</td>
<td>66%</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Therapeutic plan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.1</td>
<td>88%</td>
<td>77%</td>
<td>94%</td>
<td>13.2*</td>
</tr>
<tr>
<td>B.2</td>
<td>59%</td>
<td>52%</td>
<td>54%</td>
<td>3.3</td>
</tr>
<tr>
<td>B.3</td>
<td>57%</td>
<td>77%</td>
<td>90%</td>
<td>4.1</td>
</tr>
<tr>
<td>B.4</td>
<td>90%</td>
<td>78%</td>
<td>93%</td>
<td>13.9*</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.1</td>
<td>66%</td>
<td>66%</td>
<td>75%</td>
<td>16.7**</td>
</tr>
<tr>
<td>C.2</td>
<td>85%</td>
<td>70%</td>
<td>72%</td>
<td>17.9**</td>
</tr>
<tr>
<td>C.3</td>
<td>79%</td>
<td>63%</td>
<td>69%</td>
<td>20.5*</td>
</tr>
<tr>
<td><strong>Patient monitoring</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.1</td>
<td>92%</td>
<td>79%</td>
<td>78%</td>
<td>18.5*</td>
</tr>
<tr>
<td>D.2</td>
<td>62%</td>
<td>54%</td>
<td>67%</td>
<td>10.9*</td>
</tr>
<tr>
<td><strong>Transitional feeding</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.1</td>
<td>64%</td>
<td>33%</td>
<td>42%</td>
<td>21.8**</td>
</tr>
<tr>
<td>E.2</td>
<td>56%</td>
<td>40%</td>
<td>53%</td>
<td>14.6*</td>
</tr>
</tbody>
</table>

*NSD = nutrition support dietitian.

See Table 2 for a definition of each standard.

*Difference between NSDs, non–NSDs, and supervisors of NSDs in frequency of application of each standard by χ² analysis; df = 4; P < .05.

**Difference between NSDs, non–NSDs, and supervisors of NSDs in frequency of application of each standard by χ² analysis; df = 4; P < .001.

degrees, and 2% held doctoral degrees. In a recent study of nutrition support team members, Regenstein (6) reported that NSDs spent 58% of their time providing enteral, parenteral, or home nutrition support therapies. Of the 414 dietitian respondents in Regenstein’s study (6), 44% had practiced as an NSD for 5 to 10 years and 21% had been in practice for more than 10 years. More than two thirds of the dietitians were employed in public or private hospitals.

The sample of DNS and ASPEN dietitians who participated in this validation study appears to be a representative group. The finding of high importance ratings for all standards and the widespread application of the standards in the practice setting give validity to the standards of practice. Respondents did, however, specify some concern and frustration regarding application of the standards. The most frequent theme that emerged from qualitative comments was that actual implementation is overwhelming. Nutritional and dietary assessment, then an evaluation as to how the current prescription meets requirements and a recommendation as to what parameters are needed for monitoring should follow. Other barriers to implementation of the standards included the ratio of patients to dietitians on staff and the question of who has responsibility for decision making in the presence or absence of a nutrition support team.

Standards of practice for nutrition support define the minimal level of practice required to ensure effective enteral and parenteral nutrition care; use of standards will promote quality patient care

APPLICATION TO PRACTICE

The management of patients on enteral, parenteral, or home nutrition support is a collaborative effort by dietitians and other members of the health care team. Use of standards of practice for managing patients on enteral and parenteral nutrition support should help dietitians develop job descriptions and define their specific responsibilities. Dietetics practitioners are encouraged to modify these standards to their individual situation or patient population and to the specific needs of the practice setting. As a result of this study, in October 1992, the House of Delegates of The American Dietetic Association approved the Standards of Practice for the Nutrition Support Dietitian.

The author wishes to acknowledge the support of Lucinda K. Lyseen, chairman of the Dietitians in Nutrition Support dietetic practice group (1991-1992) and Eva Politzer Shronts, chairman of the ASPEN Dietitians Committee (1990-1992) and their committees; and the contributions of the following individuals: Rosa Marotta, Wanda Hain-Howell, Denise Schwartz, Debbie Motta Williams, Ann Coffey, Rebecca Murray, Laura Matarese, Lucy Balogun (ADA Division of Practice), and Janet Gannon (ASPEN). Statistical consultation was provided by Susan R. Carroll, PhD, Words + Numbers Research, Torrington, Conn.

References

Self-assessment questionnaire for RDs

After reading the continuing education article, "Standards of practice for the nutrition support dietitian: Importance and value to practitioners," please answer the following questions by indicating your responses on the self-assessment questionnaire form located on the next page.

This activity has been approved for 1 hour of continuing education credit for registered dietitians by the Commission on Dietetic Registration. Answers to the self-assessment questionnaire can be found on page 1227.

ADA members should cut out the completed form and return it, with a check for $12 each (nonmembers $16) to cover processing, to: The American Dietetic Association, PO Box 97215, Chicago, IL 60678-7215.

Questionnaires must be returned within 1 year of their appearance in the Journal in order to be eligible for credit. Notification will not be sent if the hour is approved.

ITEMS 1 TO 17

For items to 17, select the one best answer or completion to each question or incomplete statement.

1. The purpose of this study was to determine whether the:
   A. American Society for Parenteral and Enteral Nutrition (ASPEN) standards of practice for nutrition support dietitians (NSDs) should be revised in 1994
   B. NSDs should be members of ASPEN or the Dietitians in Nutrition Support dietetic practice group
   C. ASPEN standards of practice for NSDs reflect current practice
   D. NSDs should document the use of the standards of practice

2. The standards of practice for NSDs were developed by:
   A. ASPEN
   B. The American Dietetic Association
   C. The Dietitians in Nutrition Support dietetic practice group
   D. The ASPEN Dietitian's Committee

3. The standards of practice for NSDs represent:
   A. Practitioner competencies based on quality patient care and effective health care
   B. The minimum level of practice necessary to ensure safe and effective nutrition care
   C. A validation process to indicate the importance of NSDs
   D. A document serving to establish a permanent alliance between ADA and ASPEN

4. Which of the following standards had a higher frequency of application by NSDs than by non-NSDs?
   A. B-4: The feeding formulation recommended/selected is appropriate for the disease process and estimated nutrient needs, and compatible with the route of access
   B. B-2: The objectives and indications for nutrition support are determined and documented before initiating therapy
   C. A-1: Established criteria are used for identifying a patient who is, or who may become, malnourished
   D. A-3: A quantitative and qualitative evaluation of nutrient needs precedes initiation of nutrition support

5. Which of the following best describes a dietitian responding to the survey?
   A. A member of both DNS and ASPEN who holds a PhD in nutrition or a related field
   B. An entry-level dietitian practicing nutrition support dietetics
   C. An NSD supervisor with 5 years of experience in dietetics
   D. An NSD with 10 years of experience

6. A majority of the dietitians responding to the survey are responsible for managing patients receiving which nutrition therapy?
   A. Enteral
   B. Parenteral
   C. Home enteral
   D. Home parenteral

7. Which of the following is an area of the standards of practice for NSDs?
   A. Education
   B. Implementation
   C. Participation
   D. Evaluation

8. The most important function of an NSD, as rated by dietitians responding to the survey, was:
   A. Participation in design, implementation, and monitoring of parenteral and enteral nutrition regimens
   B. Documentation of nutrition care plans
   C. Performance of periodic nutrition assessments of patients receiving nutrition support
   D. Provision of education to patients, families, and health care professionals

9. Implementation of the standards of practice has been difficult for some practitioners because of:
   A. The low percentage of time spent providing care to patients receiving enteral or parenteral nutrition support therapies
   B. The practitioner's inability to participate in research studies
   C. The perceived low importance ratings of the standards
   D. The influence of physicians, nurses, and pharmacists in nutrition support decision making

10. Participation in which of the following functions did dietitians responding to the survey rate as being less important to their current position?
    A. Education of patient
    B. Home nutrition support
    C. Research studies
    D. Monitoring transitional feeding

11. More than 50% of the dietitians responding to the survey applied the standards of practice for what percent of their patients?
    A. 75% to 100%
    B. 50% to 75%
    C. 25% to 50%
    D. 0% to 25%
12. Which of the following standards of practice were applied to patients least often?  
A. Patient monitoring  
B. Therapeutic plan  
C. Transitional feeding  
D. Assessment

13. Which of the following researchers showed that 63% of responding dietitians are members of nutrition support teams?  
A. Regenstein  
B. Schiller  
C. Shronts  
D. None of the above

14. With reference to Table 2, all of the following standards were perceived to be of great importance (i.e., rated 3.0) by the sample dietitians responding to the survey, except:  
A. D-1: The clinical and metabolic response to nutrition support is monitored to provide a basis for modifying nutrition support therapy  
B. B-4: The feeding formulation recommended or selected is appropriate for the disease process and estimated nutrient needs and is compatible with the route of access  
C. B-3: The route recommended to provide nutrition support is appropriate to the medical condition, provides the assessed nutrient requirements, and achieves therapeutic objectives safely and effectively  
D. D-2: The patient is monitored for physical, social, psychological, cognitive, and environmental factors that may influence the response to nutrition support

15. With reference to Table 3, NSDs applied all of the following standards to 75% to 100% of their patients more frequently than non-NSDs, except:  
A. D-1: The clinical and metabolic response to nutrition support is monitored to provide a basis for modifying nutrition support therapy  
B. C-2: There is verification that specialized nutrition support is administered in accordance with the prescribed therapeutic plan and consistent with patient tolerance  
C. C-1: There is verification that enteral formulations are prepared according to established guidelines for safe and effective nutrition therapy  
D. E-1: Established criteria are used for transitional feeding from parenteral to enteral nutrition and from enteral tube feedings to oral diet

16. According to this study, validity is given to the standards of practice for NSDs because of findings of:  
A. Widespread application in practice  
B. Moderate importance ratings  
C. Frequent implementation of the standards  
D. Appropriate documentation of nutrition support

17. Which of the following statistical analyses was used for mean comparison:  
A. One-way analysis of variance  
B. Two-way analysis of variance  
C. Scheffe post hoc test  
D. Tukey's multiple range test