Brief Assessment of Nutrition Service at Selected Government Hospital, Ethiopia, 2018

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Abstract

Nutrition service in health facilities fail to be noticed by hospital administrators and government ministries that is the main focus area for a patient's hospital experience or a patient's recovery from injury and illness. Poor nutrition also has adverse effects on the clinical course of many acute illnesses and communicable diseases. The main focus of this survey was to capture general information of selected government hospital in delivering nutrition service for their patients. Further study is needed to know factors influencing the delivery of nutrition-related services at health facilities and pursue ways which these might be improved with the ultimate goal of better nutritional health for those served. Findings indicated that the delivery of nutrition services at an optimal level in the surveyed health facilities were challenging. The facilities did not have adequate capacity in terms of supplies, quality menu, equipment and infrastructure to implement nutrition interventions for populations in their hospital. The facilities were understaffed and the available health workers did not have adequate knowledge and skills for nutrition-related care and support services.

Keywords: Nutrition Service; Health Facility; Government Hospital

Introduction

Malnutrition in hospitals is a serious issue. It occurs worldwide and affects patients of all ages from infants in the neonatal intensive care unit (ICU) to geriatric patients [1]. Worldwide an estimated 13% to 69% of hospitalized patients are malnourished [2-5]. Malnutrition has been associated with an increased length of hospital stay, increased morbidity and mortality, impaired respiratory and cardiac function, decreased immune function and poor growth in infants and children [6,7]. Making progress toward improved patient care will achieve significant population health benefits. Patients who received high quality nutritional care (defined as early intervention plus frequent use of nutrition services) averaged a 2.2 day shorter period of hospitalization than those who received medium quality nutritional care (defined as early intervention OR frequent use of nutrition services). Those who received low quality nutritional care (defined as late or no intervention and/or infrequent or no use of nutrition n services) had the longest average period of hospitalization [8,9,17]. Nutrition services are the backbones that keep healthcare organizations steadily providing patients with warm, healthy service during their stay. In principle all patients have the right to nutritional care and, whenever able to eat, to choose what they want to eat and when and with whom. What we eat and drink affects our health and wellbeing and reflects our culture and beliefs. Nutritional disorders are the main causes of morbidity and mortality [10,11].

Justification

Nutrition screening should occur within the first 24 hours of admission. Screening criteria usually include weight and height, recent weight change, oral intake and sometimes diagnosis and/or other co morbidities [8,9]. Screening is overlooked for some patients who

Citation: Sileshi Demelash., *et al.* "Brief Assessment of Nutrition Service at Selected Government Hospital, Ethiopia, 2018". *EC Nutrition* 14.11 (2019): 58-64.

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have surgery within or soon after the first 24 hours of admission, so outpatient screening prior to surgical admissions may be beneficial [12]. Any patient identified to be at risk should have a nutrition assessment, using information on weight and weight changes, food intake, gastrointestinal (GI) symptoms, functional capacity, disease state, physical characteristics and symptoms of micronutrient deficiencies; for neonates and pediatric patients, birth weight and growth progress [8]. Factors to address include calorie, protein, vitamin, mineral, electrolyte and fluid needs and the route of nutrition support, if necessary [9]. Laboratory tests for vitamin levels should be conducted for patients at risk for deficiencies. Patients with GI disorders and those on long-term parenteral nutrition (PN) are at risk for trace element deficiencies [13,14]. Proper nutrition plays a big role in disease prevention, recovery from illness and ongoing good health. A healthy diet will help patients look and feel good as well [15], with the changing health care environment, quality patient care and cost containment are of utmost importance. Early and automated nutrition intervention coupled with health care collaboration is critical in remediating the issue of malnutrition requires an interdisciplinary team approach and leadership that fosters open communication among disciplines. To be successful, all members of the health care team must understand the importance of nutrition care in improving patient outcomes and the financial impact of failing to address this problem. Processes must be put into place to ensure that appropriate nutrition intervention is provided and patients' nutrition status is routinely monitored [16].

Objective of the Study

- To assess the hospitals need for the intended nutrition service assessment at selected government hospital.
- To overview the knowledge and skill of health care provider towards nutrition service at health facility.

Methodology

Design

An exploratory survey was conducted.

Data collection methods

The assessment were employed both qualitative and quantitative data collection methods. Quantitative data collection methods were used to assess nutrition services and the capacity of systems that enable them to be carried out the nutrition services. This included number of admitted patients in the last three month number of a health worker and number of food handlers.

An exploratory survey was encompassed of open and closed-ended questions in an effort to provide a comprehensive picture of the current state of the health care service manager need, while recognizing the diversity of health care provider distribution systems, food handler and managers at selected government hospital. The questionnaire was divided into three sections: demographic information of hospital staff, source of food for admitted patients and size of patients admitted at surgical, medical, gyneobs and psychiatry wards.

Sampling of study sites and participants Study sites

The studies were included hospitals that were selected from Federal, Addis Ababa and Regionals. From Federal hospital Allert teaching and specialized hospital, St Paulo's Millennium Medical College and St Peter Referral hospital were included while from Addis Ababa Yekatit 12 medical college, Ras Desta Hospital, Gandi Hospital, Zewuditu hospital were included. From regional hospital Hyder teaching Hospital, Gondar University Hospital, Hiwet Fana referral Hospital, Dilcora referral hospital, Dubti referral hospital, Jigjiga teaching Hospital, Asosa referral Hospital and Gambella referral hospital were included. During pretest Menelik II and Fiche Hospital were assessed.

Study participant

Human resource manager, HMIS leader and health care provider were interviewed using a check list and observation. A total of 15 HR manager, 15 catering manager, 15 HMIS leader and 20 health care providers were interviewed during the pretest and need assessment.

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Analysis

This exploratory study was intended to produce simple statistical analysis to complement the themes that emerged from the responses to the open-ended questions. 16 catering manager, human resource manager, HMIS leader and health care provider response were transposed onto an Excel spreadsheet used also for quantitative data then highlighted for commonalities. Each response was transferred to a Word document where themes were refined as documented and triangulated with qualitative finding of observation and interview responses.

Result and Discussion

As per the finding of the assessment, there are lots of different professional who are serving the community in selected government hospitals. We have covered 15 hospitals to know the number of health professional in selected government hospitals. Lower-level staff such as nurses, midwives, health officer makes up the largest component of the health work force. Survey findings revealed that across all service delivery points, there are more nurses, midwives and health officer and physician than any nutritionist, although the numbers varied across service delivery points as shown below in figure 1.



Figure 1: Number of health care provider at selected government hospital, 2018 (Source: Human resource report of each hospital, 2018).

From this graph 66% of the health care provider is nurses while 22% is physician. Here almost there is a limited hospital that has nutritionist or nutrition professional in selected government Hospital. One of the government hospital human resource managers said that: Each selected and visited hospital managers and other contacted health care personnel have reflected their concerns about the dietary food provisions for the patients.

"We have two nutritionist in our hospital; however they are not doing by their profession rather we are assigned them to do other hospital activities".

Another hospital human resource manager replied about nutrition professional in their hospital as "We have one nutritionist but he is working in research directorate. He is nothing to do with patients. We have tried to ask MOH to increase budget allocated for admitted patient, so far no response reflected on this issue".

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As shown in the above figure there are a lot of health care professionals that are assigned to give health care service. Based on our pretest and need assessment, no one has taken a nutrition training that helps them to provide nutrition services to patients.

Level of admission in selected government hospital

As the report of 15 selected government hospital indicates, the number of admission has been increasing from time to time. In the last three months prior to the data collection, there were 6473 patients admitted for case of surgery and 6815 patients at internal medicine ward. This indicates that the number of admission is high. This call the responsible bodies to give an emphasis in improving nutrition service at health facility as it can help patients and their family in reducing health cost, complication and medication side effects. It can also help the health facility in reducing length of stay in the hospital, professional liability and health costs.

One of HMIS leader from the selected hospital replied as: "There are high patient's flows both in OPD and ward. The hospital had tried to handle the case beyond its capacity. The major problem in the ward is that, there is low level of discharge. Patient stay long duration as the food provided for them is not helping them to recover early. We have tried to discuss with physician and nurses but they respond us, the problem is from the government side that patients are not getting well balanced diet".

Another HMIS officer replied about number of admitted patients as: "There is high flow of patients. The hospital is suffering a lot due to shortage of beds. Patients and their families are complaining about the issue of bed. They did not get a good service as the duration of stay is small. They are enforced to leave the bed because of high flow of very critical patients".



Figure 2: Number of admission in month of April, May and June in selected government hospital. (Source: HMIS of selected government hospital, 2018).

As it is shown in the above figure, there are 23175 patients were admitted in the ward in the last three months at selected government hospital.

During our assessment there are not constant ways of food / nutrition service in all selected government hospitals. There is no standardized menu for each types of illness. The budget which is allocated for the admitted patients is not enough to provide quality diet s for patients.

One CEO of selected government hospital during our pre-test time reported that: "The government didn't allocate enough budgets for our admitted patients. We have asked both at federal and regional health bureau. yet we did not get satisfactory response".

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In addition to this, as it was seen from HMIS of the selected hospital, the number of admitted patients was increasing both in number and types. This may need well designed system to provide nutrition service in health facility. This can help in reducing length of hospital stay, complication, medication side effect and health cost. One of the surgeons replied as: "Really we are in a great problem. Our patients are not getting well balanced diet as we are not getting enough update on nutrition service to prescribe supplementary food. The hospital food is not much good and they feed it for the sake of subsistence. Here, we are trying to advice their family to bring from their home. Unless the government do something for this problem, our effort may not be effective. There is no milk, fruit and meet for car accident and other admitted patients. So how can be they recover by getting surgical care alone?"

Food handlers at selected government hospital

Knowledge, practice and attitude of food handler, catering manager is important to have well equipped food service in the hospital. This will help the patient to get safe and well cooked foods. This can improve patient's satisfaction and recovery during their hospital stay. Figure 3 shows number of food handler at selected government hospital.



Figure 3: Number of food handlers at selected government hospital, 2018. (Source: Human resource directorates of selected hospital, 2018).

The above figure shows that out of 449, majority of them or 82% were female. This can shows that most of food that is preparation and provision to patients was done by females than male food handler. It may improve the food service given for patients as food preparation is more common by female in our culture. However, knowing their level of knowledge and practice towards food prepared at health facility is good for better service provision of the patients.

During our assessment some of the government hospital provides food for admitted patients from out sourced private sector while other prepare by their own. Hence, it is difficult to have permanent food handlers. This makes the health care facility not to have well trained food handlers. One of general service manager during the pretest assertively replied as: "It is difficult to have permanent food handler. This is because the turnover of staff in this center is high. As we are out sourced the food service for private sector, as a result, we do not have the right to coach and employee well trained food handler staff. The government has to do something to improve this food service in the hospital setting".

One of the Matron from selected government hospital replied as: "The food provided for patients is out sourced for private sector which doesn't meet and consider the patients daily dietary need".

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Hospital menu characteristics

During our pre-test and need assessment, almost all selected government hospitals had planned their own menus and adapted menus created by external foodservice supplier to meet the preferences of their patients. In addition, in some hospital, menus are more commonly non- selective indicating patients do not have choice upon admission and during hospital stay.

During our observation, one of catering manager from regional hospital informed as: "I am not sure the government is aware about the cost of food given for hospitalized patients. How could 18birr be enough to feed one patient per day? We provide what is allocated but which is very minimal for our patients. We always bother for them. It is good if the trend is changed".

One of general service manager informed about this issue as: "We are suffering a lot in providing balanced diet for our patients. There is no formal way or system that helps to have a strong agreement between the contract and hospital administrator. The contract bodies provide food that varies with season. No one enforce them to provide consistent food supply for admitted patients. This is because as there is not enough money that are allocated for individual patients. For your surprising the government has allocated only 18 birr for daily budget of individual patient".

Conclusion

This survey focused on assessing the status of the integration of nutrition services into routine health care, capacity of health facility in terms of infrastructure, trained man power and source of food and identifying ways to improve nutrition interventions.

The ultimate goal of the survey is to improve nutritional services in all health facility. Findings indicated that the delivery of nutrition services given in selected government hospital is built to manage acute malnutrition. Nutrition service in health facilities fail to be noticed by hospital administrators and government bodies that is the main focus area for a patient's hospital experience or a patient's recovery from injury and illness. Specific attention is not given as nutritional service or nutritional therapy influences both their clinical outcomes and satisfaction with their hospital stay.

Good quality food and fluids are basic requirements in effectively meeting the nutrition needs of people in the hospital. There is indication that patients are not screened and treated for nutrition related problem in selected government hospital. Nutrition therapy is not considered as one of patient care so far. All stakeholder and government have not given any emphasis to improve nutrition service delivery system of the country.

Delivery of nutrition services at an optimal level in the surveyed health facilities will be challenging. The facilities did not have adequate capacity in terms of supplies, quality menu, equipment and infrastructure to implement nutrition interventions for populations in their hospital. The facilities were understaffed and the available health workers did not have adequate knowledge and skills for nutrition-related care and support services.

Recommendation

- There should be a need to refocus and strengthening of nutrition care and quality improvement in health care system.
- Assessment shall be conducted to oversee the status of nutrition service.
- Emphasis should be given from government as well as from other stake holder to improve the nutrition service of the health facility.
- Cost of nutrition service at health facility should be clearly studied.
- Standardized menu, protocol and guideline should be prepared so as to tackle the problem immediately.
- Interventions should ensure continued capacity building of health workers through refresher trainings, coaching and continuous nutrition education.

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