

IN-PATIENTS SATISFACTION ON NURSING CARE AND ITS DETERMINANTS
FACTORS AT JIMMAUNIVERSITY SPECIALIZED HOSPITAL, SOUTHWEST
ETHIOPIA, 2014

A research submitted to the Department of Health Services Management of Jimma University, in partial fulfillment of the requirement for the degree of masters of Public Health in Health Service Management (MPH, HSM)

January/2014

Jimma, Ethiopia.

By **GEMECHIS GUNJA**

Advisors:

1, Mirkuzie Woldie (MD, MPH)

2, Tesfamechael Alaro (BSC, MPH)

ACKNOWLEDGEMENT

First and for most I would like to acknowledge my advisors, Dr Mirkuzie Wolde and Ato Tesfamechael Alaro who contributed valuable comments and important points to start from beginning of this project. Secondly my gratitude also goes to Mr. Shimelis Ololo for his support in the selection of the topic. At last my deepest appreciation goes to Jimma university college of public health and medical science post graduate librarians for their support in providing and lending me the necessary material and all organizations and individuals who have participated in the study.

LIST OF ABBREVIATION

AMA	-American Medical Association
ANA	-American Nurses Association
IOM	-Institute of medicine
JUSH	-Jimma University Specialized Hospital
HCAHP	-Hospital Consumer Assessment of Health Care Providers and Systems Survey
QNC	-Quality Nursing Care
SPSS	-Statistical Package for Social Sciences
WHO	-World Health Organization
NSNS	- Newcastle Satisfaction with Nursing Scale
OSQ	-Overall Service Quality

Table of content

ACKNOWLEDGEMENT.....	2
LIST OF ABBREVIATION	3
ABSTRACT.....	6
CHAPTER ONE: INTRODUCTION.....	8
1.1BACK GROUND:.....	8
1.2. STATEMENT OF THE PROBLEM	9
1.3 SIGNIFICANCE OF THE STUDY	10
CHAPTER TWO: LITERATURE REVIEW	11
2.1.1. PATIENT SATISFACTION AS MESURE OF QUALITY OF NURSING CARE.	11
2.1.2. DETERMINANTS OF PATIENT SATISFACTION WITH NURSING CARE.....	11
2.1.2.1. PATIENTS RELATED FACTORS.....	13
2.1.2.2. PROVIDER RELATED FACTORS.....	14
2.1.2.3 INSTITUTIONAL ASPECTS	15
2.1.2.4. THE SETUATION IN ETHIOPIA.....	15
2.2. THEORETICAL FRAMEWORK	16
1.3. CONCEPTUAL FRAMEWORK	17
PATIENT SATISFACTION WITH NURSING CARE.....	17
CHAPTER THREE	18
3.1. OBJECTIVES	18
3.1.1. General objective	18
3.1.2. Specific objectives.....	18
CHAPTER FOUR: METHODS AND MATERIALS.....	19
4.1. STUDY AREA AND PERIOD.....	19
4.2. STUDY DESIGN	19
4.3. SOURCE POPULATION.....	19
4.4 STUDY POPULATION	19
4.5. ELIGIBILITY CRITERIA.....	19
4.6 SAMPLE SIZE DETERMINATION.....	20
4.7 SAMPLING PROCEDURE	20
4.6 DATA COLLECTION TOOL AND MEASURMENTS	20
4.8 DATA QUALITY ASSURANCE	22

4.9 VAIRABLE UNDER STUDY	23
4.9.1 Independent variables	23
4.9.2 Dependent variable	23
4.10. DATA MANAGMMENT AND ANALYSIS	23
4.11. .ETHICAL CONSIDERATION.....	24
4.12 OPERATIONAL DEFINATION	24
5, CAPTER FIVE RESULT	24
5.1 Socio-demographic Characteristics of the Respondents	24
5.2 Socio demographic characteristics as predictors of patient satisfaction score.....	25
5.3 Overall patients satisfaction score.....	26
5.4 Interaction with the nurses and institutional aspects	27
5.5 Interaction with the nurses and institutional aspects as predictors patients satisfaction score	29
5.6 Predictors of patient satisfaction score with nursing care.....	30
*reference group, those with high frequency of observations were used	31
6. CHAPTER SIX DISCUSSION	31
7. CHAPTER SEVEN CONCLUSSION AND RECOMMENDATION	33
7.1 CONCLUSSION.....	33
7.2 RECOMMENDATION	33
APPENDIX II REFERENCES.....	35

ABSTRACT

BACKGROUND: Patient satisfaction with nursing care constitutes an important component to measure of quality of nursing care in the hospital setting. This study were aimed to determine level of patients satisfaction with nursing care and its determinants

Objective: To assess patients' satisfaction with nursing care and determinant factors among in-patients at Jimma University Specialized Hospital, Southwest Ethiopia.

Method: Across-sectional facility based study was conducted among in-patients at Jimma University specialized Hospital in the medical, surgical, ophthalmology, Gynecology, Maternity and Pediatrics wards during March 25 to April 25, 2014. A sample of 368 patients who were admitted for two or more nights were interviewed. Data analysis was done using SPSS version 16. Descriptive statistics was used to summarize data and show the frequency distribution. Factor score was computed for the items identified to represent the satisfaction scale by varimax rotation method. Using this regression factor score, multivariate linear regression analysis was performed and the effect of independent variables on the regression factor score was quantified. Participation in the study was voluntary and based on ability of patients or care giver to give informed consent.

Results; A total of 374 in-patients were approached from the study hospitals and 368 of them participated in this study with response rate of 98.4%. In this study overall patient's satisfaction mean score was 57.2%. Moreover, patients had perceived technical competency mean score of 59.05%, perceived consultation and relational empathy mean score of 62.39%, nurse to patient communication and information sharing mean score of 57.749%, perceived cleanses and comfort of the room mean score of 75.919% and perceived privacy mean score of 31.793%. Perceived technical competency, perceived consultation and relational empathy and how nurses communicate and the amount of information shared to the patients by nurses were independent predictors of patients' satisfaction with nursing care in the hospital setting.

Conclusion: The present study showed that interpersonal processes including perceived consultation and relational empathy, perceived technical competency, communication and

information sharing of nurses significantly influence patient satisfaction in the in-patient setting. Therefore, nurses should work towards improving their communication skills along with their technical skills with the support of hospital management.

CHAPTER ONE: INTRODUCTION

1.1BACK GROUND: Quality is very broad term and in general it states the characteristics of activities and events irrespective of quantity. Quality measurement is one of the most important topics in all services and with regard to quality in health care it is reflected with complete satisfaction of the needs of those who are in most need of health services, for the minimum organizational costs, with in the given limit and guidelines of higher administrative bodies and those paying (Marija Zalletel, 2010).

Quality health care is characterized by safe, and patient centered, timely ,efficient: and equitable by relying on high level of professionalism, efficient use of resources (human, finical and material), the lowest possible risk for the patient, patient satisfaction, and a(positive) influence on his state of health. Quality health care attains these demands and in accordance with existing knowledge, meets the expectations of the greatest possible utilization with the least possible risk to the patient's health and wellbeing (Marija Zslstel, 2010 and Phil Buttell, Robert, and Jennifer Daley, 2007 and WHO, 2006). The Institute of Medicine also defines health care quality as the extent to which health services provided to individuals and patient populations improve desired health outcomes and are constituent with current professional knowledge.

Patients tend to define quality in terms of their preferences and values, which lead to satisfaction with health care and care outcome, such as recovery, mortality and functional status. Hence patient satisfaction is one of the determinants of quality of health care and the ultimate outcome of care, significant interest in patient satisfaction as an outcome variable has been present, as to rate a service on a satisfaction scale the patient has first to perceive the service. Patients judgments related to the care they receive represent their perceptions of that care and patient's perceptions of nurses influence the way patients rate the quality of nursing care (Donabedian, 1966 and Zaneta and Ilona, 2008).

Nursing is the unique function of the nurse to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge, and to do this in such a way as to help him gain independence as rapidly possible. Thus, nurses are responsible for protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities and populations (Virginia Henderson, 1978 and American Nurses Association, 2006).

Being one of the important predictor of quality of health care over the world including Ethiopia, patient's satisfaction on nursing care is influenced by different factors which are grouped as; patient related factors, provider related factor and environment and organizational factors (Felesa, 2009, Mohammad Khan, Hassan, 2006, Chaka, 2005, and Andreas and George, 2013) .

In developing countries including Ethiopia, especially the patient view didn't get enough consideration in rating patient satisfaction and in the planning, implementation and evaluation of health care services (Chaka, 2005).

1.2. STATEMENT OF THE PROBLEM

Access to quality care and information regarding care is one of the important rights of patient and many health organizations and health institutions are striving to achieve high quality services so as to attract more consumers (WHO, 2006).

Public is more aware of issues that have been played out in the media, and the IOM report has improved the awareness of the problem, but still too little is being done to transform healthcare and there appears to be lack of clear consensus on patient satisfaction with nursing care from different investigators across developed countries(Felesa, 2099). Though patient satisfaction surveys with nursing care are routinely conducted in the developed world to monitor and improve the quality of care, the same is not true for developing world (shawa, 2010).

In developing countries including Ethiopia patients view about health service delivery is a neglected subject rather Patients are viewed as beneficiary of health care services without a voice and also nursing services are not organized well in Ethiopia (Chaka, 2005). As patient satisfaction with nursing care was not assessed adequately or not at all gain attention in our country this study is very important in recognizing that patient satisfaction has something to do with how nursing care is received and appreciated. It will also look to find out exactly what nursing care, patient and organizational factors contribute to patient satisfaction on nursing care at Jimma University.

For the researcher, the problem is that, for the most part it is known what matters most patients when it comes to nursing care. Why some patients are satisfied with nursing care while others are not? There is a need to find Out this from the patient's perspectives, as well as their hospital experiences, views and needs. this lack of a consensus on what constitutes patient satisfaction with nursing poses a major challenge for health services and it has motivated and increased the interest of this researcher to undertake the assessment of patient satisfaction on nursing care and associated factors at hospital setting.

1.3 SIGNIFICANCE OF THE STUDY

Patients would like to go to institutions that provide nursing care that is holistic and patient centered. Health personnel differ in quality and quantity from one area to another, each geographical unit must make the best possible use of its resources, including health personnel. To meet the needs of the people, health educators, physicals, social workers, nurses and all other categories of health personnel must constantly evaluate their roles, be ready to modify them for the common good and modify the program that prepare them for their work.

Among health care services delivered at Hospital setting good nursing care is a critical factor of health care quality. It has an impact on all aspects of the business of hospitals and community care. Since hospitalized patients have high level of anxiety that will also affect the overall outcome of their health, nurses need to have the skills to provide care that will alleviate their anxiety. Thus, exploring patient's perception and experiences on nursing care is important in identifying areas of patient's satisfaction and no satisfaction. This study is significant because little was done in Ethiopia to correlate what matters patient satisfaction with nursing care at Hospital setting.

The results of this study will be useful in providing baseline data for government and nongovernmental institutions that need to work and implement any program regarding patient care in hospital setting. Therefore it will be helpful in overcoming resistance in addressing the negative health outcome of the patients during hospital stay and will assist in identifying strengths and weaknesses of the type of care provided from patient perspective. Therefore study will explore patients satisfaction on nursing care provided in Hospital focusing on admitted patients during the study period. It builds body of knowledge of nursing discipline in areas of patients' satisfaction and allows nurses to understand what patients expect from them and also clarifying any misinformation patients may have regarding nursing care. It will also assist nurses to develop nursing care plans that are patient centered because patients expectations will be considered. Hence, it promote quality nursing care that is consistent with patient's expectations in line with standards of nursing care adopted by the Hospital. The results may also used in quality assurance program.

CHAPTER TWO: LITERATURE REVIEW

2.1.1. PATIENT SATISFACTION AS MEASURE OF QUALITY OF NURSING CARE.

To understand the Quality of Nursing care (QNC), there is need to understand what quality is from health perspective. According to world health organization (WHO, 2000) quality has been defined as the process of meeting the needs and expectations of patients and degree to which care services influence the probability of optimal patient out come and satisfaction with the care.

Nursing, as an integral part of health care system, encompasses the promotion of health, the prevention of illness, and care of physically ill, and disabled people of all ages, in all health care and other community settings. Within this broad spectrum of nursing care, the phenomena of particular concern to nurses are individual family and group responses to actual or potential health problems. These human responses range broadly from health restoring reactions to individual episode of illness to the development of policy in promoting the long term health of population. Therefore nurses need to know what factors influence patient satisfaction and realize quality of nursing care. Hence satisfaction is prominent predictors of quality health care (Mohammad, khan, Hassan and Saied, 2006, International council of Nurses, 2007).

Patients have the right to expect quality of care and patient satisfaction with nursing care is considered an important factor in explaining patient's perceptions of service quality. Quality nursing care satisfies the needs and expectations of patients. Patients are likely to care more about communication, listening, kindness and responsiveness of their nurses. Therefore, assessment of quality of care from patient's perspective has been operationalized as patient satisfaction (patients become more satisfied if their needs are met). As health professionals, nurses are accountable for quality and systematic improvement of nursing practice (Burhans and Alligood, 2010, Rafii, 2008 and shawa, 2010).

Systematic assessment of patients perceived services quality and their satisfaction is an important element to design the marketing strategy for health care services over time. Such process will enable the managers and doctors of a given hospital to identify the points of strength and weakness relative to competitors and consequently investigating the available resources in the dimension that improve the quality of services delivery and patient satisfaction (Chaka, 2005)

2.1.2. DETERMINANTS OF PATIENT SATISFACTION WITH NURSING CARE.

Patient satisfaction is a complex dimension affected by many different components of patient care. One version of definition states that the satisfaction constructs reflects three basic variables: a) the personal preferences of the patient, b) the patient's expectation and c) the realities of the care received and

Satisfaction about care implies that health care users compare their expectations against the actual care delivered and that leads to either a positive or a negative feeling (Herman J sixrma and Aanke J e De veer, 2008).

Patient satisfaction and their expectations of care are valid indicators of quality nursing care. Socio demographic factor of patients, technical skill and competency of provider, amount of time nurses spent with patient, nurses attention and responsive to the patients need, nurses treatment of patient as individual, way of communication and amount of information provided to the patient by nurses , interpersonal relationship, maintaining dignity and privacy, emotional support and empathy, nature of care provided, environmental and organizational factors, are among the strong predictors of patient satisfaction with nursing care. And also personal preferences of the patient and patients' expectations matters patient satisfaction with nursing care (Felesa, 2009, Mohammad Khan, Hassan, 2006, Chaka, 2005, and Andreas and George, 2013).

Data from Hospital Consumer Assessment Healthcare Providers and Systems (HCAHPS) survey provides a portrait of patients experiences in U.S hospitals and as nursing represents a constant presence in the experience of Hospitalized patients, it seems logical that satisfaction with nursing care has a primary influence on patients overall satisfaction with experience. Several researchers (O`Connell B., young J, et Al, 1999) have noted that patient satisfaction with nursing care is the primary predictor of overall satisfaction with their hospital experience. Although international comparative studies are possible because of the universal nature and philosophical roots of quality nursing care for patients they are still rare. Using international and comparative in the MEDLINE database some international studies that focused on surgical patients was found (M al Momani, h, al korashy et al.2012).

“Five social-psychological variables were also proposed as probable determinants of satisfaction with health care. These include a) Occurrences- the event which actually takes place, and perhaps more importantly ,the individuals perception of what occurred .b) value evaluation- in terms of good and or bad of an attribute or an aspect of health care encounter. c) expectations- beliefs about the probability of certain attribute being associated with an event or object, and the perceived probable outcome of that association. d) interpersonal comparisons- an individual rating of health care encounter by comparing it with all such encounters known to or experienced by him or her: and e) entitlement—an individual’s belief that she/he has proper, accepted grounds for seeking or claiming particular outcome” (Olusoji Daniel, 2009).

2.1.2.1. PATIENTS RELATED FACTORS

Hence satisfaction is result of expectation and actual care experiences. Consequently, variations in satisfaction scores can be a result of differences in either expectations or experiences. In addition, the fact that healthcare users often feel dependant and grateful to their care providers may result in socially desirable answers and skewed distributions (the majority report being satisfied or very satisfied). Measuring care users `experiences and relating these to their expectations may therefore better reflect the quality care and may also provide clearer action points for quality improvement purposes. There was positive and significant relationship between overall service quality (OSQ) and patients satisfaction and willingness to recommend the services of specific hospital. A stronger correlation was also declared between patients' satisfaction and willingness to recommend the services of a hospital to other people (Wathek, 2004).

Sociodemographic factors of patient determine the expectation of patient before the beginning care, during care and after care received which directly matters their satisfaction. These socio demographic factors include age, gender, racial, /ethnicity, language, culture, educational levels, Levels of anxiety. Health status and previous hospitalization were also other patient related factors that influence patent satisfaction with nursing care (Iftikhar, Shadiullah and Habibuallah, Felesea Samuel 2009.Elswin 2010).

At hospital setting patients are less satisfied with nursing care and older patient's shows greater satisfaction than younger and middle age groups and men are more satisfied with care than women (Mohammed, Rasheed and Saeed, 2007, Luice J Agosta, 2005). In contrast to this study conducted in Ethiopia revealed high level of satisfaction of patient with nursing care at hospital setting and there were more female patients (74%) fully satisfied than male patients(69%) and age group 18 to 30 years were fully satisfied compared to participants 61 years and above(chaka,2005).

Davis and Bush (2003) reported between country differences in patient satisfaction with nursing care in the emergency department. American and Slovenian Patients reported greater satisfaction with nursing care than did the Australian patients. Between-country differences were also found in older patient's perception of autonomy, information dissemination, and opportunities to make decisions. Concerning daily activities, among the patients admitted in hospitals it was observed that hospitalization is associated with increased anxiety. It was also shown that post operative pain and anxiety continue to be problematic for patients after surgery. Therefore, it is expected that nursing care needs to be engaged and should provide individualized care that acknowledges the emotional, physical, spiritual, and environmental dimension of patients (Allen, et.al, 2002)

Patients satisfaction with nursing care and factors influencing satisfaction in a hospital in china report that patients with high level of education and high level of income showed greater satisfaction with nursing care than those who had less education and low income level (Luice J. Agosta, 2005 and Liu Wang, 2007). In contrast to this study conducted in Ethiopia and Saudi Arabia reflect that those who were illiterate and low income patients were more satisfied than educated and high income level (Abdullateef A, 2010 and Chaka, 2005)

2.1.2.2. PROVIDER RELATED FACTORS

Study in Saudi Arabia identified variable patient's experience of nursing care: 45% were satisfied with care provided while 55% were dissatisfied. About 94% liked nursing practice of keeping privacy of patients. Patients also felt nurses were excellent as they were very regular in routine vital signs checkup. When patients were asked about behavior, 90% were not feeling talking to nurses, 40% patients appreciated nursing skill while 84% patients had negative experiences as they observed nurses were not attentive to their needs, particularly at night. The same percentage also had negative perception with respect to physical conditions. Patients felt nurses were good at providing privacy when needed. Patients had very negative experiences about nurse's behavior. The interpersonal communication skill was poor. Nursing technical skill was also less than 60%. Majority of patients complained that nurses were not being sufficiently attentive to their needs. Nursing staff were not feeling their responsibility of cleanliness of patients, personal hygiene was totally ignored (Mohammad, Rasheed and, Saeed, 2007).

Patent satisfaction is determined by patients expectation regarding the health care they are about to receive and also their expectations based on care previously experienced. This involves individualized care, participation and involvement and continuity of care (Felesa Samuel 2009, sahawa, 2010 and Fekadu A et. al, 2001).

Improved communication with families may significantly increase their satisfaction about their hospitalized patients and patients experiences have also moderate to high level of satisfaction with many dimensions of nursing care. Patients are positively satisfied with privacy issues and routine checkup of vital signs and negative experience about nursing behavior, interpersonal communications and technical skill of nurses during their hospital stay. Especially nurse staff forgot about personal hygiene of patients (Mohammad, khan, Hassan and saeed, 2006).Patients complained about problems with information and education, coordination of care, respect for patients' preferences, emotional support, physical comfort, involvement of family and friends, and continuity and transition were reported in study conducted by Khan *etal.* 2006.

Study conducted in Kenya also shows high ratings for patient satisfaction are considered a desired outcome of health care. Patients expected nurses to be kind, friendly, knowledgeable, responsive, but did not expect nurses to be rude and harsh to them. Majority had positive experience of nursing care. Patients felt that nurses were not usually providing explanation on treatment and procedures. Patients were not usually asked for informed consent. Nurses were not satisfied with the information provided about their conditions and treatment by nurses (Elwin, 2012).

2.1.2.3 INSTITUTIONAL ASPECTS

(WHO, 200 and Niedz, 1998), Organizational and environmental factors that influence patient satisfaction include cleanliness and comfort of the room, noise (discipline of the room, fellow patients), availability of water, ward management, admission and discharge procedure and privacy of the room (Johansson, 2002 and Dzomeku, V M; Ba-Etilayo and Tuluku, (2013), Abida, April ,2010)

2.1.2.4. THE SITUATION IN ETHIOPIA

In Ethiopia like other study conducted in different sectors of the world, socio demographic factor of patients, technical skill and competency of provider, nature of care provided, environmental and organizational factors, communication and information, interpersonal relationship, maintaining dignity and privacy, emotional support and empathy are identified to be the leading predictors of patient satisfaction with nursing care(Fekadu A et al, 2001,Girmay A, 2006, chaka, 2005 and Berhanu et .al, 2010).

According to study conducted in Ethiopia that overall ratings of satisfaction with nursing care were 67% in Addis Ababa public hospital, report from Tigray zonal hospitals reveled satisfaction level of 43.60%, 55% in Gondar teaching hospital and 77% in Jimma university hospital from previous study (Fekadu A,et al, 2001,Girmay A,2006 and chaka,2005). In Addis Ababa public hospitals Patients were more satisfied with the amount of freedom in the ward ,technical capacity of the nurses ,treatment as an individual, manner in which nurses treat and nurses helpfulness and less satisfied with the amount of information given from nurses about their condition and treatment. And the amount nurses knew about patient care(47%), the way nurses explained things to patients (52%) how willing nurses were to respond to patients request(53%) and nurses awareness of patients needs (56 %) were aspects nursing services given low satisfaction score(Chaka,2005).

2.2. THEORETICAL FRAMEWORK

The study will be based on the king's theory of Goal attainment. The major element so king's middle range theory of Goal attainment are seen in the interpersonal system which requires understanding of the concepts of communications, interactions and role. Stress/stressors transaction

A. Interaction: acts of two or more persons in mutual presence.

B. Communications: information processing, a change of information from one state to another

C. Transaction, a process of interaction between a person and another person or the person and the environment to achieve goals that is valued.

Kings theory of nurses patient interaction states that nursing is viewed as, "interpersonal process of action, reaction, interaction, and transaction, whereby nurse and patient share information about their perceptions in the nursing situation and as process of human interaction, between nurse and patient, whereby each perceives the other and the situation, and through communications, they set goals, explore means and agree on means to achieve goals" according to kings theory ,perception had been described as a process in which data obtained through this senses and from memory are organized, interpreted and transformed and leads overall satisfaction of the situation i.e. nursing care in our case . This process of human interactions with the environment influences behavior, provides meaning to experience, represents the individuals image of reality and learning. Communications represent and is part of, the information aspect of interaction and may occur within a person as well as between people. Transaction represents the aspect of human interaction in which value are apparent and involve compromising, conferring and social exchange. When transactions occur between nurse and clients, the goals are attend, patient is satisfied and quality is maintained. This theory was used because it simply incorporate/states how nurse patient interaction and the environment and how different factors contribute to the patient satisfaction and quality of health care

1.3. CONCEPTUAL FRAMEWORK

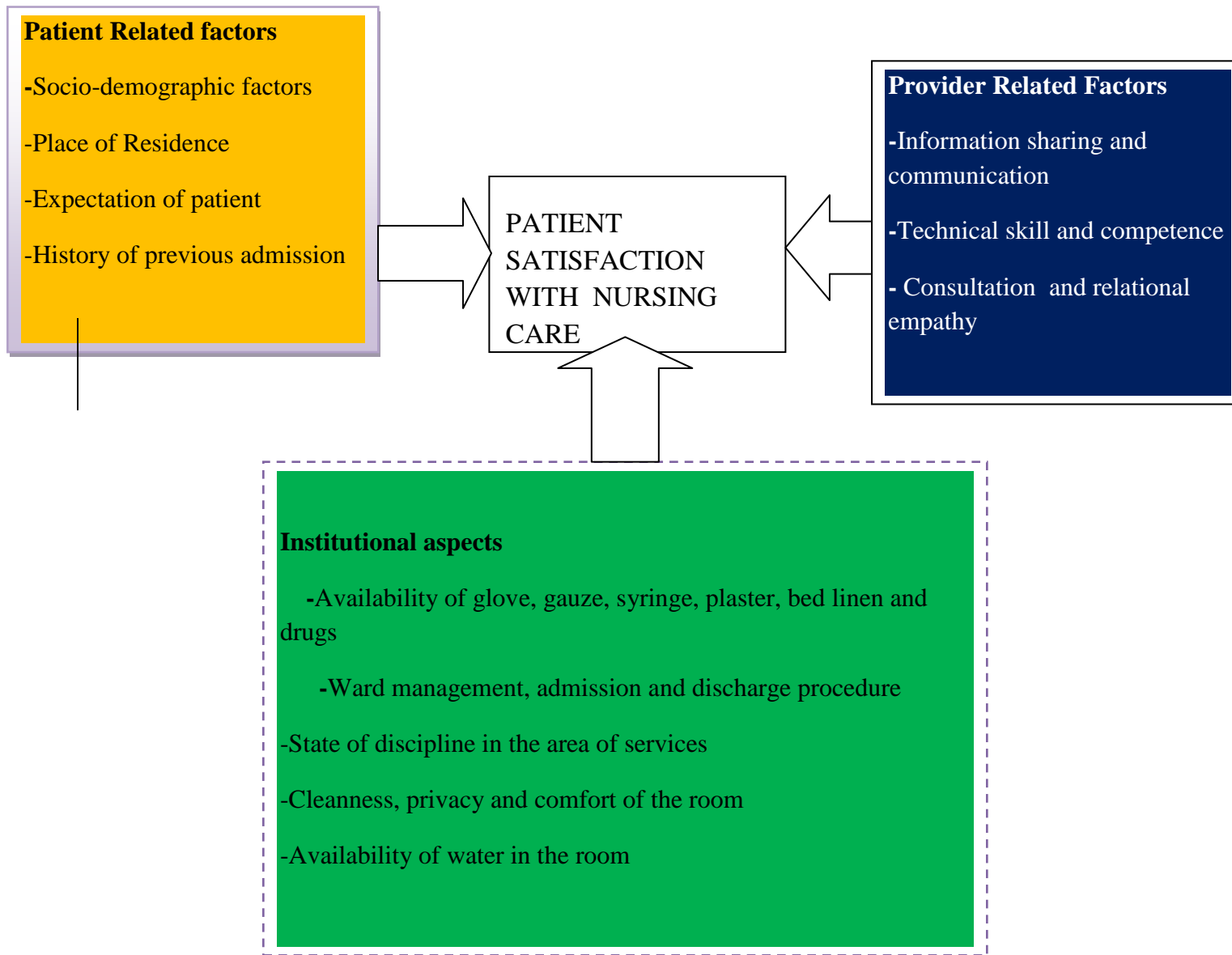


Figure.1. Conceptual frame work of patient satisfaction on nursing care.

CHAPTER THREE

3.1. OBJECTIVES

3.1.1. General objective

To assess in-patient satisfaction with nursing care and determinant factors at Jimma university specialized hospital.

3.1.2. Specific objectives

To measure the patient satisfaction score with nursing care among in-patients

To identify predictors of patient satisfaction score with nursing care among in-patients

CHAPTER FOUR: METHODS AND MATERIALS

4.1. STUDY AREA AND PERIOD

The study was conducted in Jimma Hospital (JUSH), Medical, Surgical, Ophthalmology, Gynecology, Maternity and Pediatrics wards from March 25 to April 25, 2014. Jimma university specialized hospital is found in Jimma town. The town is located 365kms southwest of the capital Addis Ababa. The town has characteristic of tropical highland climate condition, heavy rain fall, warm temperature and long wet period. The hospital serves a total of around five million populations in southwest of Ethiopia with total of 503 beds of which 409 beds included in the study ward with monthly bed occupancy rate of 95% and average hospital stay of 12 days. The hospital has 365 nurses and three shifts within 24 hours in which one nurse is responsible to do one shift out of three shifts. Accordingly admitted individual patients get help from at last three different nurses per day under supervision of two nursing supervisors in each ward.

4.2. STUDY DESIGN

Facility based cross sectional study design was employed.

4.3. SOURCE POPULATION

The source population included all in- patients admitted to the medical, surgical, ophthalmology, Maternity, Gynecology and Pediatrics wards of Jimma university hospital.

4.4 STUDY POPULATION

The study population was comprised of a sample of in-patients admitted to the medical, surgical, ophthalmology, Maternity, Gynecology and Pediatrics wards of Jimma University hospital during the study period.

4.5. ELIGIBILITY CRITERIA

The patients recruited for the study were those who were in stable condition and fully conscious, stayed in the ward for two or more days and were not treated in the private wing of the hospital.

4.6 SAMPLE SIZE DETERMINATION

The sample size was calculated using single population proportion formula as follows;

$$n = \frac{(Z_{\alpha/2})^2 P (1-P)}{d^2}$$

Where; n=the desired sample where population > 10 000

z=standard normal deviate (1.96) corresponding to 95% confidence limit

d=degree of precision usually set at 0.05

p = 0.67 obtained from overall in-patient satisfaction score on nursing care in Addis Ababa Public Hospitals.

$$n = \frac{1.96^2 * 0.67(1-0.67)}{0.05^2} = 340, \text{ plus } 10\% \text{ none response rate}$$

$$n = 374$$

4.7 SAMPLING PROCEDURE

The study used simple random sample technique. This technique was chosen since we had a sample frame containing the list of all in-patients who were part of the source population. The total sample of in-patients required for the study was proportionally allocated to each ward based on number of beds in these wards. A list of all bed number were obtained from each ward through the help of ward registers nurse in-charge and then selects bed number of those patients by generating random numbers using SPSS.

4.6 DATA COLLECTION TOOL AND MEASUREMENTS

Semi-structured interview questionnaire to conduct exit interview were adapted as follows after reviewing similar studies;

Perceived technical competency

Perceived technical competency of the provider is the subjective judgment of the patients about the professional skills and abilities of the health care provider to detect and manage their problem. It was measured by 8 items. Each item was scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) which yields a score range of 8-40. The scale has high internal consistency (Cronbach's $\alpha = 0.920$) KMO value of 0,902. The items cover physical examination, procedural steps to arrive at what is wrong, experience of the provider, etc. The items of the scale were subjected to factor analysis to look into the underlying components. Accordingly, one factor with eigenvalue greater than one was identified and it accounts for 64.288% of the total variance.

Consultation and Relational Empathy (CARE)

The Consultation and Relational Empathy tool measures the patient's perception of the provider's empathy during the clinical encounter. Within the CARE tool patients were asked 7 questions to rate each item of empathy. Each item was scored on an ordinal scale from "strongly agree to strongly disagree". All seven items taken together yield a maximum score of 35 and a minimum of 7. Higher score on each item indicates higher level of empathy. These 7 items were based on the following questions: Making you feel at ease, letting you tell your story, really listening, being interested in you as a whole person, fully understanding your concerns, being caring and compassionate, being positive. The reliability coefficient (Cronbach's alpha) of the empathy scale was 0.909 indicating that the scale was internally consistent and KMO value of 0.915. To examine the underlying factors (components) of the empathy scale, an exploratory factor analysis was conducted and produced one meaningful factor with eigenvalue greater than one. This factor accounted for 64.811% of the total variance and thus the remaining factors of the empathy scale were discarded during the linear regression analysis.

Information sharing and communication

Seven items on five point Likert scale ranging from strongly disagree to strongly agree was used to measure to what extent patients were satisfied with how nurses were communicate with them in the process of providing necessary information. These items had high internal consistency with cronbach's alpha of 0.831 and KMO value of 0.860. All seven items taken together yield a maximum score of 35 and a minimum of 7. Higher score on each item indicates higher level of satisfaction. These 7 items were based on the following questions; I am very satisfied with how nurses welcoming me on my admission, Completely satisfied with how nurses introduce themselves to me, Very satisfied about how nurses orient me on the ward environment and regulations, very satisfied with how nurses inform me about my disease condition, Very satisfied with how nurses communicate to me about my nursing care, Completely satisfied with how nurses inform me about my medications and treatment procedures and Completely satisfied with how nurses listen to my worries and opinion about my treatment. The items of the scale were subjected to factor analysis to look into the underlying components. Accordingly, one component with eigenvalue greater than one was identified and it accounts for 64.89% of the overall variance and thus the remaining factors of the empathy scale were discarded during the linear regression analysis.

Institutional Aspects

An institutional aspect of the services refers to the environment in which nursing services were carried out and necessary materials needed to deliver nursing services. Accordingly seven items on five point Likert

scale ranging from strongly disagree to strongly agree were used to measure to what extent patients were satisfied with services environment and availability of materials. These items had high internal consistency with Cronbach's alpha of 0.726 and KMO value of 0.777. All seven items taken together yield a maximum score of 35 and a minimum of 7. Higher score on each item indicates higher level of satisfaction. These 7 items were based on the following questions; I 'm satisfied with availability of supplies. I'm satisfied with ward management and admission procedure, I'm satisfied with state of discipline in the room, I'm satisfied with cleanness and comfort of the room, I'm satisfied with privacy of the room, I'm satisfied with supply of power, food and water supply of the room satisfied with comfort of my bed. These items of the scale were subjected to factor analysis to look into the underlying components. The item refers to availability of supplies was discarded because the communality value of this item was less than the initial value. Once again the remaining six items were subjected to factor analysis. Once again item referring about ward management and admission procedure loaded on both components by more than 0.4(complex structure) which suggest this item to be avoided from the analysis. For the third time the remaining five items subjected to factor analysis, accordingly, two components with eigenvalue greater than one were identified but scree plot suggests only to extract one factor which accounts 58.76% of the overall variance with KMO value of 0.737.

Measuring overall Patients' Satisfaction

Overall patient satisfaction was measured with five items. Moreover, one factor was extracted from a scale of five items (Cronbach's alpha value of 0.939) and 0.827 measure of sample adequacy to measure patient satisfaction among in-patients of Jimma University specialized Hospital. The items in this scale include: "I am totally satisfied with the nursing care", "Something about my nursing care should better", "I am not completely satisfied with my nursing care", "I would come back to this institution" and "I would send my friends or relatives to this institution". However, when factor analysis was computed, only one factor with eigene value greater than one was identified. This item renamed as (" Totally satisfied with nursing care in this hospital") explained 80.22% of total variance of satisfaction among these patients'.

4.8 DATA QUALITY ASSURANCE

Quality of data was assured through careful adaptation of data collection instruments from similar studies. Pretest was done on sample of 20 patients from Shenan Gibe Hospital. Data was collected by 12th complete carefully trained data collectors those who were not giving nursing services. The questionnaire was translated to Afaan Oromo and Amharic language for interview. Participants was asked whether or

not able to identify nursing staff from other health professionals and data collector explained the activities of nursing staff before interview was conducted which help patient to identify them. Participants were asked to rate their satisfaction with different aspects of nursing care by only selecting one number that represent their opinion on the scale for each item. Data collection procedure was checked frequently through close supervision and frequent checking of information collected for its consistency on the same day by coordinator and principal investigator. Coding and data cleaning was done for each item after data collection has been completed.

4.9 VAIRABLE UNDER STUDY

4.9.1 Independent variables

Socio demographic factor

Expectation of patients

History of previous admission

Consultation and relational empathy

Information sharing and communication

Perceived technical competency/ professional skill

History of hospitalization

Ward management, admission procedure

State of discipline in the area of services

Cleanness, privacy and comfort of the room

Availability of water in the room

4.9.2 Dependent variable

Patient satisfaction score

4.10. DATA MANAGMNET AND ANALYSIS

Data were checked for completeness and were entered into EPI-DATA version 3.1. After double entry verification, the data were exported to SPSS version 16.0 for analysis. The data were explored using descriptive analyses to clean data entry errors. Factor scores were created and were used in the subsequent analysis. Hierarchical multiple linear regression analysis was conducted to identify significant predictors of patient's satisfaction with nursing care after controlling for other independent variables. Socio-demographic variables were entered into the first linear regression model in similar way variables related to duration and history of previous admission, technical competency, consultation and relational empathy, communication and information sharing and institution related factors were entered into the different

model separately. The variables found to be significantly associated with the dependent variable in the preceding models were entered into a final model. Enter method was employed to enter variables into the final model. The assumptions in multiple linear regressions (linearity, normality and multi-co linearity) were checked.

4.11. .ETHICAL CONSIDERATION

Ethical clearance was obtained from Jimma University ethical review committee to protect the right and welfare of participants and to minimize risk of physical and mental discomfort, harm or dangers from research procedures. The principal investigator ensured that all the data collectors' were trained on professionalism, ethics and participant rights through training. Permission is granted from Jimma University specialized hospital and ward in charges nurses to access the participant's .The purpose of the study was clearly explained for the study subject, and written consent was obtained from each study participants.

4.12 OPERATIONAL DEFINATION

Nursing care: Health care services provided by nurses that meet patient's physical and psychological

Patient satisfaction score with nursing care: is defined as the patient opinion of the care received from nursing staff and is acknowledged as an outcome indicator of the quality of nursing care and assessed using five items on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

5, CAPTER FIVE RESULT

5.1 Socio-demographic Characteristics of the Respondents

A total of 368 in-patients were interviewed yielding a response rate of 98.4%. Out of 368 respondents 197(53.5%) were males. The median age of the respondents were 35 years with range of 18-75, with regard to their religion 213(57.9%) were Muslim while 80(21.7%) and 56(15.2%) were orthodox and protestant respectively. One hundred ninety seven (53.5) of the respondents resides in the rural, with regard to their marital status 231(62.8%) were married while 78(23.6%) were single. Two hundred and eight (56.5%) of the respondents were Oromo and 72(19.6%) were Amhara while 34(9.2%) of them were gurage. Concerning educational status of the respondents 99(26.9%) can't read and write and 85(23.1%) were grade1-6 74(20.1%) and 73(19.8%) , read and write and diploma and above respectively. With regard to occupation of the respondent 105(28.5%), 88(23.9%), 60(16.3%) 48(13%) and 37(10.1%) were farmers, house wife's, merchants, governments employee and students respectively. One hundred six

(28.8%) earn monthly average income of 200 and below ETB while 60(16.30%) of respondents earn monthly average income of 201-350 ETB. The median hospital stay of respondents was 12 days with range of 2-270 days. One hundred twenty two (33.2%) of the respondents have history of previous admission in similar hospital.

Table 1. Socio-demographic characteristics of patients at Jimma University specialized hospital, south west Ethiopia April 2014.

Variables	frequency	%	Variables	frequency	%
Sex			Educational status		
Male	197	53.3	Can't read and Wright	99	26.9
Female	171	46.5	Can read and Wright	73	19.6
Religion			1-6	85	23.1
Muslim	213	57.9	1-12	74	20.1
Orthodox	80	21.7	Diploma and above	37	10.1
Protestant	56	15.2	Occupation		
Catholic	14	3.8	Farmer	105	28.5
Residence			House wife	88	23.5
Rural	197	53.5	Merchant	60	16.3
Urban	171	46.5	Gov't employee	48	13.0
Marital status			Student	37	10.1
Married	231	62.8	Age category		
Single	87	23.6	15-24	58	15.8
Widowed	26	7.1	25-34	117	31.8
Divorced	17	4.6	35-44	75	2.4
Ethnic group			45-54	55	14.9
Oromo	208	56.5	55 and above	63	17.1
Amhara	72	19.6	History of previous admission		
Gurage	34	9.2	yes	120	33.2
Others	36	9.8	No	248	66.8
Income			Duration of hospitalization		
≤ 200	106	28.80	≤ 12	197	56.2
201-350	60	16.30	>12	171	43.8
351-799	82	22.28			
≥ 800	85	23.28			
Didn't give inform,	35	9.5			

5.2 Socio demographic characteristics as predictors of patient satisfaction score

The relationship between socio-demographic variables and satisfaction factor score is quantified in table 2 below. Socio-demographic variables were found to explain only 1.6% of the variability in the satisfaction factor score. In this model, marital status and religion appeared to be statistically associated with satisfaction factor score at P (<0.05). Accordingly satisfaction score of protestant respondents was increased by an average of 0.427 at P (<0.05) and 95% confidence level of (0.100 to 0.754) as compared to their Muslim counterparts. Respondents who didn't respond to their marital status had 1.003 units less satisfaction score when compared to their married counter parts at P (0.05) and with 95% confidence level of (-1.743 to -0.264). Monthly income was left from the analysis since it was collinear with age. With regard to history of previous admission and duration of hospital stay; none of them were associated with patients satisfaction score.

Table 2. Socio-demographic predictors of patients satisfaction score at Jimma University hospital, south west Ethiopia April 2014

Variables	frequency	%	B	P-value	95% CI for β
					UB LB
Sex					
Male**	197	53.3			
Female	171	46.5	0.11	0.6264	(-0.088 0.320)
Religion					
Muslim**	213	57.9			
Orthodox	80	21.7	-0.227	0.162	(-0.546 0.092)
Protestant	56	15.2	0.427	0.011	(0.100 0.754)
Catholic	14	3.8	-0.504	0.074	(-1.058 0.049)
others	5	1.358	-0.016	0.975	(-0.923 0.892)
Residence					
Rural	197	53.5	-0.04	0.698	(-0.185 0.508)
Urban**	171	46.5			
Marital status					
married	231	62.8			
Single	87	23.6	0.031	0.903	(-0.428 0.538)
widowed	26	7.1	0.051	0.814	(-0.375 0.473)
divorced	17	4.6			
others			-1.003	0.008	(-1.743 -0.264)
Ethnic group					
Oromo**	208	56.5			
Amhara	72	19.6	-0.100	0.533	(-0.417 0.216)
Gurage	34	9.2	-0.008	0.969	(-0.393 0.378)
Others	36	9.8	0.62	0.396	(-0.214 0.539)
occupation					
Farmer**	105	28.5			
House wife	88	23.5	0.032	0.804	(-0.225 0.290)
Gov'nt employee	60	16.3	0.005	0.976	(-0.310 0.320)
Merchant	48	13.0	-0.095	0.519	(0.385 0.195)
student	37	10.1	0.158	0.379	(-0.506 0.193)
others	5	1.43	0.274	0.158	(-0.107 0.655)
Educational status					
Can't read and write**	99	26.9			
Can read and write	73	19.6	0.028	0.42	(-0.244 0.299)
1-6	85	23.1	0.026	0.843	(-0.234 0.286)
7-12	74	20.1	0.095	0.488	(-0.175 0.360)
Diploma \$above	37	10.1	0.254	0.154	(0.604 0.096)
Age			-0.002	0.619	(-0.009 0.006)

*Reference groups with highest frequency

5.3 Overall patients satisfaction score

Mean scores (as the percentages of maximum scale scores) of in-patients satisfaction with nursing care was 57.2%. The raw mean score patient satisfaction was 16.44 \pm 5.3997 with possible value range of 5 to 25. Two hundred twenty one (60.1%) of respondents agreed or strongly agreed with overall satisfaction on nursing care where as 102(27.7%) were disagreed or strongly disagreed and the rests 12.2% were in different.

The response of in-patients to overall satisfaction items of nursing care at Jimma University Teaching Hospital, South west Ethiopia.

Variables	SDA	DA	NEUTRAL	AG	SA
Totally satisfied with nursing care	27(7.3)	75(20.4)	45(12.2)	132(35.9)	89(24.2)
Nursing care I receive should have been better	16(4.3)	122(33.2)	110(29.9)	75(20.4)	45(12.2)
Completely not satisfied with nursing care	19(5.2)	96(26.1)	33(9.0)	133(36.1)	87(23.6)
Would come back in future	33(9.0)	57(15.1)	102(27.7)	108(29.3)	68(18.5)
Would send friends or relatives in future	43(11.7)	62(16.8)	105(28.5)	102(27.7)	56(15.2)

5.4 Interaction with the nurses and institutional aspects

Two hundred twenty seven (61.7%) of respondents agree or strongly agree with perceived technical competency of nurses and while 65(17.6%) of respondents disagree or strongly disagree with technical competency of nurses but 76(20.7%) of them were in different regarding technical competency. Similarly, 198(53.85), 70(19.0%), and 100(27.2%) of respondents were agree or strongly agree, disagree or strongly disagree and in different with perceived consultation and relational empathy of nurses. With regard to communication and information sharing of nurses to patients 140(40.2%) of respondents were agree or strongly agree where as 101 (27.41%) of them were disagree or strongly disagree and 119(32.3%) of them were indifferent about the information shared and how the information were shared to them. Three hundred and thirteen (84.7%) of respondents agree or strongly agree and 47(12.8%) were in different with cleanses and comfort of the room while, 161(43.8%) were disagree or strongly disagree and 105(28.5%) were strongly agree or agree about privacy of the room and the one with which less agree compared to others

The response of in-patients to perceived technical competency items of nursing care at Jimma University Teaching Hospital, South west Ethiopia.

	SDA	DA	NEUT	AG	SA
Nurses examined me very thoroughly	6(1.6%)	59(16%)	76(20.19)	118(32.1%)	109(29.6%)
Nurses carefully checked every thing when examining me	8(2.2%)	65(17.7%)	99(26.9%)	99(26.9%)	97(26.4%)
Nurses does everything needed to arrive what is wrong with me	7(1.9%)	75(20.41%)	69(18.8%)	130(35.5%)	78(23.6%)
Nurse is competent and well trained	1(0.5%)	28(7.6%)	125(34.0%)	118(32.1%)	96(26.1%)

Nurses understand how I was ill	16(4.5%)	76(20.7%)	100(27.4%)	107(29.1%)	69(18.8%)
Nurses explained well what is wrong with me	35(9.5%)	52(14.1%)	113(30.7%)	69(18.2%)	101(27.4%)
Nurses care provider I have seen lacks experience with my medical problems	69(18.8%)	100(27.2%)	108(29.3%)	80(21.7%)	11(3.0%)
I have some doubts about the ability of nurse who took care of me	83(22.6%)	97(26.4%)	70(19.0%)	99(26.9%)	19(5.2%)

The response of in-patients to perceived consultation and relational empathy items of nursing care at Jimma University Teaching Hospital, South west Ethiopia.

Variables	SDA	DA	NEUTRAL	AG	SA
Making you feel at easy?	1 (0.3%)	40 (10.9%)	73 (19.8%)	130(35.3%)	124(33.7%)
Letting you tell your “story”?	7 (1.9%)	76 (20.7%)	115(31.2%)	77(20.9%)	93(25.3%)
being interested in you as whole person	10 (2.7%)	65 (17.7%)	108 (29.3%)	110(29.9%)	75(20.5%)
Really listening?	10 (2.7%)	57 (11.5%)	84(22.8%)	127(34.5%)	90(24.5%)
Fully understand your concerns?	20 (5.4%)	50 (13.6%)	100(27.2%)	115(31.2%)	83(33.6%)
Showing care and compassion?	15 (4.1%)	49 (13.3%)	83(22.6%)	135(36.7%)	86(23.4%)
Being Positive?	15 (4.1%)	16 (4.3%)	64(17.4%)	141(38.3%)	132(35.9%)

The response of in-patients to perceived communication and information sharing items of nursing care at Jimma University Teaching Hospital, South west Ethiopia.

Variables	SDA	DA	NEUTRAL	AG	SA
I am very satisfied with how nurses welcoming me on my admission	4(1.1)	26(7.1)	63(7.1)	137(37.2)	138(37.5)
Completely satisfied with how nurses introduce themselves to me	108(29.3)	86(23.4)	61(16.6)	68(18.5)	45(12.2)
Very satisfied about how nurses orient me on the ward environment and regulations	13(3.5)	61(16.6)	106(28.8)	116(31.5)	72(19.6)
Very satisfied with how nurses inform me about my disease condition,	20(5.4)	81(22.0)	119(32.3)	80(21.7)	68(18.5)
Very satisfied with how nurses communicate to me about my nursing care	54(14.7)	99(26.9)	102(27.7)	56(15.2)	57(15.50)
Completely satisfied with how nurses inform me about my medications and treatment procedures	7(1.9)	30(8.2)	84(22.8)	150(40.8)	97(24.6)
Completely satisfied with how nurses listen to my worries and opinion about my treatment	16(4.3)	55(14.9)	109(29.6)	101(27.4)	87(23.6)

The response of in-patients to perceived institutional aspects items of nursing care at Jimma University Teaching Hospital, South west Ethiopia.

Variables	SDA	DA	NEUTRAL	AG	SA
I am satisfied with availability of medical supplies	----	53(14.4)	167(45.)	97(26.4)	51(19)
I’m satisfied with ward management and admission procedure	17(3.0)	23(6.2)	59(16.0)	164(45.6)	111(30.2)
I’m satisfied with state of discipline in the room	----	5(1.4)	36(9.8)	154(41.8)	173(47.0)

I'm satisfied with cleanness and comfort of the room	4(1.1)	5(1.4)	46(12.5)	140(38.0)	173(\$7.0)
I'm satisfied with privacy of the room	-----	161(43.8)	102(27.7)	66(17.9)	39(10.6)
I'm satisfied with supply of power, food and water supply of the room	12(3.3)	14(3.8)	52(14.1)	172(46.7)	118(32.1)
Satisfied with comfort of my bed	-----	6(1.6)	51(13.9)	157(42.7)	154(41.8)

5.5 Interaction with the nurses and institutional aspects as predictors patients satisfaction score

In this study mean scale score of perceived technical competency score found to be 59.05%. And also has average raw mean score of 28.125 ± 7.2115 with possible value range of 8 to 40.

The components which constitute perceived technical competency was interred in the third model and this model explained 48.4% of the variation in satisfaction score among patients and it was significantly associated with patient satisfaction score at $p (<0.05)$ and 95% confidence level of (0.624, 0.771). Perceived technical competency has positive effect on patient's satisfaction. Accordingly, a unit increase in perceived technical competency increases patient satisfaction by 0.698.

Mean scale score of perceived consultation and relational empathy was found to be 62.391% and has average mean raw score of 25.597 ± 6.0996 with value range of 7 to 35. The component that constitutes the consultation and relational empathy was renamed and interred in to the fourth model and its importance in predicting patient satisfaction was checked. This model explained 50.2% variation in patient satisfaction score among in-patients. And thus it was significantly associated with patient's satisfaction score at $p (0.05)$ and 95% confidence level of (0.636 to 0.780). Similar to perceived technical competency it has positive effect on patient satisfaction score. Accordingly, a unit increase in consultation and relational empathy of provider increases satisfaction score by 0.708.

Mean scale score of perceived communication and information sharing to the patients in this study was found to be 57.7496% and has average raw mean score of $23.5924 \% \pm 5.693$ with value range of 7 to 35. The factors extracted to explain the influence of how nurses communicate and share information to the patients on satisfaction score was interred in to fifth model. This model explained 46.1% variability in satisfaction score. This factor was significantly and positively associated with satisfaction score at $p (0.05)$ and 95% confidence level of (0.608 to 0.759), accordingly as way of communication and information sharing of providers improved by a unit the patient's satisfaction score was improved by 0.683 units.

From the items we used to measure perceived instructional aspects of nursing care the extracted factor from clustered item was entered in the last model and this model explained 3.0% of variability in the patients satisfaction score. Mean scale score of perceived institutional aspect in this study was found to be of 75.9197% and average raw mean score of 16.869 ± 2.426 with possible value range of 4 to 20. And also institutional aspects were significantly associated with and have positive effect on patient satisfaction score. Accordingly a unit increase in perceived institutional aspects improves satisfaction score by 0.179 at $p < 0.05$ and 95% confidence level of (0.078, 0.279).

5.6 Predictors of patient satisfaction score with nursing care

Table 5 shows the regression estimates and the relative effect of each predictor variable for patient satisfaction score with nursing care. Only variables which had significant association with patient satisfaction score were displayed in the table. The final model explained 63.8% of the variation in patient satisfaction. As shown in table 5 perceived technical Competency, Information sharing and communication and perceived consultation and Relational empathy were strong predictors of patient's satisfaction. For example, as nurses perceived technical competency increased by a unit patient's satisfaction score increases by an average of 0.238 at $p < 0.05$ and (95% CI, 0.048 to 0.428). Regarding information sharing and communication its increment by a unit increases patients satisfaction factor score by 0.449 unit (95% CI, 0.248 to 0.650). With perceived consultation and relational empathy, as perceived consultation and relational empathy of patients on provider increase by a unit patients satisfaction factor score increase by 0.222 unit (95% CI, 0.014 to 0.429).

Table 5 Predictors of patient satisfaction with nursing care at Jimma University specialized hospital, south west Ethiopia

Variables			Unstandardized Coefficients		Standardized Coefficients	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta	Beta	Lower Bound		Upper Bound	
Religion								
Muslim *	213	57.9						
Protestant	56	15.2	-0.121	0.171	0.061	0.482	-0.221	0.464
Orthodox	80	21.7	0.352	0.291	0.135	0.641	-0.123	0.640
Catholic	14	3.8	-0.611	0.435	-0.123	0.165	-1.48	0.258
Others	5	1.4	-0.969	0.557	-0.058	0.072	-1.929	0.130
Marital status								
Married*	231	62.8						
Single	87	23.6	-0.080	0.168	-0.040	0.638	-0.416	0.257
Divorced	17	4.6	-0.339	0.286	-0.107	0.241	-0.911	0.234
Widowed	26	7.1	0.759	0.270	0.221	0.720	0.220	1.298
Others	7	1.9	-1.555	0.453	-0.312	0.102	-3.461	-0.65
Perceived technical competency			0.222	0.105	0.215	0.037	0.014	0.429
Perceived information sharing and communication			0.449	0.101	0.436	0.0001	0.248	0.650
Perceived institutional aspects			-0.182	0.137	-0.179	0.187	-0.452	0.089
								0.314
Perceived consultation and relational empathy			0.238	0.096	0.232	0.014	0.048	0.428

*reference group, those with high frequency of observations were used

6. CHAPTER SIX DISCUSSION

Nursing care is a key determinant of overall patient satisfaction during hospital admission. Patients' comments suggest that number of concerns must be addressed. And it is also an important way of evaluating nursing practice in most developed countries. It has also to be practiced in developing countries like Ethiopia. This study may contribute something in this area. The nurses need to know what factors influence patient satisfaction, if we must improve the quality of health care. Satisfaction studies can

function to give providers of care some idea of how they would have to modify their provision of services in order to make their patients more satisfied. Satisfied patients usually trust their health care providers, and as a return they comply with medical and nursing orders. Then, eventually, the patient's healing process is enhanced and at the same time, they disseminate their experiences to others which increase the number of clients who uses the services. If not satisfied the opposite may happen. In this study the overall rating of satisfaction mean score as a percentage was 57.2% which was low compared to other studies [Burhans L.M and Alligood,(2010), Chaka B. (2005), Connell B, and Young, (1999)]. For example study done in Addis Ababa in community hospital overall rating of in-patients satisfaction with nursing care at hospital setting was 67% which is slight higher than in this study[Chaka B. (2005)]. But it was higher compared to study conducted in Gondar and Tigry (Fekadu A,et al, 2001,Girmay A,2006).

Attempts made to identify determinants of patient's satisfaction at hospital setting depicted that perceived technical competency of the providers, perceived consultation and relational empathy, how nurses communicate to the patients and amount of information shared were found to be determinants of patients satisfaction score with nursing care. Most of these variables were also found to be determinants of patients satisfaction with nursing care at hospital setting in studies conducted else were [Chaka B. (2005), Connell B,Young J and Twigg D (1999)].

In this study perceived technical competency of the provider as mean scale score was 59.05% which is very similar with other study[Mohammad Khan, Hassan, (2006)], and also positive association with patients satisfaction[M AL Momani, H AL Korasky, (2012)]. And also found that 47.9% of the respondents strongly agree and agree with perceived technical competency of nurses which is lower than study conducted in Africa [Shawa. (2010), Chaka B. (2005) and Asres and Degefa, (1999)] When we look at perceived consultation and relational empathy it has positive association with patient's satisfaction in similar ways with other studies (Anderssoni. S. and Lindgrenm, (2013), Hala. H. sayed and had, (2013). Mean scale score as percentage of perceived consultation and relational empathy was 62.3% which was low compared with study done Iraq [Hala. H. sayed and had, (2013)]. In this study 53.8% of respondents were found to strongly agree and agree with perceived consultation and relational empathy of nusres which was low compared study conducted in South Africa [Felesia, (2009)].

How nurses communicate to the patients and the amount of information transferred by the nurses were positively associated with patient's satisfaction with nursing care [Hala. H. sayed and had, (2013). Asres and Degefa, (1999)]. Mean scale score as percentage of these variables were found to be 57.749% and 40.2% of respondents strongly agree and agree with amount information shared and how nurses communicate to the patients, which were almost similar with study done in Addis Ababa and lower compared to study conducted in Kenya.

Cleanses and comfort the room and privacy of the room had also positive association with patients satisfaction , Rafii F, Hajinezhad M.E. & Haghani H. (2008), and Samina M, Gadri G.J, Tabish S.A, Samiya M & Riyaz R. (2008). Mean scale score as percentage of perceived cleanses and comfort of the room was found to be 75.919 in this study which is very similar with other studies done else where [Anderssoni.S. & Lindgrenm.(2013) and Ahmad M.M. & Alasaad J.A. (2004)].

7. CHAPTER SEVEN CONCLUSSION AND RECOMMENDATION

7.1 CONCLUSSION

Nowadays most patients in our country complain about hospital services. To identify specifically which services cause dissatisfaction requires investigation. The patient may be relatively satisfied with the nursing care received but not be happy about the hospital food and the attitude of other workers, so nursing has to be separated out from the other aspects of the hospital experience and then broken down into various components, such as communication, comfort and attention to privacy and personal needs in order to achieve a valid measure of patient satisfaction Boureaux ED andO'Hea EL. (2004)

Our study indicated that equipping nurses with technical competency, how and amount of information required for the patients through training and building positive behavioral character of nurses through different advice and giving attention to institutional inspects that has in line with nursing services, were of paramount importance in increasing patients satisfaction with nursing care at hospital setting which is important in realizing fast healing process of the patients and efficient utilization of the services. Thus, examining the items with low patients' satisfaction will enable nurses to identify the defects in nursing care and to institute appropriate change. Items with high patients' satisfaction need to be maintained and enhanced by nurses.

Finally, this study may be the pioneer in its kind for our country and will be reinforce other researchers to do further studies in this area specifically to nursing care services.

7.2 RECOMMENDATION

The nurses need to know what factors influence patient satisfaction, if we have to improve the quality of health care. Followings are recommended to improve nursing performance quality;
Ongoing monitoring of patient satisfaction specific to nursing services,

Strengthened regarding skills training,

Communication skills should be emphasized specially nurse-patient communication,

Develop and test nurse-sensitive indicators that is related to patient satisfaction

Ensuring conducive environment with necessary materials in line with nursing services

Finally, nurses' job satisfaction environment will need to be improved, to enable nursing staff to dedicate themselves for serving the morbid and injured human beings.

Promotion of continued education, innovation and research in nursing care.

APPENDIX II REFERENCES

- 1, Abdullateef A. Alzolibani(2010). Patient satisfaction and expectations of the quality of service of University affiliated dermatology clinics. *Journal of Public Health and Epidemiology* Vol. 3(2), pp. 61-67, February 2011.
- 2, Ahmad M.M. & Alasaad J.A. (2004). Predictors of Patients Experiences of Nursing Care in Medical-Surgical Wards: *International Journal of Nursing Practice*, Vol. 10, Issue 5, pp.235-41.
- 3, Allen C., Carr E., Barrett R., Brockbank K., Cox C., & North N. (2002). Prevalence and Pattern of Anxiety in Patients undergoing Gynaecological Surgery: *Institute of Health and Community Studies Bournemouth University, Salisbury Health care NHS Trust*. <http://www.eprints.bournemouth.ac.uk/11680/1/Anxiety.pdf> visited on 20/1/2012.
- 4,AmericanMedicalAssociation(2006).ClinicalGovernanceIntroduction.<http://www.clinicalgovernance.scot.nhs.uk/section1/quityinhealthcare.asp>,
- 5, Anderssoni.S. & Lindgrenm.(2013) Perceptions of nursing care quality, in acute hospital settings measured by the Karen instrument. *Journal of Nursing Management* 21, 87–93.
- 6, Andreas Charalambous, George Efstathiou et, al 2013. Adult cancer patient’s satisfaction of nursing care. *Int J Health Plann Mgmt* (2013).
- 7, Birhanu et al.: Determinants of satisfaction with health care provider interactions at health centres in central Ethiopia: a cross sectional study. *BMC Health Services Research* 2010 10:78
- 8, Boureaux ED, O’Hea EL. Patient Satisfaction in the Emergency Department: a Review of the Literature and Implications for Practice. *JEM*. 2004; 26:13–26.
- 9, Burhans L.M. & Alligood M.R. (2010). Quality nursing care in the Words of Nurses: *Journal of Advanced Nursing*, Vol.66. Issue 8 pp1689-1697.
- 10, Chaka B. (2005). Adult Patient Satisfaction with Nursing Care. <http://www.aau.edu.cf> visited on 28/11/2011.
- 11, Connell B., Young J., & Twigg D (1999). Patient Satisfaction with Nursing Care: A measurement Conundrum. *International Journal of Nursing Practice*. Vol. 5 pp72-77.

- 12, Debono D, Travaglia J. 2009. Complaints and patient satisfaction: a comprehensive review of the literature. Centre for Clinical Governance Research, University of New South Wales, Sydney Australia. <http://clingov.med.unsw.edu.au>.
- 13, Elwin Shawa.(2010). patients' perceptions regarding nursing care. KNHplan@ken.healthnet.org. september, 2012
- 14, Federal democratic republic of Ethiopian population census commission, summary and statistical report of 2007 population and housing census," UNFPA, 2008.
- 15, Ghana Health Services (2004). Health Care Quality Assurance Manual: <http://www.ghanahp.org/fileadmin> visited on 6/12/2011
- 16, Hala Y. Sayed and, Hoda A. Mohamed et.al. Patients' Perceptions As Indicators of Quality of Nursing Service Provided At Al Noor Specialist Hospital at Makkah Al Moukarramah, KSA. *J Am Sci* 2013;9(5):71-78]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>.
- 17, Khan M.H., Hassan R., Anwar S., Babar T.S., & Babar K.S. (2007). Patient Satisfaction with nursing care. *Rawal Medical Journal*: Vol.32, Issue 1 pp 27-29.
- 18, M Al Momani, H Al Korashy et al.2012, Patient Experience of Nursing Quality in a Teaching Hospital, Iranian J Publ Health, Vol. 41, No.8, Aug 2012, pp. 42-49
- 19, Marija Zaletel , QUALITY OF NURSING CARE College of Health Studies, University of Ljubljana, Slovenia marija.zaletel@vsz.uni-lj.si
- 20, Mohammad Hussain Khan, Rasheed Hassan et.al.2007, Patient Satisfaction with Nursing Care. *Rawal Medical Journal*: Vol.32, No.1, Jan.-June, 2007.
- 21, Muhondwa E.P.Y., Leshabari M.T., Mwangu M., Mbembali N., & Ezekiel M.J. (2008). Patients Satisfaction at Muhimbili National Hospital in DaresSalaam, Tanzania: *East African Journal of Public Health*. Vol. 5 Issue 2 (internet source).
- 22, Nankumbi J. (2005). Patients' Attitude towards Satisfaction with the Quality of Nursing Care. *Makerere University Research Reporting*. <http://www.dspace.mak.ac.ug>. Visited on 28/11/2011.
- 23, Oljira, L., Gebre Selassie, S. (2001). Satisfaction with outpatient health services at Jimma Hospital, South West Ethiopia. *Ethiopian Journal of Health Development* 15(3):179-84.
- 24, Phil Buttell and Robert Hendler et.al (2007). Quality in Healthcare: Concepts and Practice. 9/8/2007, 611-394-V3-003.indd 68.

- 25, Rafii F, Hajinezhad M.E. & Haghani H. (2008). Nurse caring in Iran and its relationship with Patient satisfaction: *Australian Journal of Advanced Nursing*. Vol. 26. Issue2 pp 75-84
- 26, Samina M, Gadri G.J, Tabish S.A, Samiya M & Riyaz R. (2008). Patients' Perception of nursing care at Large Teaching Hospital in India: *International Journal of Health Sciences*. Vol.2. Issue.2 pp92-100
- 27, Tan ja P. Mathiesen, Morten Freil.2007.Do Patients Differentiate Between Aspects of Healthcare Quality? *Journal for Healthcare Quality Web Exclusive* Vol. 29, No. 1, pp. W1-3–W1-10 www.nahq.org/journal/online/
- 28, Tateke T, Woldie M, Ololo S. Determinants of patient satisfaction with outpatient health services at public and private hospitals in Addis Ababa, Ethiopia. *Afr J Prm Health Care Fam*
- 29, Tsegaye Asres and Legesse Degefa, (1999) “Patients’ Satisfaction on the nursing care in medical and surgical wards of Jimma Hospital”, *Ethiopian Journal of Health Sciences*, Vol. 9, No. 2
- 30, Virginia Henderson, (1978). The concept of nursing. *Journal of Advanced Nursing* 3, 113–130.
- 31, Walsh M, Walsh A (1998), **Evidence-based practice: is patient satisfaction evidence?** *Nursing Standard*, Aug. 26 / vol. 12/ no. 49
- 32, World Health Organization (2006), Quality of care: A process for making strategic choices in health system. http://www.who.int/management/quality/assurance/qualitycare_B.def.pdf. visited on 10/12/2011.