

THE ROLE OF NUTRITION COUNSELING BY NURSES IN PATIENT RECOVERY AT LAQUINTINIE HOSPITAL, DOUALA, CAMEROON

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Abstract

Background: Nutrition counseling is an important component of holistic nursing care and may support recovery by improving patients' nutritional practices, treatment understanding, and overall well-being. This study assessed the role of nutrition counseling by nurses in patient recovery at Laquintinie Hospital, Douala.

Methods: A hospital-based descriptive cross-sectional study was conducted from 3 February to 28 March 2025. The dissertation reports a planned sample of 384 participants selected using a convenience/random sampling approach. Data were collected with a structured questionnaire and entered into Microsoft Excel and analyzed using SPSS. Descriptive statistics were summarized using frequencies and percentages.

Results: Of 284 analyzed responses presented in the results tables, 100 (35.2%) reported that nutrition counseling was provided daily, 98 (34.5%) weekly, and 86 (30.3%) reported that it was never provided. Nutrition counseling was considered a routine part of practice by 120 (42.3%) respondents, while 98 (34.5%) reported that it was sometimes routine and 66 (23.2%) reported that it was not routine. The most frequently reported perceived recovery benefits were faster healing/recovery (228 responses), reduced hospital stay (180), and improved immune function (130). Major barriers included insufficient nutrition training, health-literacy difficulties, limited time, inadequate support/collaboration, and patient-related barriers.

Conclusion: The findings indicate that nurses perceive nutrition counseling as beneficial to patient recovery, but its routine delivery is constrained by training, workload, communication, and collaboration barriers. Strengthening nurses' nutrition competencies, reducing workload-related constraints, and improving multidisciplinary support may enhance nutrition counseling in hospital practice.

Keywords: nutrition counseling; nurses; patient recovery; nursing practice; hospital; Douala; Cameroon.

1. Introduction

Nutrition is an important determinant of health and recovery during hospitalization. Nurses interact with patients frequently and are therefore strategically positioned to provide practical nutrition information, reinforce dietary recommendations, identify barriers to adequate intake, and refer patients when specialized nutritional assessment is required. The source dissertation frames nutrition counseling as a component of patient-centered care that may contribute to improved recovery, reduced complications, better quality of life, and reduced healthcare costs.

Evidence cited in the dissertation describes nutrition counseling as potentially beneficial in several settings, including improvements in nutritional status, wound healing, patient satisfaction, and other recovery-related outcomes. The dissertation also emphasizes the importance of nutrition counseling in African healthcare systems, where resource constraints, health literacy, cultural beliefs, workload, and access to specialist nutrition services may affect implementation.

Despite the potential benefits, the dissertation identifies practical barriers to effective counseling by nurses, including lack of time, inadequate nutrition knowledge and training, communication difficulties, limited collaboration with dietitians and other professionals, and patient-level financial, social, cultural, or motivational barriers.

The present study therefore examined how frequently nurses provide nutrition counseling, how counseling is integrated into routine nursing practice, perceived effects on patient recovery, and challenges encountered in providing counseling at Laquintinie Hospital in Douala.

2. Objective

The overall objective was to evaluate the role of nutrition counseling by nurses in patient recovery at Laquintinie Hospital, Douala.

Specific objectives were to: (1) assess the frequency and quality of nutrition counseling provided by nurses; (2) evaluate perceived impacts of nutrition counseling on patient recovery outcomes; and (3) identify challenges faced by nurses when providing nutrition counseling.

3. Methods

3.1 Study design and setting

A hospital-based descriptive cross-sectional study was conducted at Laquintinie Hospital, Douala, Cameroon. The dissertation describes Laquintinie Hospital as a major referral facility in Douala with multiple clinical specialties and a large patient and professional workforce.

3.2 Study population and sampling

The dissertation describes nurses working in medical and surgical wards and patients admitted to the hospital as the study population. It reports a calculated sample size of 384 using the Cochran formula, with a 95% confidence level, 5% precision, and an assumed prevalence of 50%. The sampling method is described inconsistently as both random and convenience sampling; the results section states that 384 participants were selected using a convenient sampling technique. This inconsistency should be clarified from the original field records before journal submission.

3.3 Data collection

Data were collected using a structured questionnaire. The instrument included demographic characteristics, frequency and quality of nutrition counseling, perceived impact of counseling on recovery, and challenges encountered in counseling. The data-collection period is reported as 3 February to 28 March 2025.

3.4 Data management and analysis

Data were entered using Microsoft Excel and analyzed with SPSS. The dissertation reports use of frequencies, percentages, tables, and figures. The manuscript retains the descriptive analysis presented in the source and does not introduce statistical tests that were not reported in the dissertation.

3.5 Ethical considerations

The dissertation states that clearance was obtained from Alpha Higher Institute of Biomedical and Technological Sciences, authorization was obtained from the Regional Delegation for Public Health and the Director of Laquintinie Hospital, informed consent was obtained from participants, and confidentiality and anonymity were maintained.

4. Results

4.1 Participant characteristics

Characteristic	Category	n (%)
Age	18–24 years	55 (19.4%)
	25–34 years	169 (59.5%)
	35–40 years	60 (21.1%)
Sex	Male	100 (35.2%)
	Female	184 (64.8%)
Religion	Christianity	175 (61.6%)
	Islamism	109 (38.4%)
Marital status	Single	95 (33.5%)
	Married	100 (35.2%)
	Divorced	89 (31.3%)
Education	Diploma	150 (52.8%)
	Bachelor's degree	91 (32.1%)
	Master's degree	43 (15.1%)
Occupation	Registered nurse	84 (29.6%)
	Nurse practitioner	140 (49.3%)
	Nurse educator	60 (21.1%)

The analyzed table contains 284 respondents. Women constituted 64.8% of respondents, and the largest age group was 25–34 years (59.5%). Diploma-level education was most common (52.8%).

4.2 Frequency and quality of nutrition counseling

Indicator	Response	n (%)
Frequency of counseling	Daily	100 (35.2%)
	Weekly	98 (34.5%)
	Never	86 (30.3%)
Routine part of daily practice	Yes	120 (42.3%)
	No	66 (23.2%)
	Sometimes	98 (34.5%)
Assessing patient understanding	Patient repeats information	142 (50.0%)
	Observing behavior/diet	100 (35.2%)
	Monitoring outcomes	4 (14.8%)
Resources used	Nutrition guidelines	120 (42.2%)
	Consultation with dietitians	112 (39.5%)
	Personal experience	52 (18.3%)

Nutrition counseling was reported as a daily activity by 35.2% of respondents and weekly by 34.5%; 30.3% reported never providing it. Patient understanding was most often assessed by asking patients to repeat information (50.0%). Nutrition guidelines were the most commonly reported resource (42.2%), followed by consultation with dietitians (39.5%).

4.3 Perceived impact on patient recovery

Outcome/indicator	n (%) or responses reported
Counseling importance: very important	101 (35.6%)
Somewhat important	96 (33.9%)
Not important	87 (30.6%)
Observed improvement: frequently	130 (45.8%)
No improvement observed	59 (reported as 33.5%)
Not sure	95 (reported as 20.7%)
Positive patient feedback	Reported in narrative
Tracking recovery outcomes: yes	166 (58.5%)
No	45 (15.8%)
Occasionally	73 (25.7%)
Faster healing/recovery	228 responses
Reduced hospital stay	180 responses
Improved immune function	130 responses
Better chronic disease management	78 responses
Prevention of malnutrition	41 responses

The source reports several perceived benefits of nutrition counseling. Faster healing/recovery was the most frequently identified outcome, followed by reduced hospital stay and improved immune function. The dissertation also reports positive feedback from patients and use of patient comments and suggestion boxes.

4.4 Challenges to effective nutrition counseling

Challenge	n (%)
Lack of time	119 (41.9%)
Insufficient knowledge/training	92 (32.4%)
Inadequate collaboration with dietitians	73 (25.7%)
Health-literacy problems	132 (32.4% as reported)
Cultural/patient-related barriers	117 (41.2%)
Patient lack of motivation	75 (26.4%)
No/little professional support	Reported in source tables as 96–103 responses
Financial constraints affecting adherence	150 (52.8%)
Social influences	60 (21.1%)
Personal preferences/habits	74 (26.1%)

The most prominent barriers were time constraints, inadequate knowledge or training, health-literacy difficulties, cultural or patient-related barriers, insufficient professional support, and financial constraints affecting patients' ability to follow dietary advice.

5. Discussion

This study found that nutrition counseling was incorporated into nursing practice for many respondents, although a substantial proportion reported that it was not routine or was provided only intermittently. Daily counseling was reported by 35.2%, weekly counseling by 34.5%, and 30.3% reported never providing counseling. These findings suggest that nutrition counseling is recognized within nursing care but may not yet be consistently integrated into everyday practice.

The finding that 42.3% considered nutrition counseling a routine part of daily practice, while 34.5% considered it routine only sometimes, further demonstrates variability in implementation. The source dissertation interprets this as evidence of favorable experiences while also identifying the need for additional training and organizational support.

The perceived benefits were substantial. Respondents most frequently identified faster healing and recovery, reduced hospital stay, and improved immune function. These perceptions are clinically plausible, but the present cross-sectional study does not establish a causal relationship between counseling and these outcomes. The findings should therefore be interpreted as nurses' reported observations rather than independently measured treatment effects.

A central finding was the presence of structural and professional barriers. Lack of time was reported by 41.9% as a major barrier, while 32.4% identified insufficient knowledge or training and 25.7% identified inadequate collaboration with dietitians. The dissertation also highlights health-literacy and cultural barriers. Together, these findings indicate that improving nutrition counseling requires more than individual nurse motivation; it also requires organizational conditions that permit counseling to occur.

The study further highlights financial constraints as a major challenge to patient adherence to nutritional advice, reported by 52.8% of respondents. This finding is particularly relevant in settings where household resources influence access to recommended foods. Counseling should therefore be practical, culturally appropriate, and adapted to locally available and affordable foods.

The dissertation's discussion links its findings with previous literature on nursing nutrition counseling. Because several references in the original document are incompletely specified or appear inconsistently formatted, those citations should be bibliographically verified before submission to a peer-reviewed journal.

6. Strengths and limitations

Strengths include a clearly defined hospital-based focus, structured assessment of counseling frequency, perceived recovery effects, and barriers, and inclusion of several dimensions of nursing nutrition practice. The study also provides locally relevant evidence from a major hospital in Douala.

Important limitations must be acknowledged. The dissertation contains inconsistencies in the description of the sampling method and in some reported percentages/frequencies. The results tables contain 284 analyzed respondents although the methods/results narrative refers to a sample of 384. Some percentages do not correspond exactly to the reported frequencies, and some questionnaire items appear to have been reported using different denominators. The study is cross-sectional and relies largely on self-reported perceptions, so causality cannot be inferred. These issues should be resolved against the raw dataset before final journal submission.

7. Implications for nursing and public health

Nutrition counseling should be integrated into routine nursing care through clear protocols, practical documentation tools, and referral pathways to dietitians or other nutrition professionals. Continuing professional development should strengthen nurses' skills in nutrition assessment, communication, culturally appropriate counseling, and use of evidence-based dietary guidance.

Hospitals should also address workload and time constraints. Short, structured counseling interventions may be incorporated into routine patient education, while patients requiring specialized nutritional management should receive timely referral. Communication should be adapted to health-literacy level, and recommendations should consider household resources and locally available foods.

8. Recommendations

Based on the study findings, the source dissertation recommends continuous training programs in nutrition counseling and patient-centered care; reduction of excessive nursing workload to allow adequate patient counseling; and simplification of nutrition information for patients with limited health literacy. The study also supports stronger collaboration between nurses, dietitians, and other members of the healthcare team.

9. Conclusion

The study indicates that nurses at Laquintinie Hospital recognize nutrition counseling as relevant to patient recovery and report several perceived benefits, particularly faster healing and recovery, reduced hospital stay, and improved immune function. However, counseling is not consistently integrated into routine practice for all nurses. Time constraints, insufficient training, communication difficulties, patient-related barriers, financial limitations, and inadequate professional collaboration remain important obstacles. Strengthening nursing nutrition education, improving organizational support, and promoting multidisciplinary collaboration may increase the consistency and quality of nutrition counseling and potentially contribute to better patient recovery.

Declarations

Ethics approval and consent to participate: The source dissertation reports institutional clearance, public health authorization, hospital authorization, informed consent, and maintenance of confidentiality and anonymity.

Consent for publication: Not applicable to the aggregate results presented here.

Competing interests: Not reported in the source dissertation.

Funding: Not reported in the source dissertation.

Data availability: The source dissertation does not provide a public data-access statement. Raw data should be made available only in accordance with institutional ethical approvals and participant consent.

Author contributions: Millo Mildred Nwenyoh conceived/conducted the study and prepared the original dissertation. Eric Epah supervised the research. Maurine Ikiah and Lilian Ugweuzel are identified in the source research-team record as collaborators. The final contribution statement should be confirmed by all authors before submission.

References

1. World Health Organization. Nutrition counseling. Geneva: WHO; 2018.
2. Academy of Nutrition and Dietetics. Nutrition counseling. *Journal of the Academy of Nutrition and Dietetics*. 2019;119(3):536–543.

3. Canadian Nutrition Society. Nutrition counseling. 2019.
4. National Institute of Diabetes and Digestive and Kidney Diseases. Nutrition counseling. 2020.
5. Johnson et al. The impact of nutrition counseling on hospital readmissions. *Journal of the Academy of Nutrition and Dietetics*. 2019;119(3):432–438.
6. Laprise et al. Nutrition counseling and patient satisfaction. *Canadian Journal of Dietetic Practice and Research*. 2018;79(2):68–73.
7. Huang et al. Nutrition counseling by nurses: a systematic review. *Journal of Clinical Nursing*. 2020;29(11–12):2111–2123.
8. Barker LA, Gout BS, Crowe TC. Hospital malnutrition: prevalence, identification and impact. *International Journal of Environmental Research and Public Health*. 2011;8(2):514–527.
9. World Health Organization. Nutritional care in hospitals. Geneva: WHO; 2021.
10. Vasiloglou MF, Fletcher J, Poulia KA. Challenges and perspectives in nutritional counselling and nursing: a narrative review. *Journal of Clinical Medicine*. 2019;8(9):1489. doi:10.3390/jcm8091489.
11. de van der Schueren MAE, et al. Using intervention mapping to develop an outpatient nursing nutritional intervention for surgical patients. *BMC Health Services Research*. 2020;20:152. doi:10.1186/s12913-020-4964-6.
12. Mbachu CC, van den Akker T, van Roosmalen J, et al. Nutrition counseling by nurses in Cameroon: a randomized controlled trial. *Journal of Clinical Nursing*. 2019;28(11–12):2131–2138.
13. Ofori-Asenso R, Agyeman AA, Laar A, et al. Nutrition counseling by nurses in Ghana: a systematic review. *Journal of Nursing Research*. 2020;28(1):1–9.
14. Maimela E, Alberts M, Modjadji SEP, et al. Nutrition counseling by nurses in South Africa: a systematic review. *Journal of Human Nutrition and Dietetics*. 2020;33(2):247–256.

Editorial verification note before journal submission

Before submission, the authors should: (1) reconcile the stated sample size of 384 with the 284 respondents used in the results tables; (2) verify all frequencies and percentages against the raw dataset; (3) clarify the actual sampling technique; (4) verify the study dates; (5) complete and verify all bibliographic references; and (6) confirm the final author list and each author's contribution according to the target journal's authorship criteria.