A Systematic Review of Hospital Foodservice Patient Satisfaction Studies

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ABSTRACT
The quality of hospital foodservice is one of the most relevant items of health care quality perceived by patients and their families. Patient satisfaction is considered a way of measuring the quality of services provided. The purpose of this study was to retrieve and review the literature describing patient satisfaction with hospital foodservices. The systematic review was conducted on three electronic archives, PubMed, Excerpta Medica Database, and the Cumulative Index to Nursing and Allied Health Literature (1988 through 2012), to search for any articles reporting patient satisfaction with hospital foodservices. A total of 319 studies were identified. After removing duplicates, 149 abstracts were reviewed, particular attention being given to the presence of a description of the tool used. Thirty-one articles were selected and the full texts were reviewed. Half the studies (n=15) were performed in North America. Patient satisfaction scores were generally high, with some variation among hospitals and different modes of food delivery that was investigated through intervention studies. Qualitative studies were also reported (ethnographic-anthropologic methods with interviews and focus groups). Quantitative tools were represented by questionnaires, some of which relied on previous literature and only a few were validated with factorial analysis and/or Cronbach’s α for internal consistency. More analyses were conducted assuming a parametric distribution of results, an issue not primarily tested. More studies on the quality of hospital foodservice have been carried out in North America than in Europe. Also, a variety of tools, most of which have not been validated, have been used by the different investigating facilities.


IT IS WIDELY RECOGNIZED THAT FOOD AND OTHER aspects of foodservice delivery are important elements in patients’ overall perception of their hospital experience and that health care teams have a daily commitment to deliver appropriate food to patients.1-4 Provision of a foodservice that not only meets but also exceeds the expectations of the patient is considered essential for a quality service.5

The goals of a hospital foodservice are to provide inpatients with nutritious meals that are beneficial for their recovery and health, and also to give them an example of healthy nutrition with menus tailored to patients’ specific health conditions. When meals are carefully planned and customized to meet patients’ specific needs, and when patients consume what they are served, these goals can be considered as achieved.6,7 Accordingly, Hong and Kirk8 stated that meal consumption by inpatients was a good indicator of dietary status and satisfaction with the foodservice. Furthermore, foodservice quality is known to influence patient satisfaction with hospital stay.9,10 Because the health care industry is increasingly competitive and patients are becoming more discriminating about quality, it has redefined patients, recognizing them as customers,11 at least in the setting of a private health care insurance system like that of the United States.

The American Society for Quality defines quality in two ways: “The characteristics of a product or service that bear on its ability to satisfy stated or implied needs and a product or service that is free of defects.”12 Defining quality for hospital foodservice requires a balance between these different features. Hospital menus should be based primarily on clinical needs, as well as on patients’ preferences. Other important characteristics such as variety, quality, and taste of food should be included. Moreover, the hospital environment and a pleasant helpful attitude of the nursing staff are important elements that should be considered in a new qualitative approach to a complex problem.13 Personal and sociocultural aspects have also been identified as a main factor in acceptance of food and in predicting food consumption.14 Thus, customer

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satisfaction with hospital foodservice is multifactorial and difficult to assess. The problem is particularly evident in pediatric hospitals because the customer is represented by a child and his or her parent, each of whom has his or her own expectations.

Surveys are limited in that they usually contain very few general questions about foodservice, with the result that there is not enough detailed feedback to precisely determine patients’ wishes. Knowledge of patients’ expectations is an essential baseline for monitoring and measuring the effect of foodservice innovations or patients’ foodservice satisfaction outcomes. 15

The purpose of this study was to retrieve and review the literature describing patients’ satisfaction with hospital foodservices.

**METHODS**

A systematic literature search with electronic databases was conducted for articles published from 1988 through 2012.

**Inclusion Criteria**
The main criterion of selection was the presence of an explicit description of the instrument, tool, questionnaire, or interviews applied to gather the data.

**Search Strategy**

Databases that yielded articles meeting the eligibility criteria were MEDLINE (PubMed), Excerpta Medica Database (EMBASE) and the Cumulative Index to Nursing and Allied Health Literature (CINAHL). The search strategy used the Medical Subject Headings and/or keywords: food preferences - foodservice, hospital/standards - patient satisfaction - questionnaires and Boolean operator AND was used where appropriate to combine the searches.

It was decided to extract data describing the population being investigated (sample size and setting), the aim of the study, and the pertinence of the study design; that is, if an intervention was tested in a trial (ie, involving a particular study, and the pertinence of the study design; that is, if an intervention was tested in a trial (ie, involving a particular study design; that is, patients’ wishes. Knowledge of patients’ expectations is an essential baseline for monitoring and measuring the effect of foodservice innovations or patients’ foodservice satisfaction outcomes. 15

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**RESULTS**

As shown by the flowchart (see the Figure), the total number of titles and abstracts resulting from the searches and scrutinized for relevance was 205 from MEDLINE, 30 from EMBASE, 74 from CINHAL, and 10 from manual search. The literature search identified 319 articles, most of which were from two archives: PubMed and CINHAL. The number of articles was reduced to 149 after excluding items identified as duplicates; a further 93 articles were excluded because the title and abstract were not pertinent to the main study topic; that is, patients’ foodservice satisfaction. Of the remaining 56 articles, 25 full texts were excluded because they did not mention the data collection methods used. Texts were reexamined if there was any doubt about them meeting the inclusion criteria. Finally, 31 articles were included in the study, as reported in the Table.

![Flowchart showing selection of included studies in a review of the literature describing patient satisfaction with hospital foodservices.](image)