

# The Role of Dietitian in Nutrition Service at King Khalid Hospital: Case Study

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**Abstract:** *Purpose: this study aim to identify and evaluate the role of dietitian in nutrition service at king Khalid hospital and set recommendation related to nutrition. Method: 2 questionnaires summated to collect information concern the role of dietitian from King Khalid hospital. Result: There are no enough dietitians in hail to manage the disease that have relation to nutrition. Conclusion: this study concludes that the role of dietitian is very important. Hail community over (600.000 ppl) need more qualified dietitian to provide proper nutrition services at hospital and even in the community health.*

**Keywords:** Dietitian, Nutrition services, Community, Health

## 1. Introduction

Dietitians are experts in food and nutrition. They advise people on what to eat in order to lead a healthy lifestyle or achieve a specific health-related goal. Dietitians work in various capacities in the field of healthcare, foodservice, corporate setting, and educational arenas. (1)

### 1.1 Roles of Dietitians

A dietitian has numerous roles to fill. No matter what your interests are surrounding food and nutrition, there is a career in dietetics that is right for you. A career in dietetics will enable you to use your strengths and skills everyday in order to teach others about the importance of healthy eating and good nutrition.

- a) Identifying nutrition problems and assessing the nutritional status of patients in a clinical setting.
- b) Developing diet plans and counseling patients on special diet modifications.
- c) Assessing, promoting, protecting, and enhancing the health of the general public in a community setting and providing strategies for prevention of nutrition-related diseases.
- d) Managing a cost effective food production operation, distributing high quality meals/snacks, and monitoring sanitation and safety standards in a food service setting.
- e) Operating private consulting practices to provide expertise in nutrition, as well as promote health and prevent disease
- f) Working with individuals, groups, workplaces and media to provide dietary advice for healthy living.
- g) Working with food and pharmaceutical companies to provide research, develop products, educate consumers, and promote and market better food and nutritional products in a business setting.
- h) Teaching nutrition, food chemistry, or food service administration to students in any health profession and at all levels of education. (2) (3)

### 1.2 Main Role

The role of a nutritionist is to advise and work closely with individuals or groups on planning what foods to eat.

Nutritionists develop nutrition programs, supervise the preparation of meals and ensure that the proper meals are served, according to the Bureau of Labor and Statistics. Besides providing guidance on what to eat, nutritionists also recommend what not to eat to prevent diet-related conditions like obesity and heart disease. Most states require nutritionists to become certified. Nutritionists can attain certification through the Clinical Nutrition Certification Board. (3)

### 1.3 Types of Dietitians

#### 1.3.1 Clinical Dietitians

Clinical dietitians help hospital patients and the elderly in nursing care facilities by determining their nutritional needs. They work in team with doctors and healthcare professionals to develop appropriate nutritional programming for patients.

Clinical dietitians help hospital patients and the elderly in nursing care facilities by determining their nutritional needs. A clinical dietitian may also work at correctional or psychiatric institutions. They work in tandem with doctors and healthcare professionals to develop appropriate nutritional programming for patients, track their progress and report important findings. If you experience a stay in a hospital or nursing care setting, that stay will likely include a meeting with the facility's nutritionist. Clinical nutritionists are responsible for planning dietary treatment programs for patients in hospitals, nursing homes, retirement communities, prisons and ambulatory facilities and providing therapeutic nutritional care, education and counseling in accordance with established procedures and regulatory requirements. States have specific laws regarding requirements for education, registration, certification and licensure to practice as a clinical nutritionist. You may specialize in enteral and parenteral nutrition, diabetes, cancer, kidney disease or other conditions. (5)

#### 1.3.1.1 Nutritional Counseling

The primary role of a clinical nutritionist is to counsel patients on their nutritional health and advise them of dietary changes to make to manage their medical conditions. Clinical nutritionists are part of a health team and confer with physicians on the diagnosis and treatment protocol

prescribed to determine what diet is most appropriate. Communication is a key skill required to provide services. Clinical nutritionists who can speak multiple languages, especially Spanish, are in biggest demand among health care organizations nationwide. (6)

#### 1.3.1.2 Nutritional Assessment

Nutritional assessment is a critical part of the job because morbidity and mortality increase when an ill patient is malnourished or has a deficiency or excess of one or more nutrients, impaired absorption of nutrients or imbalance of nutrients. A routine nutritional assessment involves determining the patient's diet; medical and family history; and data such as height, weight, fat and lean muscle composition, and blood pressure. A more in-depth nutritional assessment involves performing a physical exam and conducting and evaluating a series of biological tests that may include blood sugar, cholesterol, fat, proteins, such as liver enzymes, vitamins and minerals. Clinical nutritionists may also review laboratory tests ordered by the physician.(6) (7)

#### 1.3.1.3 Diet Recommendations

After conducting and evaluating a nutritional assessment of the patient, the clinical nutritionist is able to identify nutritional problems and recommend a dietary meal plan to coincide with the physician's treatment protocol. The dietary meal plan includes the amount of calories from proteins, carbohydrates and fats, the types and quantities of foods and portion sizes. The clinical nutritionist discusses these recommendations with the patient and physician before prescribing the diet and sharing the plan with the food service manager of the institution who is responsible for preparation and the meal service. The American Dietetic Association encourages clinical nutritionists, particularly those who provide care for the aging population, to implement an individualized nutrition intervention plan that balances the patient's desires for food preferences with medical needs and focuses on patient quality of life, according to research by registered dietitian Kathleen Niedert, published in the "Journal of the American Dietetic Association" in 2005. Clinical nutritionists may adjust the diet plan as the patient's health progresses or if certain foods may interfere with any prescribed drugs. (10)

#### 1.3.1.4 Supplement Recommendations

Clinical nutritionists may also prescribe nutritional supplements for patients who are deficient in a particular nutrient or who benefit from the supplement in the management of their condition. Clinical nutritionists discuss this with the physician and pharmacist to determine any potential adverse interactions with drug therapy. Patient response to supplements prescribed is monitored throughout the course of treatment. (11)

#### 1.3.2 Management Dietitian

Management dietitians work for large organizations, such as schools, prisons and company cafeterias, planning and overseeing food preparation. These dietitians hire and train other dietitians and food service workers. They are responsible keeping a budget and purchasing the food, equipment and supplies. They must make sure the sanitary and safety regulations are met. (11) (12).

#### 1.3.3 Community Dietitians

Community dietitians work closely with individuals and community groups to promote healthy lifestyles and help prevent diseases. They typically work for community health care organizations or in-home health agencies, which cater to the disabled and the elderly. Community dietitians can review and evaluate your dietary needs, and then help with setting grocery shopping lists and teaching you how to prepare nutritious meals in the home.(13)

#### 1.3.4 Consultant Dietitians

Consultant dietitians operate on a freelance basis and are contracted by individuals, groups or health care organizations. Many consultant dietitians operate their own clinic, where they can perform nutrition screenings and run a number of dietary tests to help determine the needs of their patients. (15)

Much of a consultant dietitian's work focuses on weight-loss-oriented programming. As a consultant, a dietitian can also work with food service companies to evaluate sanitary conditions and develop a menu.

Dietitian is a term sometimes used to describe dietitians who work under contract with health care facilities or in private practice, such as used in Canada and the United States. The term 'consultant' in this case should not be confused with the identical title reserved for certain medical doctors in countries such as the United Kingdom and Ireland. (14) (16)

Consultant dietitians contract independently to provide nutrition services and educational programs to individuals and health care facilities as well as sports teams, fitness clubs, supermarkets, and other health and nutrition-related businesses. (19)

#### 1.3.5 Community Dietitians

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Community dietitians work with wellness programs, public health agencies, home care agencies, and health maintenance organizations. These dietitians apply and distribute knowledge about food and nutrition to individuals and groups of specific categories, life-styles and geographic areas in order to promote health. (19)

They often focus on the needs of the elderly, children, or other individuals with special needs or limited access to healthy food. Some community dietitians conduct home visits for patients who are too physically ill to attend consultations in health facilities in order to provide care and instruction on grocery shopping and food preparation.

#### 1.3.6 Management dietitians

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equipment and supplies. They must make sure the sanitary and safety regulations are met. (17)

**1.3.7 Gerontological dietitians**

Gerontological dietitians are specialist in nutrition and aging. They work in nursing homes, community-based aged care agencies, government agencies in aging policy, and in higher education in the field of gerontology (the study of aging).

**1.3.8 Neonatal dietitians**

Neonatal dietitians provide individualized medical nutrition therapy for critically ill premature newborns. They are considered a part of the Neonatal Intensive Care Unit's medical team. The neonatal dietitian performs clinical assessment of patients, designs nutrition protocols and quality improvement initiatives with the medical team, develops enteral and parenteral regimens, helps establish and promote lactation/breastfeeding guidelines and often oversees the management of infection prevention in the handling, storage, and delivery of nutritional products.(10)

**1.3.9 Pediatric dietitians**

Pediatric dietitians provide nutrition and health advice for infants, children, and adolescents. They focus on early nutritional needs, and often work closely with doctors, school health services, clinics, hospitals and government agencies, in developing and implementing treatment plans for children with eating disorders, food allergies, or any condition where a child's diet factors into the equation, such as childhood obesity.(10)

**1.3.10 Research Dietitians**

Research dietitians are involved with dietetics-related research conducted in hospitals, universities, government agencies, food and beverage companies, and the pharmaceutical industry. They may conduct research in clinical aspects of nutrition, for example, the effects of diet on cancer treatment. They may focus on social sciences or health services research, for example, investigate the impact of health policies or behaviour change, or evaluate program effectiveness. They may survey foodservice systems management in order to guide quality improvement. Some research dietitians study the biochemical aspects of nutrient interaction within the body. In universities, they also may have teaching responsibilities. Some clinical dietitians' roles involve research in addition to their patients care workload. (20)

**1.3.11 Administrative Dietitians**

Administrative or management dietitians oversee and direct all aspects of food policy and large-scale meal service operations in hospitals, government agencies, company cafeterias, prisons, and schools. They recruit, train and supervise employees of dietetics departments including dietitians and other personnel. They set department goals, policies and procedures; purchase food, equipment and supplies; maintain safety and sanitation standards in food preparation and storage; and keep records to monitor areas such as budget control and client information. (18)

**1.3.12 Business Dietitians**

Business dietitians serve as resource people in food and nutrition through business, marketing and communications.

Dietitians' expertise in nutrition is often solicited in the media — for example providing expert guest opinion on television and radio news or cooking shows, columnist for a newspaper or magazine, or resource for restaurants on recipe development and critique. Business dietitians may author books or corporate newsletters on nutrition and wellness. They also work as sales representatives for food manufacturing companies that provide nutritional supplements and tube feeding supplies. (12) (18)

**1.4 Required Qualifications and Professional Associations**

In most countries, competent performance as a dietitian requires formal training at a higher educational institution in food and nutritional science, nutrition education, dietetics, or a related field. Their education in health science involves scientific based knowledge in anatomy, chemistry, biochemistry, biology, and physiology.

While the specific academic and professional requirements to becoming a fully qualified dietitian differ across countries and jurisdictions, as these are adapted to the needs of the individual countries and the opportunities available, common academic routes include:

- A Bachelor degree in Dietetics which typically requires four years of postsecondary studies; *or*
- A Bachelor of Science degree and a postgraduate diploma or master's degree in Dietetics.

In addition, dietitians may be required to undergo an internship to learn counseling skills and aspects of psychology. The internship process differs across countries and jurisdictions. (19) (21). Associations for dietetics professionals exist in many countries on every continent

**2. Results and Discussion**

**Table 1:** Socio-demographic characteristics of respondents (n) %

Characteristics		Total
Sample Size		2(100%)
Age Groups (year)	35-45	2
	Sex	
	Male	0
	Female	2
Education	Higher education	0
	University	2 (100%)
Specialization	Clinical nutrition	2
Experience	10/More	2

**Table 1:** Show the Socio-demographic characteristics of respondents in this study their age between (35-45yrs) were female, with education up to university, specialized on clinical nutrition, more than ten experiences in their work.

**3. Interview**

This is results when the researcher interviews the two dietitians in King Khalid hospital. According to the type of work, both of them work as clinical dietitian on the hospital. Clinical dietitians help hospital patients and the elderly in nursing care facilities by determining their nutritional needs. They work in team with doctors and healthcare

professionals to develop appropriate nutritional programming for patients (1) (2). About their function in King Khalid hospital two dietitians listed the following.

- Work In Nutrition Department
- Work In O.P.D
- Work With Inpatients
- Asses Patients Nutritional State
- Calculate Nutritional Needs
- Provide Diet Instructing To Patient
- Food Trays Organization.
- Prepare EN Feeding For Special People

Concerning the important of the dietitian at the hospital, both the dietitian answer as follow:

- Dietitian important in the hospital because they are the one who is going to assess the patients nutritional state and gave them the right diet
- Dietitian in the hospital is highly needed, no enough staff available

Problems facing dietitian at the hospital, the dietitian listed some of this problem as follows:

- Physician not collaborate
- No assistant from the other team group
- No nurse to follow the description diet
- More work load.

Relation between dietitian and manager at nutrition services is very good as the dietitian in King Khalid hospital mention. There is direct contact because dietitians are dietary supervise by the head of the department. More than two a dietitian spouses to be in the hospital according to ratio between dietitian/patient. 1:75

The dietitians said that they are not involved in research at the hospital. They think that because the hospital is not a research hospital. Also there is no advance training for the dietitians. But clinical dietitians' roles involve research in addition to their patients care workload. (20)

#### 4. Conclusion

This study concludes that the role of dietitian is very important. Hail community over (600.000 ppl) need more qualified dietitian to provide proper nutrition services at hospital and even in the community health.

#### 5. Recommendation

- Increase number of employed dietitian in the hospital
- Providing advance training courses for dietitian in the hospital
- Enable dietitian to participate on researches.

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