Government hospitals food quality and patient satisfaction

Journal of Tourism, Hospitality & Culinary Arts (JTHCA) 2017, Vol. 9 (2) pp 593-602 © The Author(s) 2017 Reprints and permission: UiTM Press Submit date: 24th June 2017 Accept date: 7th Aug 2017 Publish date: 30th Sept 2017

Nurul Nadira Busra* Siti Noraisah Dolah @ Abdullah Haslina Che Ngah Azlina Samsudin

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA Cawangan Terengganu, Malaysia nurulnadirabusra@yahoo.com

Proposed citation:

Busra, N.N., Abdullah, S.N.D., Ngah, H.C. & Samsudin, A. (2017). Government hospitals food quality and patient satisfaction. *Journal of Tourism, Hospitality & Culinary Arts*, *9*(2), 593-602.

Abstract

Food quality is important in maintaining patients' satisfaction, especially towards patients' meals. Patients need high quality foods in their recovering or healing process. Therefore, hospital foodservices must ensure the foods offered at the hospital are of the highest quality despite the medicine provided. If the food quality offered at the hospital is high, the appetite of patients will be enhanced. In addition, the appetite of patients can also be stimulated through improvement in taste, texture, appearance and freshness of patients' meal. This paper discusses the information gathered from secondary data based on the previous published research and articles.

Keywords:

Food quality, satisfaction, patient meal, hospital, foodservice

1 Introduction

1.1 Background of the study

Foodservice industry is divided into two sectors which is institutional foodservice and commercial foodservice (Palacio & Theis, 2012). Institutional foodservice is also known as noncommercial or on-site feeding, which focuses on governmental, business, educational, correctional, or other organizations that manage their own foodservice (Hyun, 2009; Palacio & Theis, 2012). It can be found in hospital facilities, prisons, schools, nursing homes, child and senior care centers and also catering services (Stanton et al., 2000; Chong et. al., 2001; Gregoire & Spears, 2007).

According to Stanton et. al. (2000), institutional foodservice sector is expanding and will continuously grow from 10% to 15%. As mentioned earlier, hospital foodservice is also classified under institutional foodservice and indirectly, there is also a demand for hospital foodservice. This proves that the foodservice institution is one of the fastest growing sectors and the expansion of hospital foodservice sector over the years is one of the examples (Pei & Ayub, 2015; Woo et. al., 2009; Chang et al., 2014). Like any other segments in the industry, the most critical aspect of this industry is patients' satisfaction on products and services. According to Guadagnino (2003) patients' satisfaction is defined as a measurement of the patient's valuation of quality and service provided by the hospital staff.

1.2 Problem statement

National Health Services (2015) stated that the quality of food provided in hospitals is important to patients hence hospitals foodservice must accommodate suitable personal dietary need by the patients. A lot of chronic diseases are suffered by the world population over the years. As reported by the World Health Organization (2005), 35 million people regardless the age were dying due to chronic diseases in 2005. Due to the increasing number of patients hospitalized, patients' meals provided by the hospital foodservice will also be escalated. As a result, there is an increased pressure on hospital foodservice operations to serve patients' meal of the highest quality not only to fulfil their needs and wants but also for speedy recovery. This is supported by lff, Leuenberger, Rosch, Knecht, Tanner and Stanga (2008) who claimed that the condition of good quality of food, fluids and nutritional care are crucial parts of the therapeutic care in hospitals. This study aims to determine the elements of food quality for hospital patients' meals and to examine relationship of food quality towards patients satisfaction.

2 Literature Review

2.1 Food quality

Parasuraman, Zeithaml and Beery (1985) asserted that quality is an indefinable and imprecise construct that is not easy to classify. Furthermore, quality plays a momentous character in shaping and influencing customer satisfaction. Food quality and satisfactoriness is multifaceted and interdisciplinary, encircling scientific disciplines including food science and technology, nutrition, psychology, physiology, marketing and hospitality (Imram, 1999). Quality of food includes all those uniqueness of excellence that makes it suitable to the food buyer. Besides, according to Abdelhafez et al. (2012), with the increasing quality of foods and hospital foodservices, it will also increase the altitude of overall contentment with foods and food services.

Hospital foodservice plays an important role to ensure the quality of food served is good and satisfy the patients during recovery. According to Iff et al. (2008), hospital foodservice needs to fulfill individual patients' needs and wants as well as offering an impartial menu to meet the patients' nutritional requirements. Therefore, hospital foodservice should provide the best service to their patients. According to Kleeb, Lau and Greogire (1998) health care industry is being more aggressive as patients are more perceptive about quality. As a result, health care industry has redefined patients and recognizing them as customers. There are various factors that contribute to quality of food such as taste, color, appearance, freshness, odor, nutritional value, adulterants and contaminants. Chang, Suki and Nalini (2014) avowed that food quality measurement is overall quality of the food, the taste of food, the freshness of the food and eye appeal of the food. In hospital foodservices, food quality can avoid from patients' dissatisfaction as well as food-borne disease among them.

2.2 Taste of food

Taste of food is essential to satisfy customers as well as maintaining the high-quality of the product. According to McWilliams (2012), taste is the impression produced when stuff in the mouth reacts chemically with taste receptor cells which positioned on the taste buds. The same author also stated that the tastes are classified into four segments which are sweet, sour, salty and bitter. Hospital foodservice is accountable to offer good taste of food to stimulate the appetite of patients. Apart from that, hospital foodservice also plays a role to take maximum level of care of their patients which includes quality and nutritional value of food that is served and eaten (Jeffrey, 2014).

Furthermore, good taste on patients' meals provided in hospital foodservice will enhance quality of life among the people especially to the patients. Quality of life can be fostered by satisfactory taste of dietary intake as one of the main factors in maintaining good health (Hoogeven, Dalernberg, Renken, Horst and Lorist, 2015). Therefore, patients' treatment process and evaluation of patients' satisfaction should be treated as inseparable elements in hospital foodservice operation (Sergi, Bano, Pizzato, Veronese & Manzato, 2016).

2.3 Food appearance

Appearance can be divided into several elements such as color, texture, odor and flavor. This is supported by Imram (1999) who contended that appearance encompasses some basic sensory attributes such as color, opacity, gloss, visual structure, texture and apparent flavor. According to McWilliams (2012), colors of the food frequently activate the mind to anticipate a particular flavor such as pink, which is always associated with strawberry flavor. According to Ackbarali and Maharaj (2014), color and appearance are utilized to increase temptation and appetite prior to consumption. Moreover, good appearance of food in hospital also will stimulate the appetite of patients to consume the food. This is supported by Ackbarali and Maharaj (2014) stated that the visual appeal of a meal can influence the outcome of appetite inspiration or depression. Therefore, hospital foodservice should provide meals to the patients that can magnetize patients to eat as well as furnish the best effect to the health of patients.

2.4 Freshness of food

Freshness of food is significant to preserve the quality of patients' meal provided at the hospital to ensure the patients satisfaction. According to Russel (2007) the quality of food served in hospitals has come under scrutiny as unhealthful may lead to an extensive range of medical conditions, including coronary heart disease, some cancers and certain chronic diseases. There are various types of freshness as freshness of fruit, freshness of vegetables and freshness of meats. In terms of quality control, the freshness of fruits and vegetables would relate to physiological changes in texture, browning reactions, microbial activity and vitamin content. Hospital foodservice should provide patients' meals with high quality to help them in the healing process. Furthermore, according to Olivan and Pinzauti (2016) quality, nutritional value and sustainability of food are the critical factors among the patients when selecting the foods from the menu list.

2.5 Patient satisfaction

According to Elizabeth (2010), patients have the right to choose the best foodservice provider in hospitals because the patients are treated as customers. Furthermore, treating patients like inimitable individuals with the best service may increase patients' satisfaction. Therefore, hospitals foodservice need to provide the best food quality to meet patients' expectation as well as to remain competitive. Besides that, patients' expectations of care and attitudes of the hospital providers are also important to enhance level of satisfaction. New approaches with patients and better understanding of patients' needs in hospital foodservice are therefore required (Pawar, 2005).

3 Methodology

The research methodology starts with the process of identifying related case studies and collecting secondary data regarding the effect of food quality of hospital patients' meals towards patients' satisfaction. By using this approach, the researchers compiled all the information that have been documented or examined by previous researchers in the forms of journals, articles, online database from website and other sources that are associated with the study. From these data, the author will be able to summarize all the information and use it to develop research framework and research hypotheses.

4 Findings

The purpose of this study is to determine the elements of food quality on hospital patients' meal towards patients' satisfaction. The features of food quality do not only focus on taste, appearance and freshness of food but also other attributes of food quality such as texture of food, safety of food, food nutrition and other visual appeals. According to Mentziou et al. (2014), meals offered to the patients in hospitals must be safe and in good quality. They also strengthened the claim that patients' satisfaction with hospital foodservice are highly affected by factors such as taste, variety and temperature.

The attributes of taste in food quality is vital to stimulate the appetite of patients towards hospital patients' meals. This is firmly agreed by Jeffrey (2014), Hoogeven et al. (2015) and Sergi et al. (2016). However, the tastes of food among people are not similar especially among the patients. For instance, the elderly food sensory evaluation is very hard to stimulate as compared to adult because their taste receptors are less sensitive. Fukunaga, Uematsu and Sugimoto (2005) supported the above notion by claiming that older adults have difficulties to properly recognize the taste quality of sweet, sour, salty or bitter.

From the literature, it is well-documented that hospitals should enhance the color, texture and flavor of patients' meals. This is agreed by Imram (1999), McWilliams (2012), Maguolas (2009) and Gifford and Clydesdale (1986) where all of them stressed the importance of good appearance of patients' meals especially when patients start the process of judging the food. In addition, the freshness of patients' meal is also crucial as it affects the nutrition content and consequently affect patients' general health. Russel (2007), Joo, Kim, Hwang and Ryu (2013) and Cioci et al. (2016) meanwhile stated that freshness can also affect patients' overall satisfaction on the meals they consume.

Ahmed et al. (2014) highlighted that patients' satisfaction is a critical issue for healthcare providers. Therefore, hospital foodservice operations must concentrate on patients' meal satisfaction if they want to remain competitive with other hospitals. Patients' feedbacks may indicate the overall quality of the service and at the same time alerting the management about the opportunities to achieve higher level of patients' satisfaction in the future.

5 Conclusion

Patients' satisfaction is an important component in hospital foodservice in order to ensure the patients being wonderful as well as to preserve the speedy recovery of patients. Food quality provided at the hospital will influence the patients' satisfaction level. This is supported by Fernando and Wijesinghe (2015) who acknowledged that food quality was the best forecaster of patients' satisfaction with meals and foodservices, followed by customization and the attitude of the staff. This study is imperative from both academic and industry fronts. It can help students or future researchers to gain better understanding on patients' meal quality and other issues related to it. It has been mentioned earlier that the number of patients in hospitals are increasing thus hospitals' foodservice department are facing daunting tasks not only to serve them but also satisfying their needs and wants. Hospital foodservices are expected to acquire better returns especially in private hospital sector.

High quality of food provided in hospital will enhance patients' satisfaction. Therefore, hospital foodservice management plays an important role to guarantee the satisfaction of patients as well as boosting the recovery process. According to Spence (2017), improving the quality of food will greatly enhance patients' satisfaction with hospital foodservice. He also added that sometimes, evaluations of the meal appearance could be more important than the actual quality of food. Other than that, patient who are satisfied with the meals provided will share positive words-of-mouth thus lead to good reputation and positive image of the organization.

6 About the authors

Nurul Nadira Busra graduated from UiTM Dungun in 2016 with a Bachelor in Science (Hons) in Foodservice Management. She completed the program in 2 years and did her industrial attachment training at KPJ Perdana Specialist Hospital Kota Bharu, Kelantan.

Siti Noraisah Dolah @ Abdullah graduated from UiTM Shah Alam in 2011 with a Master Degree in Foodservice Management. She is a lecturer at Faculty of Hotel & Tourism Management, Universiti Teknologi MARA, Cawangan Terengganu. She is the former Executive Chef in Hotel UiTM Dungun and work closely with the Foodservice Department in the faculty. She has published several articles in Interdisciplinary Journal of Research in Business.

Haslina Che Ngah graduated from UiTM Shah Alam in 2012 with a Master Degree in Hospitality Management. Currently, work as a lecturer at the Faculty of Hotel & Tourism Management, Universiti Teknologi MARA, Cawangan Terengganu. She is the former Room Division Manager in Hotel UiTM Dungun and work closely with the Hotel Department in the faculty. She has published several journal articles and presented paper in International Academic Conference (IAC) organized by Universiti Teknologi MARA, Cawangan Terengganu. Azlina Samsudin graduated from UiTM Shah Alam in 2011 with a Master Degree in Hospitality Management. Currently, work as a lecturer at the Faculty of Hotel & Tourism Management, Universiti Teknologi MARA, Cawangan Terengganu. She is the former Food & Beverage Manager in Hotel UiTM Dungun and work closely with the Hotel Department in the faculty. She has published several articles and had won Best Paper Award during the International Academic Conference (IAC) 2015.

7 References

Abdelhafez A.M., Qurashi L.A., Ziyadi R.A., Kuwair A., Shobki M., Mograbi H. (2012). *Analysis* of Factors Affecting the Satisfaction Level of Patients Toward Food Sciences at General Hospitals in Mekkah, Saudi Arabia. Retrieved on October 18, 2015 from article.sapub.org/10.5923.j.ajmms.20120206.03.html

Ackbarali D.S., Maharaj R. (2014). Sensory Evaluation as a Tool in Determining Acceptability of Innovative Products developed by Undergraduate Students in Food Science and Technology at the University of Trinidad and Tobago. Retrieved on October 11, 2015 from http://www.sciedu.ca/journal/index.php/jct/article/viewFile/3633/2314

Ahmed T., Assefa N., Demisie A., Kenay A. (2014). *Levels of Adult Patients' Satisfaction with Nursing Care in Selected Public Hospitals in Ethiopia*. Retrieved on October 22, 2015 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4350891/

Bleich S.N., Ozaltin E., and Murray C. How does satisfaction with the health-care system related to patient? Experience?, *Buletin of the World Health Organization*, 87 (4), 271-278 (2009).

Chang M.L.D., Suki N.M., Nalini A. (2014). A Structural Approach on Students' Satisfaction Level with University Cafeteria. Retrieved on November 1, 2015 from http://www.ccsenet.org/journal/index.php/ass/article/viewFile/39703/21986

Chong, P. P., Chen, Y. S. and Chen, J. C. H. (2001). IT Induction in the Food Service Industry. Industrial Management and Data Systems, 101(1), 13-20: MCB University Press.

Cioci G., Olivan P.H., Pinzauiti I. (2016). *Fresh, Healthy and Sustainable Food: Best practices in European healthcare*. Retrieved on October 15, 2015 from https://noharm-europe.org/sites/default/files/documentsfiles/4680/HCWHEurope_Food_Report_Dec2016.pdf

Clarke, R.J. (2005). Research Methodologies. Retrieved on October 25, 2015 from

https://www.uow.edu.au/content/groups/public/@web/@commerce/documents/doc /uow012042.pdf.

Elizabeth H. (2010). *Patient Satisfaction- Why Should We Care?* Retrieved on October 15, 2015 from www.medscape.com/viewarticle/736495.

Fernando G.H.S., Wijesinghe C.J. (2015). *Patient perceptions on hospital food service at Teaching Hospital, Karapitiya*. Retrieved on October 4, 2015 from file:///C:/Users/A455L/Downloads/7933-27977-1-SM.pdf

Fradkin L. (2015). 20 Things Only People Obesessed With Going Out to Eat Understand. Retrieved on October 1, 2015 from www.cosmopolitan.com/foodcocktails/news/a34973/things-only-people-obsessed-with-going-out-to-eat-understand/.

- Fukunaga, A., Uematsu, H., & Sugimoto, K. (2005). Influences of aging on taste perception and oral somatic sensation. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 60*(1), 109-113.
- Gifford, S. R., and Clydesdale, F. M. (1986). The psychophysical relationship between color and sodium chloride concentrations in model systems". *Journal of Food Protection*, 49, 977-982.
- Gregoire and Spears (2007). Who Will Direct Hospital Foodservice Departments in The Future? Retrieved on October 20, 2015 from fsmec.org/wp-content/uploads/2011/09/ GregoireGreathouse2010.pdf.

Guadagnino C. (2003). *Role of patient satisfaction-Physician*'s *News Digest*. Retrieved on October 2, 2015 from http://www.physiciansnews.com/cover/1203.html.

Hoogeven H.R., Dalernberg J.R., Renken R.J., Horst G.J., and Lorist M.M. (2015). *Neutralprocessing of basic tastes in healthy young and older adults-an fMRI study.* Retrieved on October 15, 2015 from www.rug.nl/research/portal/publications/neutralprocessing-of-basic-tastes-in-healthy-young-and-olderadults--an-fmri-study(63fa0b4ff473-461a-a84a-e4ad2dc4efc0)/export-html

- Hyun, S. (2009). Re- examination of Herzberg's Two- Factor Theory of Motivation in the Korean Army Foodservice Operations. Iowa State University, Ames, Iowa. *Implications from the frontier. service quality: new directions in theory and practice.* Thousand Oaks, CA: Sage Publications.
- Imram, N. (1999). The role of visual cues in consumer perception and acceptance of a food products. *Nutrition and Food Science*, 5, 224-228.
- Iff S., Leunberger M., Rosch S., Knecht G., Tanner B. & Stanga Z. (2008). *Meeting the nutritional requirements of hospitalized patients: An interdisciplinary approach to hospital catering.* Retrieved on October 15, 2015 from http://ac.els-cdn.com/S0261561408001453/1-s2.0-S0261561408001453-main.pdf?tid=de82ec68-d6af-11e4-

aa300000aab0f27&acdnat=142770133635016218e15668de1af8999459af1c0 Jeffrey (2014). *Measuring Patient Satisfaction : A Bridge Between Patient and Physician Perceptions of Care.* Retrieved on October 5, 2015 from healthaffairs.org/blog/2014/05/09/measuring-patient-satisfaction-a-bridge-betweenpatient-and-physician-perceptions-of-care/

- Joo S.T., Kim G.D., Hwang Y.H., Ryu Y.C. (2013). *Control of fresh meat quality throughmanipulation of muscle fiber characteristics*. Retrieved on October 11, 2015 from http://www.sciencedirect.com/science/article/pii/S0309174013001666
- Kleeb T. (1998). Service excellence: Unit-based service objectives in CQI Hospitals. 66: 50-4.
- Maguolas C. (2009). *How color affect food choices*. Retrieved on October 11, 2015 from http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1553&context=thesesdis sertations.
- McKinley R., and Roberts C. Patient satisfaction with out of hour"s primary medical cared, Journal Quality in Health Care, 10 (1), 23-28 (2001).
- McWilliams, M. (2000). *Foods: Experimental Perspectives (2nd Ed)*. New York: Macmillan Publishing Company
- Mentziou I., Delezos C., Nestoridou A., and Boskou G. (2014). *Evaluation of food services by the patients in hospital of Athens in Greece*. Retrieved on October 30, 2015 from http://www.hsj.gr/medicine/evaluation-of-food-services-by-the-personnel-in-hospitals-of-athens-greece.pdf.

- Mojet J., Christ-hazelhof E., and Heidema J. (2001). Taste Perception with Age: *Generic or Specific Losses in Threshold Sensitivity to the Five Basic Taste?* pp. 845-860.
- Moris B.J., Jahangir A.A., SethiM.K., (2013). Patient Satisfaction: An Emerging Health Policy Issue. Retrieved on October 25, 2015 from oaji.net/articles/2016/2985-1455548244.pdf
- National Health Services (2015). *Hospital food standards*. Retrieved on October 3, 2015 from www.nhs.uk/nhsengland/aboutnhsservices/nhshospitals/pages/hospital-food-standards.aspx.

Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1988). "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality". *Journal of Retailing*, 64 (1), 12-37.

Pawar P.A. & Purwar A.H. (2005). Haccp in Retail and Food Service Operations. Retrieved on October 17, 2015 from www.ijesi.org/papers/Vol%202(10)/version- 2/H02102050066.pdf

Payne-Palacio, J & Theis M. (2012). *Foodservice Management Principles & Practices*, 12th Edition, Prentice Hall, New Jersey.

Pei K.J., Ayub A. (2015). Measuring Customer Satisfaction towards Cafeteria Services in Primary Health Care Setting: A Cross-Section Study among Patients and Health Care Providers in Bintulu, Sarawak. Retrieved on October 27, 2015 from

https://file.scirp.org/pdf/OALibJ_2016071315161120.pdf

Poupet H.R.; Parain C., Beauvais R., Descapms. P., Gillet H., Peron J.Y.L., Berche P., and Ferroni A. (2004). *Evaluation of the quality of hospital food from the kitchen to the patient*.
Retrieved on October 7, 2015 from http://www.ncbi.nlm.nih.gov/pubmed/15620447.

Russel C. (2007). A fresh approach to hospital food. Retrieved on October 14, 2015 from https://soilassociation.org/LinkClick.aspx?fileticket=MzWMRYaQNu0%3D&tabid=1 311.

Sergi G., Bano G., Pizzato S., Veronese N., Manzato E. (2016). Taste Loss in the Elderly: Possible Implications for dietary habits. Retrieved on October 18, 2015 from http://www.tandfonline.com/doi/abs/10.1080/10408398.2016.1160208?src=recsys&jo urnalCode=bfsn20

Spence C. (2017). *Hospital Food: Flavour*. Retrieved on November 13, 2015 from https://flavourjournal.biomedcentral.com/articles/10.1186/s13411-017-0055-y

Stanton, Emms and Sia. (2000). Malaysia HRI Food Service Sector Study. USDA and Foreign Agricultural Service. GAIN Report #MY0017.

Woo, G. K., Ng, C. Y. N. and Kim, Y. S. (2009). Influence of Institutional DINESERV on Customer Satisfaction, Return Intention and Word-of-Mouth. *International Journal of Hospitality Management*, 28, 10-17.

World Health Organization. (2005). *International Health Regulations*. Retrieved on October 16, 2015 from www.who.int/ihr/9789241596664/en/

Special Issue: Celebrating Hospitality and Tourism Research Hospitality and Tourism Conference 2017 7 – 8 October 2017, Malaysia