

**Review Article**

Measuring Patient Satisfaction at the Antenatal Department with the Food Services Provided In King Fahd Hospital in Al Baha City

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Abstract

Patient satisfaction: an important and commonly used indicator to measure the quality of health care [1]. Therefore, this study discussed the extent of pregnant patients' satisfaction with the nutritional services provided at King Fahd Hospital in Al-Baha City, to highlight the extent of satisfaction with the nutritional services provided to them. Patient satisfaction affects clinical outcomes, patient retention, and claims of medical malpractice. Thus, satisfaction is a very effective indicator of physician success and hospital care quality [2]. The analytical descriptive study was conducted among 47 pregnant women out of about 280 to find out the extent of hospitalized pregnant women satisfaction with the nutritional services provided to them at King Fahd Hospital in Al-Baha City during the period from 22- 12-2022 to January 22, 2023). The questionnaires included the social and demographic characteristics of the participants in addition to the health status of pregnant women as well as the information about the nutritional services provided to them. The result of this study was that the general direction of the response of the participants is good (81%) while the mean of the participants satisfaction is (4.05) and the standard deviation is (1.14).

Keywords: Measuring Patient Satisfaction at the Antenatal Department; the Food Services

The general objective

The aim of this study is to Measuring patient satisfaction among the hospitalized pregnant women at antenatal department with the food services provided at King Fahd Hospital in Al Baha city specific objectives: is to measure the Overall satisfaction with foodservice at the hospital, quality of meals provided, awareness and level of satisfaction with nutrition related pregnant needs at King Fahd Hospital in Al Baha city,

Method used: The descriptive analytical study was conducted by means of a questionnaire distributed to the in patients at antenatal department in King Fahd Hospital Al-Baha city during one month (22 December 2022 -22 January 2023). Questionnaires included sociodemographic characteristics of the participants, health status, in addition to the information's about the foods services that provide to the patients.

Introduction: Food service is considered a key component of patient care in the healthcare systems. The quality of food service plays a significant role in influencing patient's nutritional intake as well as patient satisfaction regarding the food provision by the organization [3].

Pregnancy; is a critical period during which good maternal nutrition is a major factor affecting the health of the mother and child. The risk of complications during pregnancy or childbirth is reduced when the prenatal weight gain is sufficient; the mother's weight gain during pregnancy affects the child's birth weight and health, and results vary depending on the nutritional status of the mother before pregnancy, so a healthy diet during pregnancy is essential for normal growth and development of the fetus [2,4].

Factor affecting the health of the mother and child: The risk of complications during pregnancy or childbirth is reduced when the prenatal weight gain is sufficient; the mother's weight gain during pregnancy affects the child's birth weight and health, and results vary depending on the nutritional status of the mother before pregnancy, so a healthy diet during pregnancy is essential for normal growth and development of the fetus [2,4]. Some pregnant related disease During pregnancy, having a disorder can increase the risk of problems. This disorder may be Present in a woman before she became pregnant or arising during pregnancy but not directly related to pregnancy or likely to occur during pregnancy, Both diabetes and high blood pressure are examples of pre-existing disorders that increase the risk of problems during pregnancy , Sometimes disorders not directly related to pregnancy occur during pregnancy which can increase the risk of problems for pregnant women or the fetus , some disorders are more likely to occur during pregnancy as a result of the many changes pregnancy causes in a woman's body. Examples include Blood clots in the legs or lungs (thromboembolic disorders), Anemia Urinary tract infections [3].

Healthy food: Food is essential to life but billions in the world are at risk of unsafe food. Many millions become sick while hundreds of thousand die yearly A healthy diet is important for all individuals, but when it comes to the pregnant mother, the importance of it increases due to the mother's need for nutrients and her fetus as well so that this does not affect them negatively [5,6].

Food and Guidance during Pregnancy. Pregnant women should consume a variety of foods according to the 2005 Dietary Guidelines, to meet nutrient needs and gain recommended amounts of weight. According to the Dietary Reference Intakes, energy needs are no higher than the Estimated Energy Requirement for nonpregnant women until the second trimester [7].

Hospital food service: is complex and can be considered as one of the most complicated systems in the hospitality sector with many interrelated factors. Hospital menus should be based primarily on clinical needs as well as on patients' preferences and other important characteristics such as variety, quality, aesthetics, and taste of the food [8]. Hospital food services goals: are to provide inpatients with nutritious meals that are beneficial for their recovery and health, and. It also gives an example of healthy nutrition

with menus tailored to patients' specific health conditions. When meals are carefully planned and customized to meet patient's specific needs, and when patients consume what they are served, these goals can be considered as achieved. Meal consumption by inpatients is related to nutritional status and satisfaction with the food service [9].

Clinical nutrition: Nutrition plays a pivotal role in life and in medicine. Acute and chronic diseases in most organ systems have pronounced effects on food intake and metabolism with increased catabolism, which lead to nutrition-related conditions associated with increased morbidity and eventually death. At the other end of the spectrum, diet is a major determinant of future health, i.e., the absence or postponement of disorders like cardiovascular disease, diabetes, cancer and cognitive disease [10].

Dietary cravings during pregnancy: some pregnancy-related disease pregnancy may cause disorder can increase the risk of problems. This disorder may be present in a woman before she became pregnant or arising during pregnancy but not always directly related to pregnancy [3]. Many experts believe that cravings or cravings for different foods in pregnant women, or aversion to certain foods, could be related to: hormonal background, psychological background, A desire to binge eating, But the sure fact is that it's all down to human chorionic gonadotroph Human Chorionic Gonadotrophin is a gonadotrophic hormone responsible for the positive result of a pregnancy test. The foods that a pregnant woman craves vary from woman to woman, for another, the craving for food often begins at the end of the first trimester of pregnancy, to increase clearly during the second trimester, followed by a decrease in the last trimester of pregnancy. But some women do not have a strong desire to eat, due to what they suffer from nausea, especially in the morning periods. The reason is due to the human chorionic gonadotrophin, which doubles every few days during the first trimester of pregnancy, and its rate reaches its peak during the eleventh week of pregnancy, which leads to the emergence of some symptoms such as nausea, fever, and aversion to foods. According to the Mayo Clinic, which is a medical and research group, the symptoms of fever in some women may be concentrated in the craving for certain foods even if they did not prefer or love them in their normal life, i.e., before pregnancy, in addition to nausea, headache, increased sensitivity to smelling odors, Cravings and food cravings as soon as the baby are born despite being strong during pregnancy. Research indicates that the types of foods that pregnant women crave vary according to the period of pregnancy, as they have a great desire to eat foods rich in flavor compounds during the first trimester of pregnancy, while the desire for sweet foods reaches its highest level in the second trimester, so that the desire to eat salty foods appears in the third. third of pregnancy [11].

Health care Team for antenatal units: Antenatal Care (ANC) services provide pregnant women with a series of consultations through health workers such as midwives, family nurses, nutritionists, obstetricians, anesthetists, and pediatricians. These are the health and care professionals looking after you during pregnancy. Who specializes in pregnancy and childbirth [12].

Factors affecting patient satisfaction: Satisfaction measuring studies with low sample volume unconsciously have bias in sampling from more satisfied patients and this removes the opportunity to investigate group of people who have not enough satisfaction with the service provided but have valuable information for managers and planners of health centers. Therefore, in investigations performed on patient satisfaction, ensuring a representative sample size and use of appropriate sampling method are among basic necessities of studies on patient satisfaction Barriers to Improve Dietary Intake Barriers to adequate food intakes by hospital inpatients are multifactorial and complex, and require multilevel interventions, including a change in the awareness and attitude toward food among healthcare staff and older hospital patients The main theme with regard to foodservice management is the fragmentary nature and difficulty of communication between the kitchen and wards. Foodservice managers have to rely on kitchen porters for the delivery of food to the ward; and ward staff may have difficulty in communicating with foodservice staff and dietitians. Financial constraints were a prominent part of the concern of the foodservice and facilities managers. While nurses may view the nutritional care of patients as an important aspect of their job, increased time pressures and competing tasks may mean that they are not able to prioritize feeding above other duties, such as the distribution of medicines at. Most research in this area has reported common themes of time restraints and staff shortages. A

further study investigated the most common barriers in food intake of long-stay, older adult patients in Australian hospitals. The key barriers identified were lack of choice due to special diet, boredom arising from the length of stay, a lack of feeding assistance, limited variety, and inadequate flexibility of food service , { 1 } McCray S., Maunder K., Barsha L., Mackenzie-Shalders K. Room service in a public hospital improves nutritional intake and increases patient satisfaction while decreasing food waste and cost. J Acad Nutr Diet. 2018;112:284–293. doi: 10.1016/j.jand.2017.05.014. [PubMed] [CrossRef] [Google Scholar].

Justification: The period of pregnancy is one of the critical periods for the pregnant mother. during which the mother's nutrition and lifestyle greatly affect the health of the mother and the child Also, some pregnant women refuse some types of foods strongly due to various reasons, so we have prepared this study to highlight the extent of mothers' satisfaction with the food services provided for them by the hospital Methods used This study was conducted in Al-Baha area. At king Fahad hospital which is considered the largest public hospital, The descriptive analytical study was conducted by means of a questionnaire distributed to the in patients at antenatal department in King Fahd Hospital Al-Baha city during one month (22 December 2022 -22 January2023). Questionnaires included sociodemographic characteristics of the participants, (residence, age in years, education level, health status) In addition to the health status pregnant women as well as the information's about the foods services that provide to the them.

The Results

The results were analysed by excel and five-scale Likert program, then placed in the following figures and discussed Table 1.

Characteristic {N=47}	variables	Frequency	Percentage %	Valid Percent	Cumulative Percent
Age distributions	20 ≤	1	2.1	2.1	2.1
	21-30	16	34	34	36.1
	31-40	21	44.7	44.7	80.8
	≥ 40	9	19.1	19.1	100
Total		47	100	100	
Education level of Participant's	primary	5	10.6	10.6	10.6
	Secondary	12	25.5	25.5	36.1
	University	30	63.8	63.8	100
Total		47	100	100	
Residence	Village	26	57.4	57.4	57.4
	City	21	42.6	42.6	100

Total		47	100	100	
Marital status	Married	47	100	100	
	Divorce	0	0	0	100
Total		47	100	100	
Working	Yes	11	23.4	23.4	23.4
	No	36	76.6	76.6	100
Total		47	100	100	

Table 1: Characteristic of the participants.

The above table 1 shows that the highest age of the respondents in the questionnaire is between 31 to 40 years (45%), while the lowest number are those who were less than 20 years old , Most of them have university education. (63.8)%, from villages (57.4.)%, also, the majority of them do not have jobs (76.6.)% and (100%) are not divorced.

Characteristic {N=47}	variables	Frequency	Percentage %	Valid Percent	Cumulative Percent
Hospitalization causes	Waiting before birth	14	29.8	29.8	29.8
	Caesarean births	10	21.3	21.3	51.1
	pregnancy complications	15	31.9	31.9	83
	others	8	17	17	100
Total		47	100	100	
duration stay in the hospital	≤ week	35	74.1	74.1	74.4
	2 week	9	19.1	19.1	93.2
	≥ 3	3	6.4	6.4	100
total		47	47	47	
stage of pregnancy	First trimester	5	10.6	10.6	10.6
	Second trimester	1	2.1	2.1	2.1
	Third trimester	45	87.2	87.2	100
Total		47	100	100	

Table 2: The health status of the participants.

The above table 2 shows that most of the pregnant women participating in the questionnaire (31.9%) were admitted to the hospital as a result of some pregnancy complications, and that most of them stayed in the hospital for a week or less. (72.9%) and most of them were in the third trimester of pregnancy (95.6%).

Satisfaction scales: Food quality

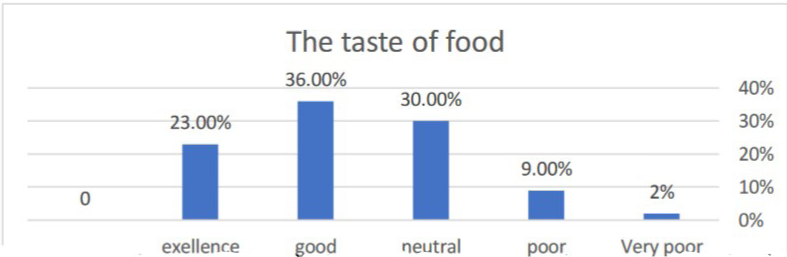


Figure 1: Food taste.

The figure 1 above shows that the highest percentage of patients chose good (36%) followed neutral (30%)

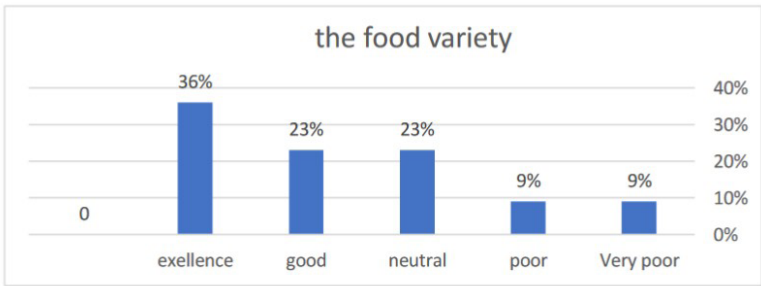


Figure 2: food variety.

The figure 2 above shows that the highest percentage of patients chose excellence (36%) followed neutral and good (23%)

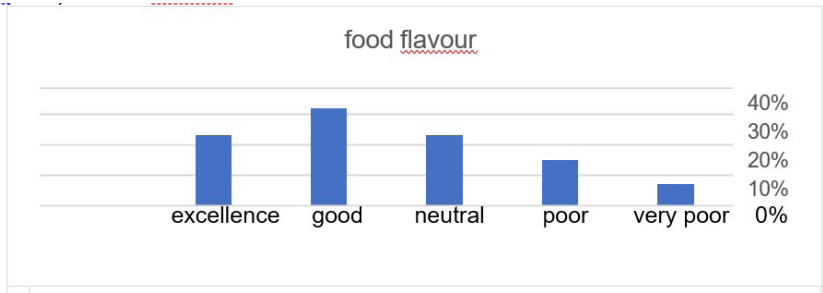


Figure 3: food flavour.

The figure 3 above shows that the highest percentage of patients chose excellence (36%) followed neutral and good (23%).

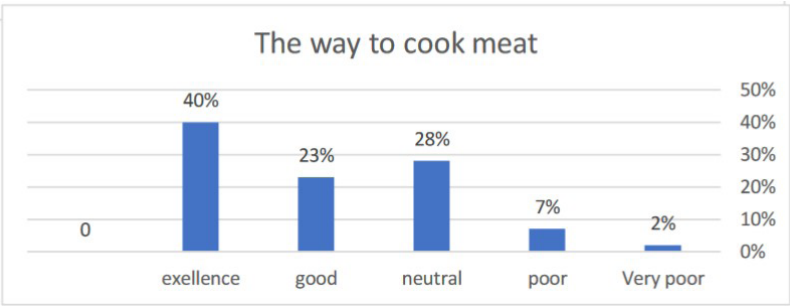


Figure 4: The way to cook meat.

The figure 4 above shows that the highest percentage of patients chose excellence (40%) followed neutral (28%).

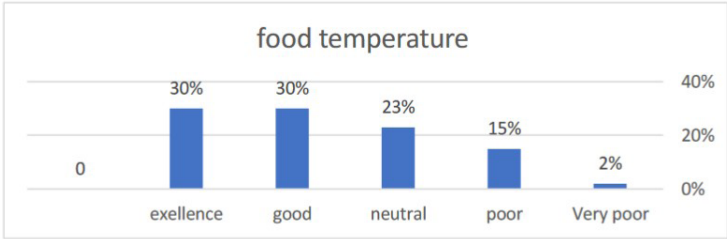


Figure 5: food temperature.

The figure 5 above shows that the highest percentage of patients chose excellence and good (30%) followed neutral (23%).

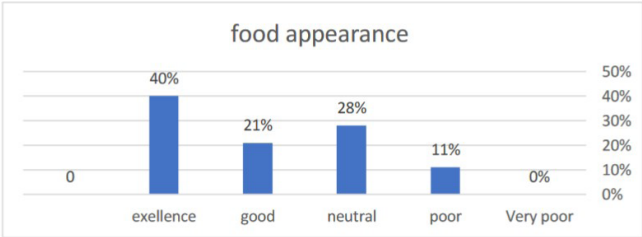


Figure 6: food appearance.

The figure 6 above shows that the highest percentage of patients chose excellence (40%) followed neutral (28%).

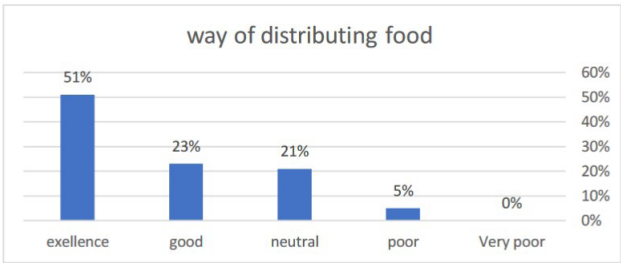


Figure 7: way of distributing food.

The figure 7 above shows that the highest percentage of patients chose excellence (51%) followed good (23%).

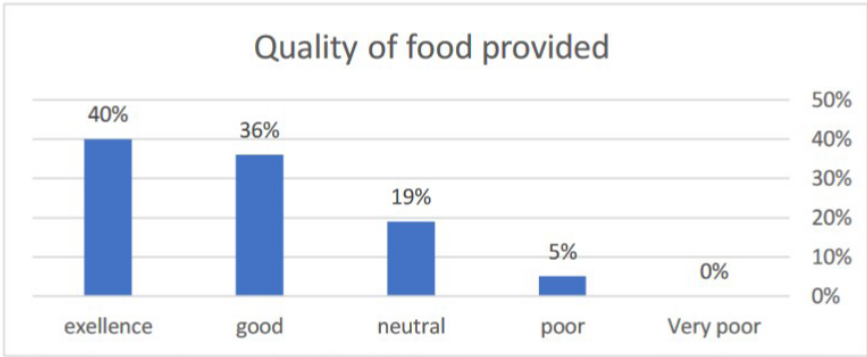


Figure 8: Quality of food provided.

The figure 8 above shows that the highest percentage of patients chose excellence (40%) followed good (36%).

Food serving utensils

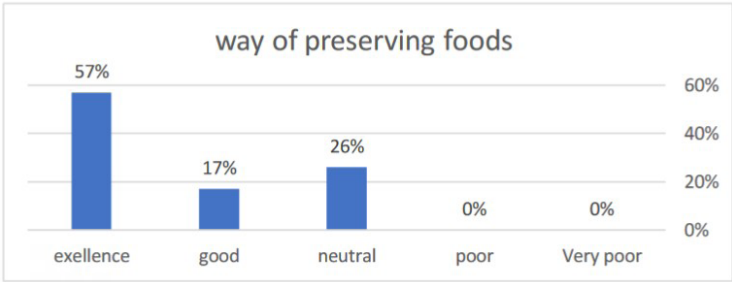


Figure 9: way of preserving foods.

The figure 9 above shows that the highest percentage of patients chose excellence (57%) followed neutral (26%).

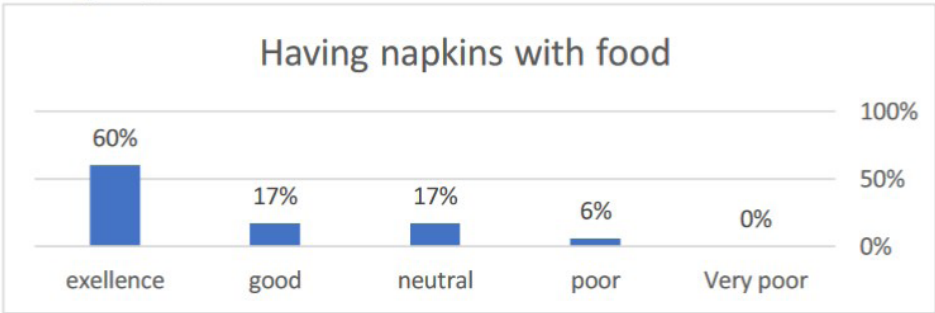


Figure 10: Having napkins with food.

The figure 10 above shows that the highest percentage of patients chose excellence (60%) followed good and neutral (17%).

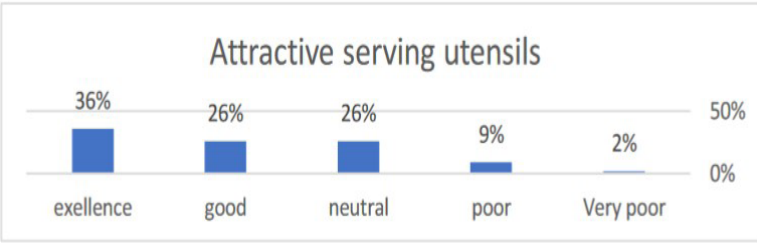


Figure 11: Attractive serving utensils.

The figure 11 above shows that the highest percentage of patients chose excellence (36%) followed neutral and good (26%).

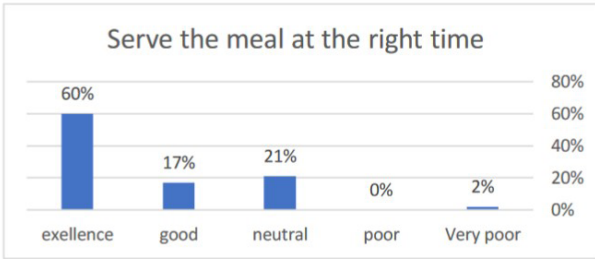


Figure 12: Serve the meal at the right time.

The figure 12 above shows that the highest percentage of patients chose excellence (60%) followed neutral (21%).

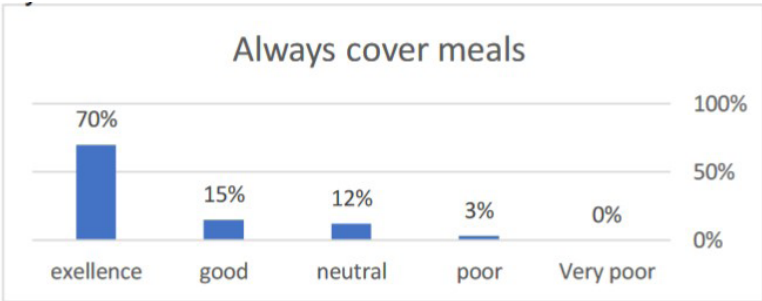


Figure 13: Always cover meals.

The figure 13 above shows that the highest percentage of patients chose excellence (70%) followed good (15%).

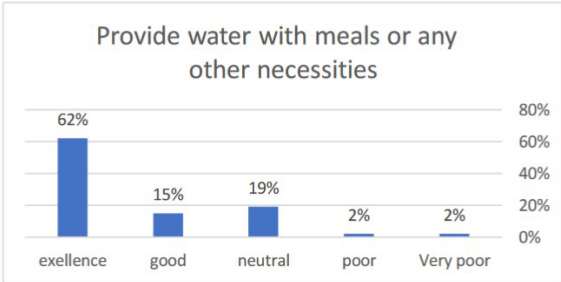


Figure 14: Provide water with meals or any other necessities.

The figure 14 above shows that the highest percentage of patients chose excellence (62%) followed neutral (19%).

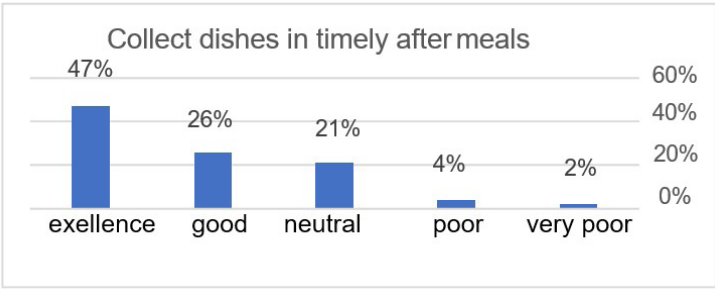


Figure 15: Collect dishes in timely after meals.

The figure 15 above shows that the highest percentage of patients chose excellence (47%) followed good (26%)

Issues related to catering services

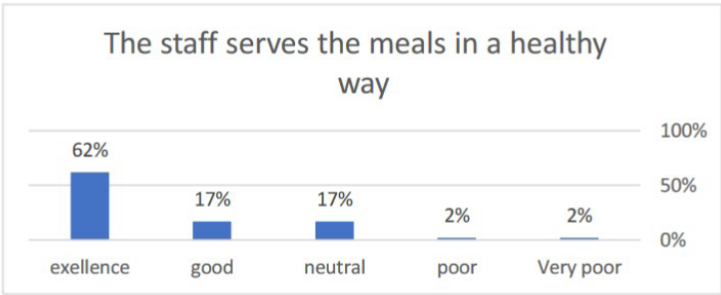


Figure 16: The staff serves the meals in a healthy way.

The figure 16 above shows that the highest percentage of patients chose excellence (62%) followed good and neutral (17%).

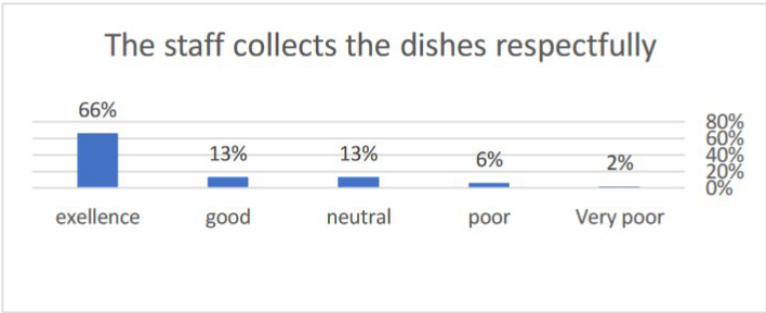


Figure 17: The staff collects the dishes respectfully.

The figure 17 above shows that the highest percentage of patients chose excellence (66%) followed neutral and good (13%).

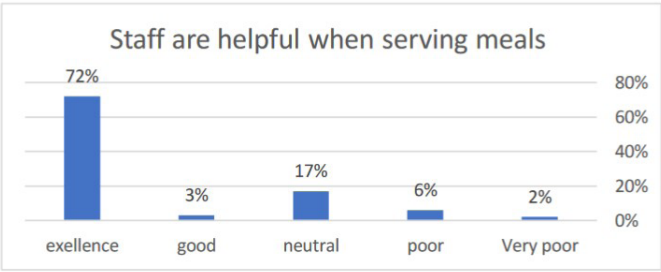


Figure 18: Staff are helpful when serving meals.

The figure 18 above shows that the highest percentage of patients chose excellence (72%) followed neutral (17%).

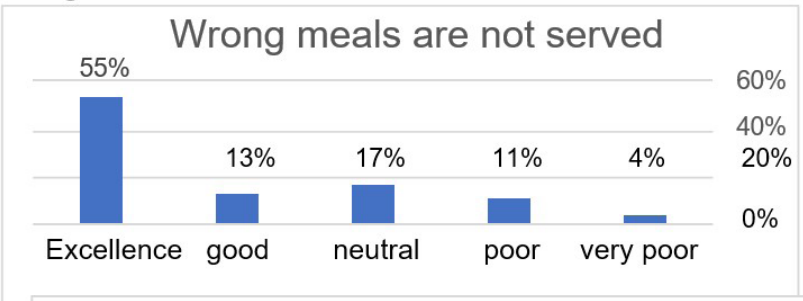


Figure 19: Wrong meals are not served.

The figure 19 above shows that the highest percentage of patients chose excellence (55%) followed neutral (17%).

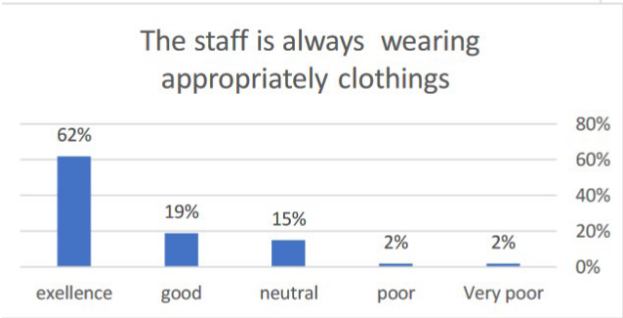


Figure 20: The staff is always wearing appropriately clothing's.

The figure 20 above shows that the highest percentage of patients chose excellence (62%) followed good (19%).

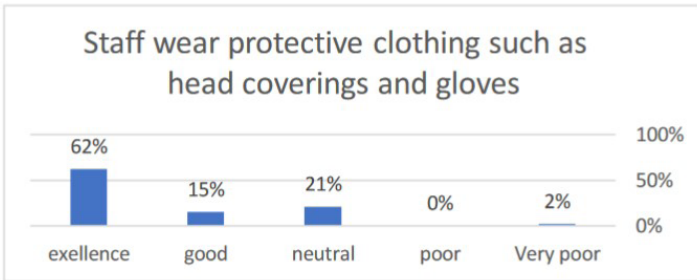


Figure 21: Staff wear protective clothing such as head coverings and gloves.

The figure 21 above shows that the highest percentage of patients chose excellence (62%) followed neutral (21%).

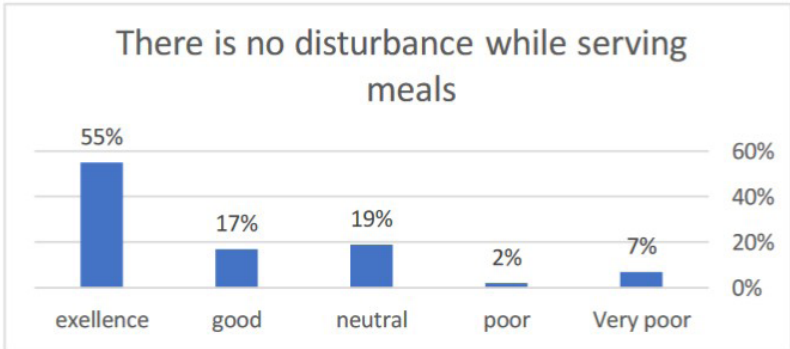


Figure 22: There is no disturbance while serving meals.

The figure 22 above shows that the highest percentage of patients chose excellence (55%) followed neutral (19%).

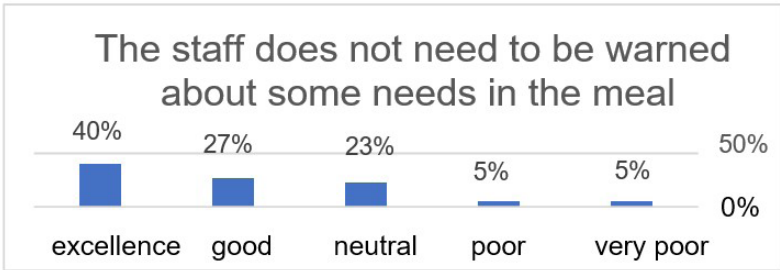


Figure 23: The staff does not need to be warned about some needs in the meal

The figure 23 above shows that the highest percentage of patients chose excellence (40%) followed good (27%).

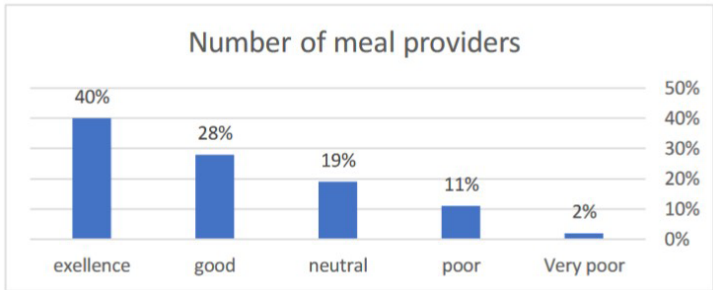


Figure 24: Number of meal providers.

The figure 24 above shows that the highest percentage of patients chose excellence (40%) followed good (28%).

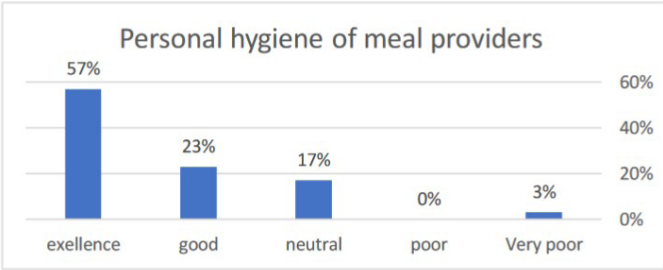


Figure 25: Personal hygiene of meal providers.

The figure 25 above shows that the highest percentage of patients chose excellence (57%) followed good (23%).

Physical environment

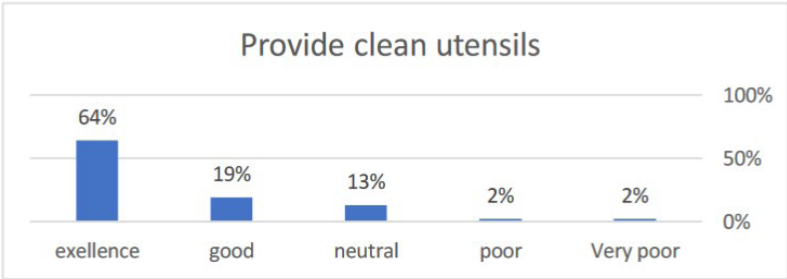


Figure 26: Provide clean utensils.

The figure 26 above shows that the highest percentage of patients chose excellence (64%) followed good (19%)

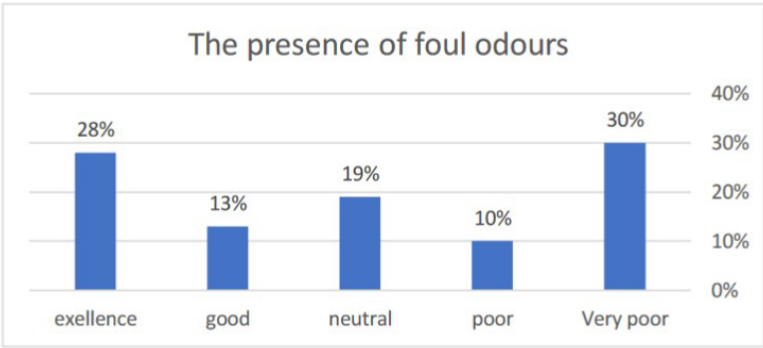


Figure 27: The presence of foul odours.

The figure 27 above shows that the highest percentage of patients chose very poor (30%) followed neutral (28%).

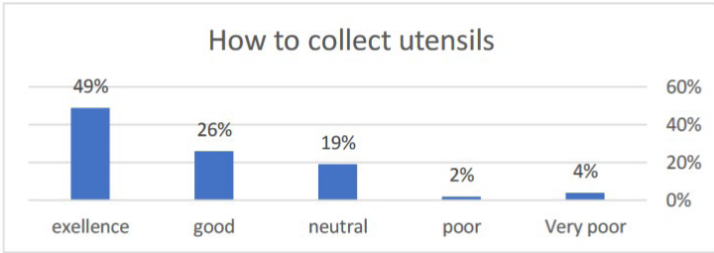


Figure 28: How to collect utensils.

The figure 28 above shows that the highest percentage of patients chose excellence (49%) followed good (26%).

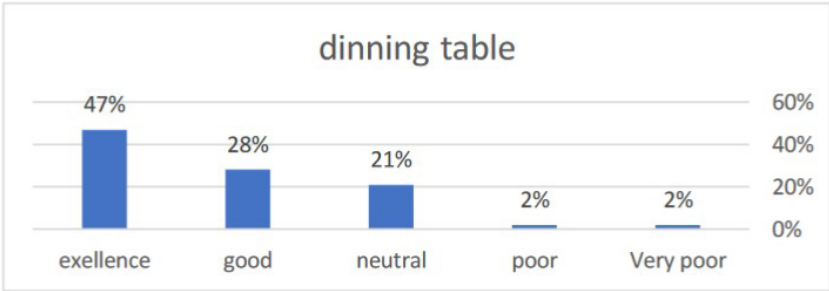


Figure 29: Dinning table.

The figure 29 above shows that the highest percentage of patients chose excellence (42%) followed good (28%).

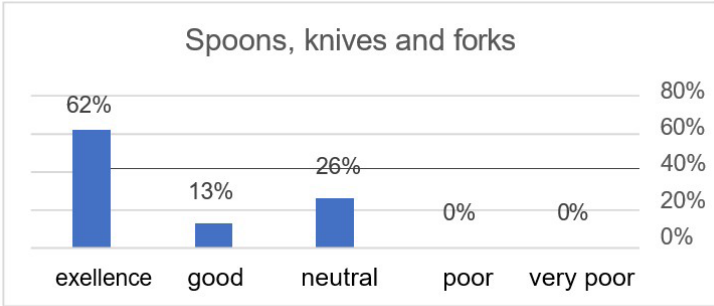


Figure 30: Spoons, knives and forks.

The figure 30 above shows that the highest percentage of patients chose excellence (62%) followed neutral (26%).

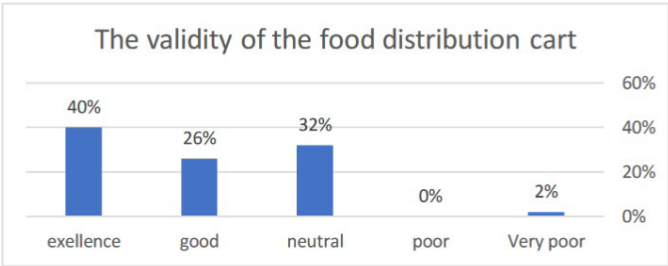


Figure 31: The validity of the food distribution cart.

The figure 31 above shows that the highest percentage of patients chose excellence (40%) followed neutral (32%).

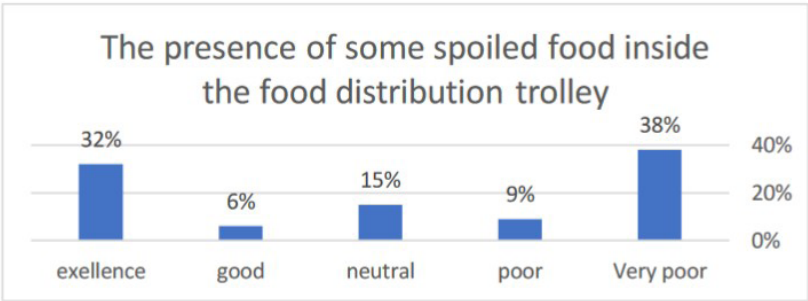


Figure 32: The presence of some spoiled food inside the food distribution trolley.

The figure 32 above shows that the highest percentage of chose very poor (38%) followed excellence (32%).

Analytics:

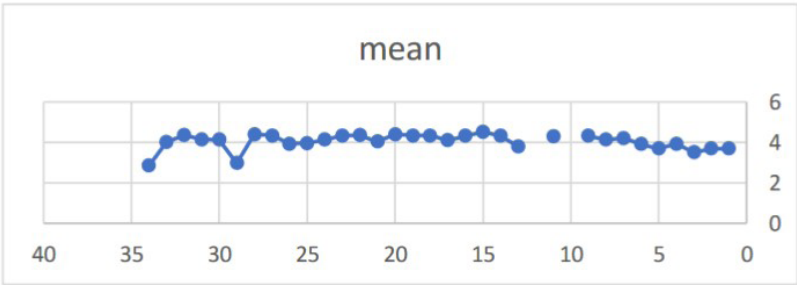


Figure 33: Mean.

The figure 33 above shows that The highest value was for the mean (4.5) and the lowest value (2.98).

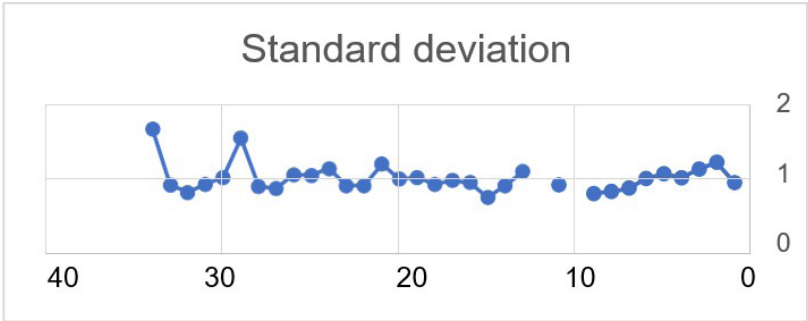


Figure 34: Standard deviation.

The figure 34 above shows that The highest value was for the Standard deviation (0.79) and the lowest value (1.71).

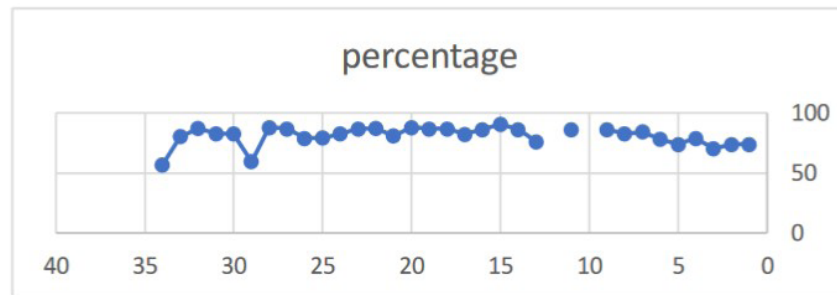


Figure 35: The percentage.

The figure 35 above shows that The highest value was for the percentage (90.6) and the lowest value (57).

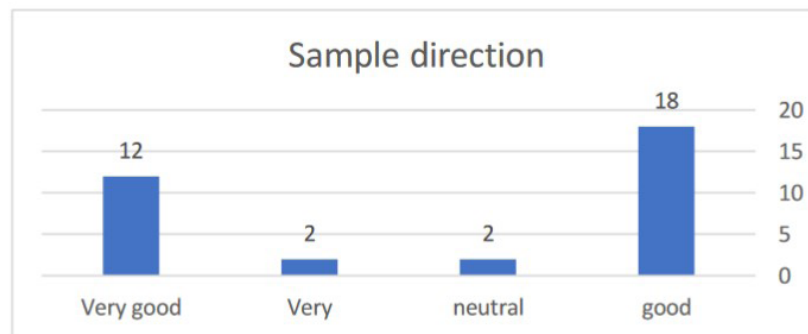


Figure 36: Sample direction.

The figure 36 above We can see that the response curve shifts towards (good).

Discussion

The results shows that most of the mothers age were between the ages of 31 to 40 years old (44.7%) which is the reproductive age of women. With differences between the participants in the level of education, as most of them have university education (63%). An analysis of all the questions that were answered as described in Part 4 of the research shows also a difference in the reason for staying in the hospital, according to the state of health and the trimester of pregnancy. As most of them, 29%, are waiting for a natural delivery, which confirms that most of them are in the third trimester of pregnancy (87.2%). The period of stay of the pregnant women who were included in the study varies according to the state of their health, ranging from less than a week to more than three weeks. As most of them had stayed for about two weeks (19.1%), which requires more attention to the nutritional aspect. There are also a number of questions to measure the patients' satisfaction with the food services provided to patients in the antenatal ward, and they include food quality and serving utensils, other matters related to food services and the physical environment which analyzed by Likert scale [10] which result of The highest value was for the mean and the lowest value (2.98) figure (4.5:3), The highest value was for the Standard deviation (0.79) and the lowest value (1.71) figure (4:5:4). So the general direction of the response of the participants is good (81%) while the mean of the participants satisfaction is (4.05) and the standard deviation is (1.14). This study is matching with other cross-sectional study about Satisfaction with Healthcare Services in Southern Saudi Arabia conducted in the hospital, in March 2018 using a questionnaire that combined (outpatients and inpatients). The results of that study were that the satisfaction rate among the participation is considered high and indicates the good care provided by health facilities in the Al-Baha region in the Kingdom of Saudi Arabia [13,14].

Ethical consideration: Ethical consideration: The research was allowed after sending a letter to the Department of Community Health who agreed and sent another one to the Health Affairs and then and other letter to king Fahad hospital who agreed to collect the information.

Conclusion

Food quality was consistently shown to be the main predictor of the overall satisfaction in food services. The response of most of the women was satisfied with the food services provided by the hospital, and the results of the sample analysis were excellent (81%), noting that most of the participants also in the questionnaire that they are hospitalized for about two weeks or more and not satisfy with food flavor food choices which may happen as a result of pregnancy changes sometimes, which is something that must be looked at and taken care of.

Recommendations:

- In general, attention should be paid to everything related to food, but special attention should be given to some special cases in the hospital, of which pregnancy is one of them.
- The result of this study should be recommended to aid hospital administrators and the food (nutrition) departments in making decisions about how to raise patient satisfaction levels with the meal services, and in assessing potential enhancements to the quality of food services.
- More attention should be tacked about food flavor & food choices

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