UNDERSTANDING PATIENT SATISFACTION: PREFERENCES, EXPECTATIONS AND PATIENT RIGHTS OF PRACTICE IN PUBLIC HOSPITAL SETTINGS OF AMHARA REGIONAL STATE, ETHIOPIA

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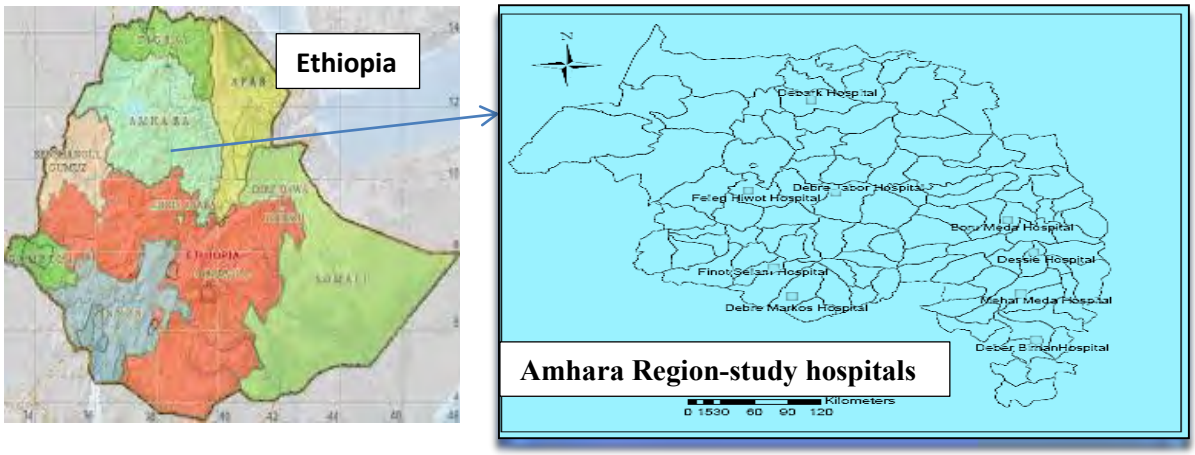

A Dissertation for the Degree of Doctor of Philosophy (PhD) in Public Health

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ADDIS ABABA UNIVERSITY
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A Dissertation submitted to the School of Graduate Studies of Addis Ababa University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy (Ph.D.) in Public Health

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DISSERTATION APPROVAL
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BY

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Lists of Original Papers

This dissertation is based on the following papers which are referred to text by their Roman numerals.

I. Berhane A. and Enquselassie F. Patients' preferences for attributes related to health care services at hospitals in Amhara Region, northern Ethiopia: a discrete choice experiment. *Patient Preference and Adherence* 2015; 9:1293-1301

II. Berhane A. and Enquselassie F. Patient Expectations and their satisfaction at hospitals in Amhara Region, northern Ethiopia (Accepted for publication, Patient preference and Adherence)

III. Berhane A. and Enquselassie F. The lived experience of patients on patient rights practice at hospitals in Amhara Region, northern Ethiopia. *Journal of Patient Intelligence* 2016;8:47-55

I. ACRONYMS and ABBREVIATIONS

AAU: Addis Ababa University
ANRS: Amhara National Regional State
AOR: Adjusted Odds Ratio
BPR: Business Process Re-engineering
BSC: Bachelor of Science
CHS: College of Health Sciences
C.I: Confidence Interval
CSA: Central Statistical Authority
DCE: Discrete Choice Experiment
Dr: Doctor
FMoH: Federal Ministry of Health
H: Hour
HSDP: Health Sector Development Program
IRB: Institutional Review Board
MPH: Master of Public Health
MRSs: Marginal Rates of Substitutions
No: Number
OPD: Out Patient Department
PhD: Doctor of Philosophy
PI: Principal Investigator
Prof. Professor
REC: Research and Ethical Committee
SE: Standard Error
SPH: School of Public Health
SPSS: Statistical Package for Social Sciences
USA: United States of America
UN: United Nations
USAID: United States Agency for International Development
WHO: World Health Organization

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IV. ABSTRACT

Background: Patient satisfaction has become an indicator and a standard part of evaluation of the health care system, despite its complex nature and multiple determinants of patient satisfaction. Health care now a day is a major service area for the people, thus it should satisfy its customers. There have been different mechanisms to enhance patient satisfaction. Adhere to services on patients' preferences, meeting expectations and health care practice based on patients' rights were among others. Making health care service more congruent with patients' preferences, expectations and patients' rights practice can be achieved through measurement and feedback of patients' satisfaction and interventions that address patient concerns. Even countries have guaranteed patients' rights to process for resolving dissatisfactions with health care providers. The implementation of patients' rights can increase patient satisfaction, as well as achieve equal distribution of responsibility between the patients, and health service providers. Thus research is needed to move forward with the structural changes regarding patients' value judgments in the health care service. Studies on patients' preference to use health care, patient expectation and patient rights practice as an important factor for patient satisfaction care rendered at health care facilities in the developing country context like Ethiopia are often neglected in health service researches and rarely subjected to scientific inquiry.

Objectives: The study aimed to examine patients' preference, expectations, and the lived experience of patients on patient rights practice as a factor of patient satisfaction at public hospitals in Amhara Region, northern Ethiopia.

Methods: The study was carried out in nine public hospitals of Amhara Region of Ethiopia. It was designed as a mixed method study in which both quantitative and qualitative data collection and analyses were employed. About 1005 participants in the out and in patient departments of general, medical and surgical departments were involved in the preference study which used Discrete Choice Experiment method. A stated-preference discrete choice experiment survey was performed among patients who visited the hospitals. Six attributes namely waiting time, physician communication, nursing communication, drug availability, continuity of care, and diagnostic facilities were selected based on a literature review of the most important characteristics of hospital health care service. These attributes were reviewed and validated with

inputs from patients and researchers in the field. Data were entered in SPSS Version 17 and analyzed using STATA version 12. A random-effects probit model was used to perform the analysis.

Regarding the quantitative Pre-and-Post consultation study of patient expectation, 776 participants were involved in the study. Data were collected on two occasions; about the expectations before consultation, and how their expectations were met and their satisfaction after the consultation. Data were entered and analyzed using SPSS Version 17. Means were computed for the overall and the sub categories of expectation items. Paired t-test and logistic regression analysis techniques were also employed.

For the qualitative study, data were collected using semi-structured interview from 22 patients who have had experience of health care service utilization in the hospital setting. The participants were selected purposively using maximum variation sampling technique based on criteria like age 18 and above years, both sexes, considering residence, educational status, and experience in the outpatient and inpatient departments. The interview (data) were tape-recorded, transcribed, translated, reviewed, and analyzed using an iterative content approach of phenomenographic researches. Open code software version 4.02 was used for data management. Main categories and sub categories were described. The outcome space was constructed based on main categories of patients' conceptions and ways of understanding the phenomenon of patient rights practice.

Results: The attributes included in the preference study; waiting time, physician communication, nursing communication, drug availability in the hospital pharmacy, continuity of care and diagnostic facilities had significant impact on participants' decisions in the choice of hospitals. The waiting time coefficient showed a negative value in the main effects model (β=-0.773, P=0.026) indicated a higher probability of choosing a hospital with less waiting time for a consultation. Patients were willing to wait up to 3.3 (MRS, 3.263 95%, CI: 1.387-5.139) hours and 2.7 (MRS, 2.66 95%, CI: 1.769-3.556) hours to get full drugs in the hospital and good nursing communication, respectively.

Preferences differ with sex occupation and type of hospitals. Farmers preferred a hospital with good nursing communication (β=0.089, P<0.05), and partial drug availability (β=0.101, P<0.05).

Participants with no jobs preferred a hospital with partial drug availability (β=0.150, *P*<0.05) and those patients who were from referral hospitals preferred a hospital that has continuity of care (β=0.081, *P*<0.05).

Patients expressed preferences in a decreasing order of all the significant attribute levels: a lot of diagnostic facilities, full drug availability, presence of continuity of care, good nursing communication, partial drug availability, good physician communication, and shorter waiting time for the consultation. A hospital with lots of diagnostic facilities was ranked at the top, which accounted for 65.9% of the log-likelihood. This was followed by full drug availability in the hospital, continuity of care, and good nursing communication collectively accounting for 23.5%.

According to Degner Scale to measure the preference in making decisions about medical care, 412(53.1% of participants expressed a desire for sharing responsibility for which treatment is best for them. This indicates patients prefer collaboration on medical decision. Of the 776 patients included in the study, 594 (76.5%) were satisfied with the global measure of patient satisfaction. Significant mean difference was reported in overall expectation between pre-consultation and post-consultation ($\bar{x}_1$ =39.62±10.27) to ($\bar{x}_2$= 47.34±14.45) with (t = -12.95, *P*<0.001).

The Multivariable logistic regression analysis showed that the probability of patient satisfaction is contingent on post consultation expectation score level. Higher score of post consultation met expectation scores, less likely satisfied. Participants with excellent to good self-perceived health status groups were 3.5 times (OR, 3.53, 95% CI; 2.27-5.49) more likely satisfied than fair to very poor self-perceived health status groups. Similarly, the odds of satisfaction were higher among participants who had a lot of perceived control on health compared with their counter parts. The odds of satisfaction were significantly lower among patients who were disappointed with the consultation (OR, 0.32, 95% CI; 0.22-0.47) compared to patients who were not disappointed. Similarly, the odds of satisfaction were lower among participants who had previous experience in health care service compared with their counter parts. Compared with patients that felt a lot of influence on the consultation, the odds of satisfaction was significantly lower (OR, 0.58, 95% CI; 0.37-0.91) to patients who do not felt a lot of influence on the consultation. The association with pre consultation expectation scores and age were not significant in the multivariable regression analysis.

The qualitative findings indicated patients described four qualitatively different main categories of patient rights practice. The main categories of description include: patient centered practice, being secured, respecting dignity and getting referral. Patient rights practice was understood from comprehensive to the lowest level hierarchically in the following order: patient centered practice, getting referral, respect dignity, and being secured.

Conclusion: Patient satisfaction can be understood from the perspective of patient preference, expectations and patient rights of practice. Changes to the diagnostic facilities of a hospital are likely to have the greatest impact on patients' preferences for hospital health care. Patient satisfaction had no relationship with pre-consultation expectations. But, it had relationship with post consultation met expectations. Based on the qualitative study, patient centered practice was a comprehensive way of illustrating patient rights practice in the hospital setting.

Recommendations: Health service providers and managers should focus on patient experience and work on their preferences to enhance patient satisfaction. Providers should also acknowledge patient rights practice in the health care continuum. Policy makers should draft a frame work which incorporates patients have the right to choose to consult a health service, and which one to consult. The health care should incorporate patient centered care in health care based on the values and standards established by the patient and the health profession. Health care ethics training both in the pre-service and in-service as well as ethical reasons in daily activities should get due attention. Furthermore, health care providers should also take part to identify situations that violates patients' rights and focused on to practice with their best effort. Future research on the preferences for health care in a specific hospital's department/ward may be important to elicit disease-specific preferences for hospital health care. Other studies which incorporate health service providers should be conducted to address the complete picture of patient satisfaction and the match in expectation and patient rights practice between patients and health service providers.

Key words: Patient preference, expectations, patient rights practice, hospital health care, patient satisfaction, Discrete Choice Experiment, Phenomenography

1. INTRODUCTION

1.1 Background of the study

Countries and International Organizations have reached an alarming increase in developing international statements and guidelines about ethics, equity and health system reform. When these statements and guidelines do not refer to specific places, times, people and condition, such thinking is of little interest in its application. All these trends in fact make the significance of health care research in the regional or local district health system more visible. Inside the organization, development in health is efficiently applied through health centers and hospitals, if health professionals realize these to take accountability both for attention of optimal health and for care of the sick in a given area population (1, 2).

Patient satisfaction has long been considered as an important component when measuring health outcomes and quality of care. The rising strength of consumerism in society highlights the central role patient's attitudes play in health planning and delivery. Furthermore, a satisfied patient is more likely to develop a deeper and long lasting relationship with their health service providers, leading to improved continuity of care, compliance, and ultimately better outcomes (3). Satisfaction influences whether a person seeks medical advice, complies with treatment and upholds an ongoing rapport with health care providers (4). Measuring expectations and experiences, the constructs underpinning satisfaction, proved to be more fruitful and more adequate to inform continuous improvement activities (5). Research indicates that patients are not generally in a position to comment on the technical quality of care (6). Patient experience measures are expected to supplement and enhance the measures of clinical outcomes and other measures of the process, outcomes and cost of safe quality care.

Patient satisfaction can be used for three key aims: First, considered as an outcome variable; Second, as a valuation of the quality of care and; third, as a gauge for deficiency in a service provision (7).

The health sector in Ethiopia follows a 5-year rolling plan as part of the national development plan. Since 1997–1998, four consecutive phases have been completed and currently the Federal

Ministry of Health (FMoH) is planning to implement health sector transformation plan. The health sector transformation plan considered health care as one of the crucial components of basic social services that has direct links to national growth and development and to social welfare. The health sector transformation plan gives emphasis on caring, respectful and compassionate health care which focuses on quality health care for patients (8).

1.2 Statement of the problem

Different studies in Ethiopia reported varying level of patient satisfaction on health care services. A study in Jimma reported that among services delivered at outpatient department, 57% were satisfied. Studies from Addis Ababa reported satisfaction levels ranging from 18.0% in public hospitals to 64-99% in private clinics and 85.5% at ART monitoring laboratory services. A study in hospitals of Amhara region reported that 53.4% of patients satisfied on services delivered at outpatient services (9-13).

Health care now a days is a major social service sector in Ethiopia. To maintain and enhance the quality of health care service, hospitals and health personnel need to be moved with the current needs of patients' preferences, expectations and practicing health care based on current patients' value conceptions. Some studies in Ethiopia explored the socio demographic determinants of patient satisfaction (9, 10, 12, 14, 15). Very few studies considered other elements like service characteristics, affordability of service charges, unavailability of basic drugs (10); self-judged health status, expectation about the services, perceived providers' technical competency, perceived adequacy of consultation duration, perceived welcoming approach and perceived body signaling (15); and measures taken by health care providers to keep confidentiality and ability of the person to answer questions (12).

Furthermore, there have been some structural changes in the health care industry regarding patients' value judgments, health care centers and health personnel. Patients' value judgments have become changed from the health care providers and hospitals previous sense of gratitude and respect to patients. Patients need to communicate with the health care provider and participate in decisions. Patient-centered care is considered as fundamental tenet of quality healthcare (16), which necessarily involves delivering services which respond to and are sensitive to the needs and wishes of the consumers or patients. Even though, some argue that assessing quality of care and patient satisfaction from patients' perspectives, and service reform in agreement with the outcomes has forthcoming role setback in context of the new model of "patient-centered care" (17, 18), access to medical information, trends in medical ethics, and an average patient education level have considerably contributed to change the face of a modern medical consultation (19).

Patients are better equipped with information, though superficial, than ever before about their illness, treatments that their health care providers are recommending and matters related to side effects and treatment failure or success. New thoughts like "shared decision making", "patient centeredness", and "informed patient consent" have been devised and are used by healthcare providers and patients alike. The usual paternalistic role assigned to health service providers no longer applies in most developed countries (20). Similar changes in patient care trends have been seen in developing countries. But patient care in developing countries including Ethiopia might not be the same (21) due to varying in budgeting, health care planning, patient preferences, expectations from the health care, and practicing of health care service based on patients' conceptions.

Hence, patients might not visit health care despite their illness. For example, studies have shown that consumers of health care in rural Africa did not visit their local centers even for severe illness due to perceived low quality of healthcare at these centers (16). Although such studies have shown the need for better understanding of perceptions of patients to the health systems, patient satisfaction data from developing countries remains scarce.

Since the concept of patient satisfaction is multidirectional and multifaceted (22), it is very hard to conclude one feature of patient satisfaction. Even patient outcomes in terms of quality of life and compliance also been linked to level of patient satisfaction. The problem is complex and no single tool can give a complete picture of how an individual patient feels about his or her health service provider or the system as a whole (23).

Research indicated that despite the significance of expectations in the measurement of satisfaction, only few studies considered this factor. The nature of the association between patient expectations and satisfaction has not been clearly defined, yet evidence indicates there is a positive association between meeting expectations and satisfaction, and some evidence suggests unmet expectations are associated with dissatisfaction. However there is also some evidence that satisfaction is unrelated to whether specific related to tests, referrals and new medications expectations are met or unmet (22). But other studies suggest that the unmet needs can be defined and subsequently, the services can be provided" (24). Some scholars defined patient satisfaction as offering service exceeding patient expectations or meeting patient expectations (25). Studies indicate that patients' unmet requests and expectations relate to less patient satisfaction (26). However, other researches do not relate the fulfillment of expectations with greater satisfaction (27, 28). Moreover, patient satisfaction does not always appear to relate

positively to consultation outcomes; actually, the contrary is sometimes true (29). But studies are still scarce and with no agreement because of great diversity and nature of expectation (30).

A literature review indicated that right to health constituents by The General Observation 14 of the Committee for economic, social and cultural rights of the UN Economic and Social Council, commenting on the right to health are in perfect correspondence with patient satisfaction components and it could serve as a potential indicator of the right to health, and this allows to monitor to what extent the right to health has been integrated in a given health structure specifically or in the health sector more broadly (31). Other studies also indicated that patient satisfaction studies are used to monitor the right to health to take in to account the opinion of patients in policy decisions and give emphasis the importance of patient centered care. The implementation of patients' rights can increase the quality of care, as well as achieve equal distribution of accountability between the physicians, nurses and patients. This protects patients in the health care system and healthcare providers are required to observe in achieving service excellence (32, 33).

Studies showed that the concepts on patient satisfaction and patient rights are inter-related. Hence, violations of patient rights' affects factors influencing patients' satisfaction (34, 35). Despite patient satisfaction studies focused on socio-demographic features as factors of patient satisfaction, the findings were inconclusive. Patient preferences, expectations and patient rights practice were not explored adequately as factors of patient satisfaction. Furthermore, the studies were localized on few hospitals, and majority of the studies did not use mixed method to explore the factors. Moreover, the determinants may vary across different cultural settings and social values.

Therefore, this study was conducted to fill the gap in the understanding of the patient preferences, expectations and patient rights of practice influence patient satisfaction in hospital health care in developing counties in general and the Ethiopian context in particular. Thus, this study aimed to examine patient preferences, expectations and patient rights practice at public hospitals in Amhara Region, Ethiopia.

1.3 Rationale of the study

Health system strengthening is an important issue to achieve service excellence. World Health Organization (WHO) (36), and other donor organizations (21) give priority for health systems strengthening. World Health Organization's building blocks of health systems give emphasis the delivery of health services that are effective, safe, and better quality for the users (36).

In Ethiopia, health services are limited and of poor quality and the country has poor health status (37). To solve this problem, the Ethiopian government has focused on improving the health organization and quality of health services delivered to the people (38). In the health care organization, most hospitals deliver similar types of services, but they do not offer the same type of quality of service (39). A health care service organization's ability to satisfy patents demand for information and convenience can influence the quality of health care it ultimately delivers (40).

Patient satisfaction is considered as a measure of quality of health services (41). Satisfaction and quality assessment are often used interchangeably though; satisfaction is generally considered in a broader term. It is also an indicator of patient and health provider relationship. Patient satisfactions increase likelihood of compliance to treatment and better follow up of patient care. Event it affect their follow-up decisions, compliance, and lifestyle changes (42). In addition patient satisfaction may also lead to motivation to work better and provider satisfaction (43). A

study on Customer Satisfaction Happen reported that only 4% of dissatisfied patients complained about the service. The other 96% walk away quietly without complaints. Hence, the few instances of complaints represent only the tip of the iceberg of dissatisfied people among the clients of the hospital (44).

Research has done in the healthcare field to determine that patient satisfaction is a key strategic asset for hospital quality improvement (45). All healthcare staffs in an organization that measure patient satisfaction must recognize the value of the patient as a measurement of the achievement of the organization. Patient satisfaction measurement needs to be a continuous process so that health care staffs understand that their actions will be held accountable by patients first, and then by the management.

In many countries including Ethiopia, the policy statements acknowledge importance of positive experience as an outcome of health care (38). Making health care service more consistent with patients' preferences can be achieved through measurement and feedback of patients' satisfaction. Achieving congruence is however complex, because of the many attributes of health care service that are important to patients. Meeting preferences concerning a variety of attributes may be problematic within the constraints of limited budgets. Designing health care services that are sensitive to patients' preferences in the setting of inadequate resources may require patients to choose between attributes. This has led to importance in methods of assessing priorities (46).

Studies on patients' preference to use health care, patient expectation, and patient rights as an important factor for patient satisfaction and its correlation on the quality of care rendered at health care facilities in the developing country context like Ethiopia are often ignored in health service studies and rarely subjected to scientific analysis. Even the available scientific evidences

related to patient satisfaction have limitations to assess patient preferences, patient expectations, and patients' rights. Therefore, this research was undertaken to fill this apparent research gap.

To improve health care, patients can make valuable contributions. As participants in health care they can define good quality, evaluate health care and report their own experiences. It is important to consider patients' needs and preferences in hospital health care. It is important to know which aspects of care are important and which aspects are less important. This information can help health care providers to set priorities in their efforts to make health care more responsive to patients' preferences.

This study has some unique features as a study of patient satisfaction in the Ethiopian context. In this study, the preferences of patients visiting the hospital were measured by Discrete Choice Experiment, in which patients are classified in different ways to investigate differences. Discrete Choice Experiment has a history in market research, transport economics, and environmental economics has found increasing use in health care settings (47, 48), because of its promising results (49). If differences are found, this study will help to make decisions about hospital health care policies, based on preferences as a whole, and preferences based on differences in patient groups in different hospital health care practices.

Assessing expectations in the processes of health care is important in understanding pre-consultation expectation and the post consultation/met expectation. The other unique factor of this study was examined patients experience in patient rights practice. Current studies on understanding of patient rights in the local context are important since rights determined from perspectives in a social context (50). Practicing health care based on patient rights can help patients to receive care based on moral and human rights. More knowledge of service

providers, service recipients, and service producers with regards to patient rights will definitely improve patients' right and consequently provide better health care to its recipients. Thus, through focusing on patients' rights practice and implementing the laws pertaining to this particular issue, patients' satisfaction can be enhanced. And given the fact that satisfaction is one important indicator of performance effectiveness, as well as productivity and quality of health care services, it can ensure organizational survival and competitiveness.

1.4 Literature Review

The purpose of this literature review is to examine how new studies are rather like building blocks, which are laid upon the ideas built by others in the area of the research interest. Therefore, it helps us to appreciate something of the sequence and growth of knowledge in the area of patient satisfaction. We may also be able to identify areas which have not yet been investigated. These might suggest a particular focus or train of thought for our present dissertation. It is also used for deciding the main theme for the investigation, and also upon the key research objectives. It is written as a structure, and a number of different sub-headings and sections, it is essentially written in an essay style of writing which includes a number of different features including summarizing, description, analysis, discussion, evaluation, reflection and comparison. This review of the literature covers previous research in the areas of patient satisfaction regard to patient preferences, expectations, and patient rights practice. Also, this literature reviews covered research that has investigated the influence of socio-demographic and other characteristics on patient perceptions of health care.

1.4.1 Concept of service quality

Service delivery refers to the systematic arrangement of activities in service giving institutions with the purpose of fulfilling the needs and expectations of service users and other stakeholders with optimal use of resources. Thus, improvement of service delivery means increasing the cost effectiveness, coverage and impact of services (51).

Service quality differs from goods quality. The latter can be measured objectively by indicators such as durability and number of defects, while service quality is an abstract construct due to the unique features of service, such as intangibility, heterogeneity and inseparability of consumption and production (52, 53).

A research by Donabedian (41) has provided a model based on structure, process, and outcome for evaluating the quality of health care. The concept of structure refers to the attributes of organizations delivering care and the conditions under which care is provided, process refers to the professional activities associated with providing care, and outcome denotes the effects of care. And outcome includes health status improvements in knowledge, change in behavior, and patient satisfaction with care.

1.4.2 Importance of patient satisfaction survey

Patient satisfaction is considered as one of the anticipated outcomes of health care service and it is directly related with use of health care services. Asking patients about treatment they have received and what they think about the care provision is a significant step towards improving the quality of care, and to make certain that local health services are meeting patients' needs and expectations. An important way of doing this is by carrying out surveys among patients who have used the health services (54). Studies have shown that, satisfied patients are more likely to

use health services, comply with medical treatment, and continue with the health care givers (55, 56). Satisfaction is related to more social conversation, courtesy, respectful treatment, clear communication and information, drug availability, cleanliness of facility, length of consultation, waiting time and partnership building (57, 58). Measurement of patient satisfaction involves multi-dimensional aspects of patients' opinion on health care, identifying problems in health care, and evaluation of health care (41, 59-62).

Furthermore, patient satisfaction studies allow patients' voice to be heard and affirm the importance of their experience for improved health care planning (41). But, patient satisfaction is considered by some to be of undefined benefit in facilitating the process of clinical care, since patients have no specific clinical expertise and is -perhaps- readily influenced by non-medical factors; furthermore, there are few reports on the reliability of satisfaction surveys (63-65). However, satisfied patients are more likely to comply with medical treatment and therefore likely to have a better outcome (66).

1.4.3 Patient satisfaction: A measurement of quality of healthcare service

Studies confirmed close relationship between patients' satisfaction and the services' quality (2, 67). Therefore, health care centers have been concerned not only in meeting the health needs, but also the patients' expectations. Diaz sees the patient as the center of services and their level of satisfaction as a key indicator for the quality of care (68).

Patients, in general, receive numerous services of medical care and judge the quality of services delivered to them (69). According to Brady and Cronin, the service quality has two dimensions (a) a technical dimension that indicates the core service provided, and (b) a functional/ process dimension that is how the service is provided (70). They also suggested a hierarchical model to

measure perceived service quality considering three primary dimensions like; (i) interaction quality, (ii) Physical environment quality, and (iii) outcome quality consist of behavior, attitude, and experience. In their method, the researchers highlighted on patients' perception and expectation of different scopes of services in order to measure quality of service.

A research was conducted in emergency department of hospitals to measure patient satisfaction considering three latent variables or constructs with physician service, waiting time and nursing care used to define the attributes of quality of health care service. They showed that overall patient satisfaction depends on waiting time, physician service, and nursing care (71). They also pointed out that overall satisfaction is positively related with two indicators – possibility of patients' recommendation of the health care department and degree to which the service is valuable in terms of money paid by patients.

According to research from the perspective of patient satisfaction, quality has been explained by two ways; a) quality as an indicator of satisfaction that depends on person's experiences about some attributes of health care service such as dignity, privacy, comfort, security, decision making autonomy, degree of independence and attention to personal preferences and b) quality as an indicator of overall satisfaction of patients with life as well as self-perceptions of health after some medical intervention (72).

The patient satisfaction depends on three elemental issues of health care system. These are good health care organization, good health care providers, and perception of patients regarding quality health care service (73). A study by Safavi has revealed that satisfaction with hospital experience was driven by speed and efficiency, comfort, information and communication, dignity, and emotional support. A study was conducted by the Agency of Health Care Research and Quality

and Centers for Medicare and Medicaid Services to find out how patients perceive health care quality. The study showed that patients, typically, preferred four qualities of health care services namely physician communication skill, communication of nursing staff, responsiveness of hospital staff and comfort and cleanliness of the hospital environment (73). Generally, patients define quality of health service more on the basis of attributes such as respect and compassion than technical competence of doctors and staff (73).

1.4.4 Determinants of patient satisfaction

1.4.4.1 **Perceived characteristics of providers:** Studies reported that the doctor-patient interaction during the provision of health services determined patient satisfaction (67, 74, 75). The trust that the doctor transmits to his patient is good indicator of satisfaction (74). The main health provider-patient interactions were: compassion of the provider, length of the consultation, patient's satisfaction with the provider, communication, provider's activity during the medical appointment, and the quality of the diagnosis (67, 74, 75).

1.4.4.2 **Patients' characteristics***:* Characteristics of patients were reported as determinants of patient satisfaction (11, 12, 15, 74, 76). The main variables included in this type of study were: age, sex, educational level, income, and marital status. However, there has been contradiction in the results regarding the relation between these variables and the client's satisfaction (74). Studies reported that there is a slight tendency that shows that older people tend to be more satisfied with health services, but these results are not common in all investigations (76). It has been reported that women tend to value more the health services, reporting to feel more satisfied with health care service (2, 75, 77). Including patient's characteristics in the analysis of satisfaction is important, because quality

problems should not be entirely attributed to service providers. There are external factors that health care organizations are not able to control, such as age and epidemiological profile (2).

1.4.4.3 **Self-perceived health status*:*** A study by Zimmer and his colleagues reported the self-perception of health status incorporates social elements that regular indicators cannot attain, such as the influence of age, sex, and education (78). A study in Ethiopia showed that perceived health status was a determinant of patient satisfaction (11). This is also supported by other studies, reporting that a low perceived health status were associated with lower patient satisfaction (79-81). A study by Mossey and Shapiro provided empirical evidence on how self-assessment of health is a better instrument to predict mortality in patients, compared with health records (82). The results of Mossey and Shapiro have been confirmed in epidemiological studies on how self-rated health is as a predictor of mortality (83). A study done by Zimmer and others used health measures like social networks, disability and life style (78, 84). Disability and chronic illness of the population are indicators of the severity of the illnesses. Social networks represent psychological characteristics of the patient. Most research on patient's satisfaction established perception of health status as a variable predictor of satisfaction, yet the results have not always shown this relationship (2, 67, 74, 75). It has been argued that a patient with a chronic illness might show dissatisfaction with health services due to their health status, or rather be satisfied since they appreciates further attention due to their health problems (74, 76).

1.4.4.4 **Hospital and department characteristics**: Research indicates that there is a relation between organizational, financial, service, provider characteristics of care and patient satisfaction. Availability, accessibility, and convenience are positively related to patient satisfaction (22, 85, 86).

1.4.4.5 **Perceived waiting time**: It is a strong predictor of patient satisfaction. If perceived waiting time is longer than what is expected or considered inappropriate, dissatisfaction will arise no matter how long the actual waiting time (71, 87-89).

1.4.5 **Patients preferences:**

1.4.5.1 **Valuation of health care services and Discrete Choice Experiment**

Studies reported that examining the quality and efficiency of services given for the patient is the main concern of the public health sector, and studying patients' preference with the quality of hospital services is an important method for valuation of health services (90, 91). Studies acknowledged the need for a more patient-centered approach in clinical practice and evaluation studies. Patients' preferences have been shown to significantly impact their willingness to use health-care services (92-94). Hence, empirical evidence is needed regarding patients' preferences for hospital health care. Hospitals should be place priority techniques in the case of resource limitations (95). Even though there is of powerful interest of the public, customers are not asked about their preferences and views. They are not also involved in the decision-making process. The patient's point of view is important in related to policy and clinical decisions. Studying on what patients' value and need, and how patients prefer different features of a hospital health care can be valuable in evaluating and designing hospital healthcare services. Whenever hospital processes are reorganized or new products are designed the needs and preferences of patients have to be considered to assess

patients' priorities and their willingness to wait. The technique discrete choice experiment (DCE) is frequently applied to identify patients' preference. This is a stated preference approach confronts patients with hypothetical scenarios of which only one can be chosen. Now a days , researchers have been applying discrete choice experiments to elicit patient preferences in hospital healthcare (96, 97).

The foundation of Discrete choice experiments are with the hypothesis that services or goods can be explained with the attributes they have, and the value of a service or good depends on the level and nature of these attributes (98). These attributes might explain the effect of the services/goods on health outcomes. It might also explain the process by which the services are delivered or the non-health outcomes (99). Customers are offered a choice with alternative hypothetical services /goods that consists a number of attributes with their levels, and thus asked to choose among time/quality that made a different version of a service/good that needs them towards make trade-offs among attributes. This preference techniques are preferred by health economists as the analysis is stranded on random utility theory which means patients choose the alternative that give them the highest utility (99). Discrete choice experiment should capture the main attributes so as to avoid concerns about the omitted attributes by the majority of the respondents (100).

DCEs can quantify the relative weight of attributes that describe a hospital health care service which allow respondents trade-off between the attributes (101). Discrete choice experiment is valuable to set priorities in giving health care service. Hence, it measures the benefit or satisfaction from the services by estimating the different characteristics of the hospital. It also evaluates these attributes and their substitution. In general, this approach

presumes that each hospital service be able to explained with different features and this features provide different service characteristics (102).

1.4.5.2 **Preferences in health care service**

Studies in health care service reported different findings as patients differ from each other in their biologic, social or cultural features as well as in their preferences. A study in Iran on patients' preference showed that thoroughness of examination was the most important quality attribute, followed by physicians giving enough information about the illness and having high nursing care at wards, drugs and treatment to the patient (102). Similarly, another study in Iran on the determination of the marginal utility characteristics of the hospital health care service showed that priority from first to last were the type of examination, waiting time, handling of patients, personnel behavior, and cleaning of the sector and toilets. The waiting time between hospital arrivals and admission had a negative sign which shows a negative impact on patient preference (103).

A study on patients from six family practices in England, reported that patients were willing to pay the most for a thorough physical examination. The next most valued attributes of health care were receiving care from a physician who knew them well, seeing a physician with a friendly manner, taking a reduction in waiting time of one day, and having flexibility of appointment times. Responses were influenced by the scenario in which the decision was made (urgent physical problem versus minor physical problem), (vague psychological or physical problem) and by patients' socio-demographic characteristics (104).

A study in Tuscany region, Italy reported that receiving information from the physician was more important than being involved in the treatment decisions and that, approximately, a partial involvement had the same importance as a complete involvement. Respondents' past experience with physician's consultation seemed to have the greatest influence on the involvement level (105).

A study at a Dutch hospital reported that respondents prioritized services for medical consultations and examination in the ambulatory care departments. In this study, half of the respondents valued information desks, paramedic care and pharmacies as main services. Most patients living near a future center for outpatient care would rather visit this center than the regional hospital. However, respondents preferred seeing their familiar physician, short waiting lists and appointments scheduled consecutively on one day. If these aspects were not given at the adjacent centers, more patients chose to visit the regional hospital (106). A study done by Mirja et al, on patient preferences for treatment of low back pain revealed that differences in the willing-ness to wait, particularly with respect to treatment modality, the level of pain experienced at the time of data collection, and the respondents' preferences for surgery (107).

A literature review by Victoor and colleagues showed that patients' choices were determined by a complex interaction between patient and provider characteristics. A variety of patient characteristics determines whether patients make choices, are willing and able to choose, and how they choose. Patients take account of a range of structural, process and outcome characteristics of providers, differing in the relative importance they attach to these characteristics (108).

1.4.6 **Expectations**:

1.4.6.1 **Concepts and factors related to patient expectations**

Patient expectations have been defined as anticipation that given events are likely to occur during or as a result of medical care (109). Patient preferences are ideas about what should occur in a health care encounter (110), from an individual's point of view about clinical treatment. The patient's request, on the other hand, looks at the provider's perspective, perceiving the patient's explicit expectation as it is verbalized to the provider (7).

Studies on patient expectation can be seen from different viewpoints i.e. structure, process and treatment outcome. The structural aspects of patient expectation include facilities, staffs, policies and accessibility. Clinical and interpersonal relation strategies are considered as process, and physical, financial and psychological elements are included under outcome expectations (111).

Evidence suggests that good interpersonal relations like physician desire to support to patients or desires for information were given high priority than technical interventions i.e. tests or prescriptions (112, 113). Similarly, patients acknowledged advice and reassurance were the main services their physicians can offer to help them return to normal activity (114). However, about half of the patients expected prescription refill (115). Interestingly, patient expectations for tests and medications were met more often than expectations for referrals (116). A study by Ruiz-Moral et al, reported physician ability to listen the patients, receiving information from the physicians and physicians interest were factors for patient expectations (113). Similarly, a research done by Wang and his colleagues in China on patient expectations in the inpatient department reported

patients valued medical ethics, accountability of medical practice, equal treatment of all patients with respect, respectful communication (117).

Socio-demographic characteristics are considered as factors affect that patient expectations (118-122). Patients with the highest expectations of recovery were found to be younger and men (118). Male patients had significantly greater expectations from psychiatrists than females. Similarly, other studies also reported that individual factors may influence patient expectation. Some of the individual factors that affect expectations were: age, sex, marital status, educational status, pain perception, and other psychological factors which includes depression, fear, and emotional distress (123-126).

In spite of the fact that about 90.2% patient respondents still rely on the physicians to give the final decision, a study showed that about 60.7% wanted to play an active role in decision making process (121). Higher-skilled occupation increased the likelihood of expecting detailed information and informed consent. Similarly, residence in urban area also increased this likelihood, perhaps for reasons related to awareness and empowerment. Increasing age decreased the likelihood that patients would expect their physicians to give them detailed information and also seek their opinions on their management (122).

Other studies also reported factors to patient expectation. Depression, anxiety, expectations of control, time line expectation day, and expectation of fatigue identity were considered as factors of patient expectation (127). Severity of illness. expected waiting time for surgery and perceived waiting time (88, 89). Co-morbidity illness (89, 118), quality of life (118), psychosocial wellbeing (119), social support (120, 128),

mental and physical wellbeing (89), attitudes (121), physician consultation (122, 129), courteousness, detailed information and communication about unreasonable expectations (122, 129), and informed consent (122) were considered as factors.

1.4.6.2 **Patient expectations and outcomes**

The relationship between patient expectations and health care outcomes was investigated. Increased fulfillment of expectations was associated with better postoperative quality of life among lumbar spinal surgery patients (130). Other studies demonstrated that to maximize patient satisfaction, controlling and managing patient expectations may be more effective than improving patients' operative outcomes (131).

In the review of literatures, the following were listed as outcomes expectations: fast recovery time (118, 119, 127), positive experience (127, 128), follow-up attendance and impacts (89, 127), pain relief (89, 118, 119), improve functional status and ability to perform his/her usual activities (89, 118-120), fulfillment of expectations (88, 119, 121, 128), better social integrity, mental well-being and clinical outcome (89), experience of medical ethics practice (122), and satisfaction (88, 118-121, 129).

Literature identifies studies that investigated the relationship between pre-encounter expectation and post-encounter satisfaction (132, 133). Studies indicate that patients' unmet requests and expectations relate to less patient satisfaction (26). Unmet expectations for health care encounters are often associated with decreased patient satisfaction and more post-visit health resources contacts (134-136). However, other studies do not associate the fulfillment of expectations with greater satisfaction (27, 28).

Besides, patient satisfaction does not always seem to relate positively to consultation outcomes; in fact, the opposite is sometimes true (29).

According to the literature, fulfillment of patients' expectations can explain between 8% and 25% of the variance in satisfaction (108,109). Even though other factors, for example socio-demographic characteristics of the patient, previous experience, or the health and psychological status of the patient, can have some impact on the patient's satisfaction with health care services (110), those factors cannot be influenced, or only with difficulty.

Many studies have shown that unfulfilled expectations are related to lower patient satisfaction (7, 137, 138). However, a study on unmet expectations reported that there was little support for the relationship between fulfillment of specific expectations and patient satisfaction (139). Nevertheless, studies indicated that patients have a tendency to infer the level of technical quality based on non-technical aspects (140).

1.4.7 **Patient rights:**

1.4.7.1 **International human rights and its application to patients**

Given that the preface of the Human Rights operated by the United Nations in 1948, patients' rights legislations have been accepted by many countries in the world (141). The constitution of World Health Organization (141) focuses upon relationships between health and human rights. It affirms that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of religion, race, political belief, social and economic condition" (142). The Universal Declaration of Human Rights in 1948 and the International Covenant on Economic,

Social and Cultural Rights in 1966 articulate the aptness of human rights and health to the well-being of individuals as well as the family (143, 144). The Declaration of Alma Ata (145) of "health for all" in 1978 with the Ottawa Charter for Health Promotion (146) in 1986 further squeezed the need for social and economic inputs to improve the health wellbeing of the population. Therefore, there is deep affiliation between human rights and health.

Many declarations have been defining the importance of the right to lead a healthy life (147-149). The World Health Organization published a document “Declaration on the Promotion of Patients’ Rights in Europe” stating the principles and strategies of patients’ rights have all drawn up legislation covering patients’ rights (150).

The charter of the patient's right is a protective of human right, with the assumption to prevent patient’s dignity and honor, and to ensure that everyone gets a good quality of care in illness situations, specifically in medical emergencies, without any gender or age discrimination and in terms of person’s financial strength, health and life. Patient’s right charter claims that the basic rights of the patients who receive care from health institutions need to be explained (151). In addition, WHO has also presented elucidations mostly which involve active participations by the service provider and service recipients in formulating health care service policy (152).

A study on citizens’ empowerment and patients’ rights by World Health Organization recommended that every state should articulate its priorities and concerns based on its own social and cultural needs to protect and promote patients’ rights (18, 28). Many countries have recognized health care organizations charters or regulations for patients’ rights, and stated and applied them, to attain patients’ satisfaction (153). Hospitals may

adapt routine policies for informing customers about their rights for safe, effective and efficient health care provision (154).

The concept of human rights in patient health care refers to the application of general human rights principles to all stakeholders in the delivery of health care. The human rights architecture at the international and national levels provides an important formal and procedural framework for addressing abuses of human rights in patient care. This legal framework creates a number of specific mechanisms that can be utilized to hold abusive governments and state actors accountable. Here below is a summary of Ethiopia ratification of major human right treaties.

Table 1: Ratification of major human right treaties by Ethiopia.

Treaties	Organization	Introduced	Ratified
International Convention on the Elimination of All Forms of Racial Discrimination	United Nations	1966	1976
International Covenant on Economic, Social and Cultural Rights	United Nations	1966	1993
International Covenant on Civil and Political Rights	United Nations	1966	1993
Convention on the Elimination of All Forms of Discrimination against Women	United Nations	1979	1981
Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment	United Nations	1984	1994
Convention on the Rights of the Child	United Nations	1989	1991
Convention on the Rights of Persons with Disabilities	United Nations	2006	2010

Source: http://www.ohchr.org/EN/Countries/AfricaRegion/Pages/ETIndex.aspx

1.4.7.2 **The relation between patient rights and patient satisfaction**

In giving an effective care, patient's right is generally demanded by patients, while the hospital is responsible to fulfill this particular expectation (155). Most developed countries and some developing countries use the charter of the patient's right is a defense of human right, i.e. to prevent patient's honor and dignity and to ensure that he or she gets a good quality of care in illness situations, without any gender or age discrimination and with the financial strength of the his or her body, life and health.

Concerns related to respect for patients' values, their choice, and preferences are becoming more multifaceted. Patients' expectations are higher and they want the best. They want to actively participate in decision-making and wished for treatments or procedures and their different options (156). Thus, many countries have guaranteed patients' rights to process for resolving dissatisfactions with health care providers (157). In the health care service, the quality of care such as patients' satisfaction, access to health personnel, their empowerment and treatment are found to be important for patients. Furthermore, regular sources of care and convenient services are also key issues in medical care services (158-160).

Research indicated that the implementation of patients' rights can increase the quality of care, as well as achieve equal distribution of accountability between the health providers, nurses and patients. In addition, a study focused on to assess patients view on patient rights indicated that the participants looked at patient's right more from natural dimension than the legal dimension. The recipients knew they are entitled to receive natural and human rights, whereas service providers believed that the patients' right is legal and is a government's duty (25).

Reports showed that applying patient rights in the health care can enhance participation by both the service recipients and service providers in formulating health policy and developing training programs specifically for service providers and the patients (153). A study was conducted using phenomenological approach using the data on the experiences and understanding of patients, physicians and nurses of the patient's right in Saudi Arabia. The main extracted themes from the analysis of the interviews conducted in a research consisted of the current understanding of basic rights, as well as family priority, occupational and cultural resources of the right, cultural adaptation, the lack of rules and legal system, lack of standards among the hospitals, and the impact of work pressure on the patients right (153).

It is reported that more knowledge of service recipients, service providers and service producers with regards to patient rights charter will improve patients' right and consequently provide better health care to its recipients. Hence, improving the laws pertaining to this particular issue can enhance patients' satisfaction (155). A study indicated that patients' right statements are needed so as to the patient can fully participate in the process whereby acceptable care is defined and implemented. It is time that countries consistently match the charters of the patient's right with stakeholders' expectations and analyzes their strengths and weaknesses and creates the required match between stakeholders. Additionally, doing so will help to overcome problems related to the deficiency and decrease in relation to their civil and social laws and health system (152).

1.4.8 The present study

Health care now a days is a major social service sector in Ethiopia. There have been some structural changes in the health care delivery regarding patients' value judgments, health care centers and health personnel. In this regard, timely studies on patients' preferences, expectations and rights are essential to meet their preferences and needs to achieve satisfaction.

Patients' value judgments have been changed from the previous health care providers and hospitals sense of gratitude and respect to current patient focused approach. Patients need to communicate with the health care provider and participate in decisions. Patients may complain and their concerns might not be addressed by the service. They can also be dissatisfied with the service, health care centers and health service providers. There has been lack of health professionals, high patient load, unable to follow patient focused approach to health care, lack of diagnostic facilities, lack of space in some health care centers and traditional organizational management and culture. Hence, with consideration of the above mentioned social and structural changes, the health care sector should closely reflect the current situations and patients' understanding about the health care. Health care providers should also know patients' priorities, rights, and different concerns asserted by patients due to expectations.

Patient satisfaction in this study refers to at least with the following factors: personal preferences of the patient. The rationality assumption entails that, under certainty, individuals will always be satisfied with choices they deliberately made, the patients' expectations, response tendencies due to personal characteristics and the patient rights practice in health care that contributes in improving patient satisfaction and quality of the

care they received. Therefore, research in patients' preferences, expectations and lived experiences on the patient rights practice is scarce in the context of Ethiopia. Hence, the present study could contribute to fill the gap in the study of patients 'preferences, expectations and patient rights practice with the perspective of patients' view.

1.4.9 Conceptual Framework

This conceptual framework considers selected factors and developed based on literature review (Figure 1). Important factors for the patient satisfaction to be studied in this dissertation were patient preferences, expectations, and patients' rights of practice. Patients' socio demographic characteristics like age, sex, employment status, educational status, and income are considered to have relationship with expectations and preferences about the health care service. Previous experience on health care are considered to influence on patients' expectation and satisfaction. Self-perceived health status of an individual and hospital characteristics like the type of hospital might have influence one's expectation and preferences. Patients' expectations might have influence on patient satisfaction. Patients' fulfillment of their preferences have a link on patient satisfaction. Implementing patients' right according to patients' conception might influence patient satisfaction.

Here below is showing conceptual frame work on the relation between patient preferences, expectations, patient rights practice, and other determinants of patient satisfaction.

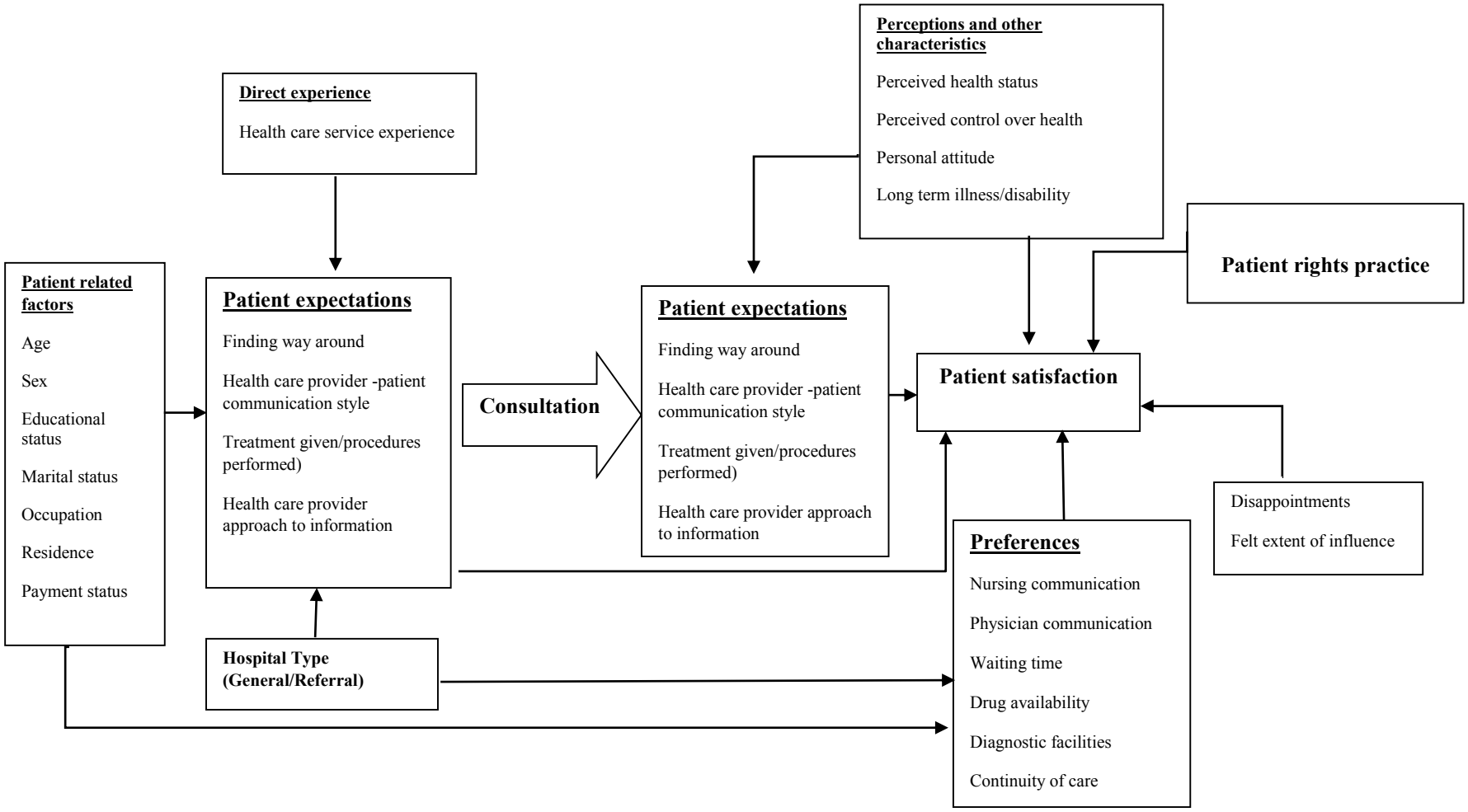

Figure 1: Conceptual frame work on patient satisfaction in health care service

2 OBJECTIVES

2.1 General objective

The general aim of this study was to examine patients' preference, expectations, and lived experience of patients on patient rights practice as a factor of patient satisfaction at public hospitals in Amhara Regional, northern Ethiopia.

2.2 Specific objectives

1. To examine patients' preference for attributes related to health care services.
2. To assess the relation between patients' expectations and patient satisfaction in the consultation of patients in the out- patient department.
3. To examine lived experience of patients on patient rights practice.

3 MATERIALS and METHODS

3.1 Study area and population/ The setting

The study was carried out in the Amhara Regional State, Ethiopia. The Region is located in the Northern part of the country. Based on CSA population estimate of inter census result for the year 2012/13, the region has a population of 19,626,000, where urban inhabitants account for 15.3% of the population (161). With an estimated area of 159,173.66 square KM. The region has an estimated density of 108.15 people per square kilometer. For the entire Region 3,953,115 households were counted which results in an average for the Region of 4.3 persons to a household, with urban households having on average 3.3 and rural households 4.5 people. The predominant ethnic group is Amhara, which is estimated to be 91.48%; other groups include the Awi /Agaw (3.46%), Oromo (2.62%), Agaw/Kamyr (1.39%), and Argobba (0.41%). Of the total population of the Region, 82.5% were Orthodox Christians, 17.2% Muslim, 0.2% Protestants and 0.1% others (162).

The health care delivery system in the region is a three-tier system involving a primary health care unit (PHCU), comprising of five satellite health posts, one health center and primary hospital. Primary hospitals are serving as referral centres for health centres. The secondary level in the tier is a general hospital that provide inpatient and ambulatory services. They are also referral centres for primary hospitals; and the tertiary or specialized hospital serves as a referral center for the general hospitals and provides inpatient services (38).

Most of the population in the region gets health services from public health institutions. In the year 2012/13, there were 17 (7 referrals and 10 general) functional hospitals, 805 health centers and 3302 health posts in the entire region, with admission rate per 1000 population of 6.6 and

outpatient attendance per capita of 0.3. About 447 physicians (GPs and Specialist), 963 health officers, and 7447 nurses were working in public institutions of the region, which accounted for health professionals to population ratio of 1 to 44,911, 20,380 and 2,635 respectively (163). Bahirdar is the capital of the region and is around 564 Kms away from Addis Ababa. The region is divided into 11 administrative zones with a total of 116 woredas (162). Figure 2; shows map of the study hospitals in the region.

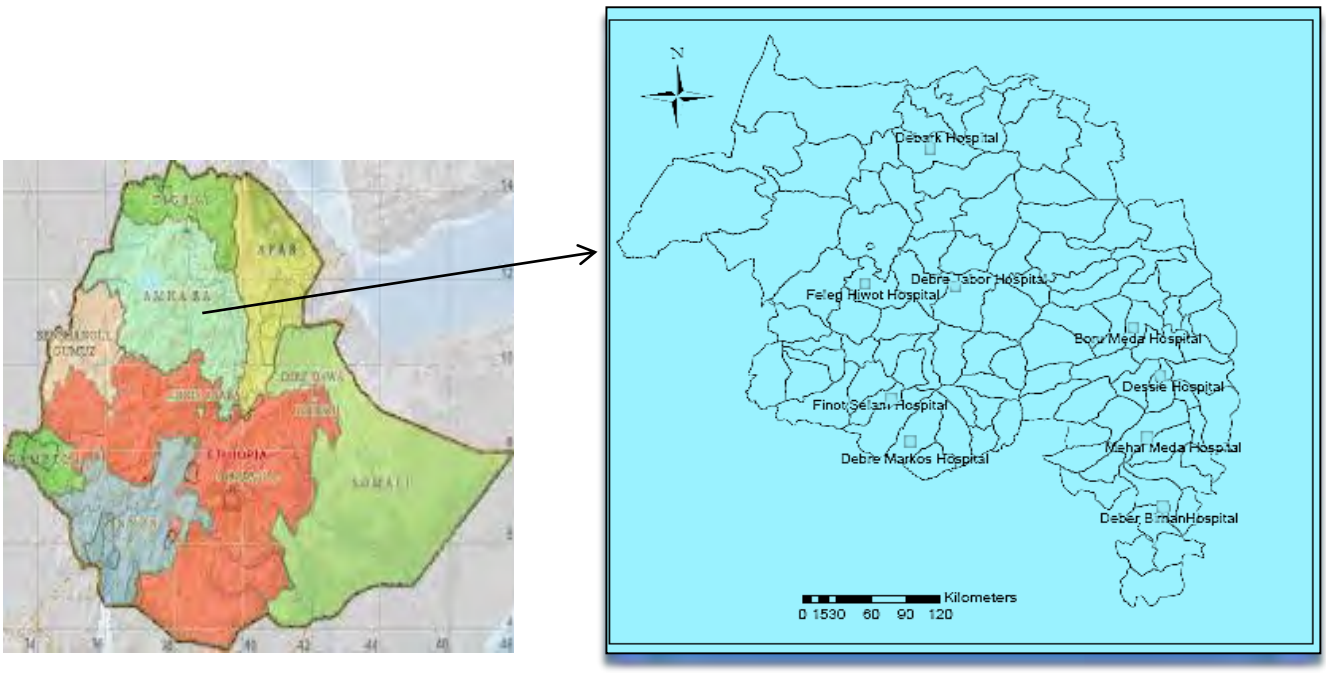

Figure 2: Map of Amhara Region showing the study hospitals

3.2 Study design

Using a mix of methods, both quantitative and qualitative data were collected. Experimental study design using Discrete Choice Experiment (DCE) was applied to evaluate patients' preferences for various attributes relating to the use of health care services. DCE is an experimental design as it served by presenting different level of attributes combined, for the

purpose of elicit the information about the hospital characteristics in order to decide the choices between two hypothetical hospital health care services (164). A cross-sectional quantitative study was used to assess the relation between patients' expectations and patient satisfaction with out-patient medical consultation. A qualitative study was also used to examine experiences of patients on patient rights practice using phenomenographic approach.

3.3 Source and study population

The source population of the study was all patients attending public hospitals in Amhara Region during the survey period. The study population was all patients attending health care service in nine selected hospitals during the survey period. Both patients from out-patient and in-patient departments were included to assess their preferences attributes related to hospital health care, and the lived experiences of patients in the practice of patient rights. Patients in the out-patient department were included to assess the relationship between patient expectation and their satisfaction. All patients were aged 18 and above years. Those patients who were unable to communicate/unconscious were excluded from the study.

3.4 Sample size and sampling methods

3.4.1 Sample size determination

The sample size for the preference study (paper I) was determined using a formula of sample size for discrete choice models (165) $$n \geq \frac{z^2\, q}{r\, p\, a^2}$$

Where p is the choice share, z is the level of statistical significance and q is failure in choice share; q=1-p; r is the number of replications; and a is the allowable error margin. Choice share p for a particular preference is a share of a single attribute over the total attribute; hence, in our case, p is 1/6. Here, 6 is the number of attributes. Assuming a heterogeneous population, ie,

p=0.167, q=0.833. We want to be 95% confident in our result, ie (z=1.96), with allowable margin of error is 5%. Our design had 16 replications, meaning the 16 scenarios generated from fractional factorial design changed into the 16 types of hospitals using the given attribute levels; therefore, r=16. We used a design effect value of 2 to accommodate sampling variance and 10% contingency. The final required sample size was 1,054.

For the study of the relation between patient expectations and patient satisfaction (Paper II), single proportion sample size calculation formula was applied. The calculation was made based on the assumption of 53.4% prevalence taken from a result in a study of the Amhara region hospitals of client's satisfaction with health services (13); expected margin of error (d) of 0.05 and with 95% confidence level ($Z\alpha/2$) and design effect of 2. Adding 10% contingency the final required sample size was 841. The sample size for each hospital was determined based on the number of clients served in each hospital. For the qualitative study (Paper III), 22 patients were interviewed after consultations in order to explore patient's rights experience of the health care episode.

3.4.2 Sampling method

Based on the Aga kahan Foundation, it is suggested of a rule of thumbs that 30-50% health care centers can be taken (166). Thus, the study included 9 (about 50%) of the total 17 functional public (Government owned) hospitals, where most of the people in the region seek health care. On the other hand, the number of private hospitals being few serves a lower segment of the population in the region. Sample size was allocated proportionately to each hospital and selection of patients were performed using systematic sampling technique. The size was determined by reviewing the annual document of each hospital to identify clients visited in each hospital.

For paper I, ambulatory patients were selected at reception and triage room and appointments were made for the interview. Then interview was conducted at the exit of the outpatient service. For the inpatient respondents, patients were selected at the inpatient department. For paper II, ambulatory patients were selected just at the waiting area in the triage room before getting the service and exit of the patients while completed the service in the hospital. For the qualitative study, maximum variation type of purposive sampling technique was used for in-depth interview.

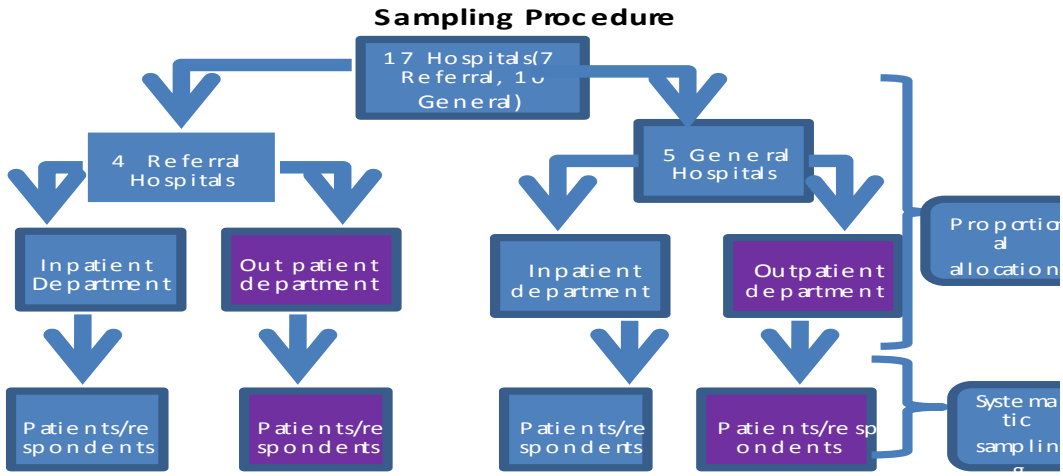

Figure 3: Sampling procedure to select respondents

3.5 Data collection method

3.5.1 Quantitative study instruments and data collection

3.5.1.1 Socio-demographic characteristics

Data on socio-demographic characteristics were collected for the quantitative studies (paper I & II). Data on age, sex, marital status, educational status, occupation, residence and payment status were collected. Residence was categorized as rural and urban. Payment status was categorized as paying and free for the health care service.

3.5.1.2 Instruments for preferences

The DCE approach is able to indicate whether particular attributes are predictors of choice over alternative scenarios, to provide information on the relative importance of the attributes used to describe the alternatives in choice sets and to indicate the relative overall importance of specific scenarios (combinations of attributes and levels) that are regarded as plausible competing scenarios (166). The development of a questionnaire to carry out DCE study has the following stages (i) identifying the attributes of health care to be included in the questionnaire, ii) assigning levels to these attributes, and (iii) generating scenarios with varying combinations of levels of attributes.

3.5.1.2.1 Establishing attributes and levels

The key attributes were established by the main futures of patient satisfaction in hospital health care that might differ with the type of health care service. Six attributes were identified through literature review and adopted from other studies (90, 102, 167). These attributes were reviewed and evaluated with outputs from patients and experts in the field. Waiting time for the consultation, physician communication, nursing communication, drug availability in the hospital pharmacy, continuity of care and diagnostic facilities were identified as attributes. The included attributes should be practically differing with the type of service provided. The attribute levels were selected to reveal the range of condition that patients might anticipate to experience (Table 2).

Table 2: Attributes and Levels for the preference study

Attribute	level	Conceptual definitions
Waiting time for the consultation	1 h 2 h 3 h	Waiting time between arrivals at the out-patients of the hospital and getting the consultation
Physician communication	Good	Likelihood that the physician has a friendly approach; provides patient information with understandable language about the illness, lab investigation, and treatment; reassures the patient; plus involves the patient in decisions.
	Moderate	Likelihood that physician is friendly approached; provides information with understandable language about the illness, lab investigation, and treatment; and apart from the stated key parameters, physician might have additional good qualities.
	Poor	Likelihood that the physician is not approached friendly; unlikely that the physician provides information with understandable language about the illness, lab investigation, or treatment.
Nursing communication	Good	Likelihood that the nurse is friendly approached; provides patient information with understandable language about the patient care and reassurance for the patient; plus involves the patient in decisions.
	Moderate	Likelihood that the nurse is friendly approached provides information with understandable language about the patient care, and some more.
	Poor	Likelihood that the nurse is not approached friendly; unlikely that the nurse provides information with understandable language about the patient care; and some more.
Drug availability in the hospital pharmacy	Fully Available	It is likely that all the drugs will be available
	Partially available	It is likely that you will have to look for some of the drugs elsewhere
	Not available	it is likely that you will have to look for all of the drugs elsewhere
Continuity of care	yes	It is likely that health care services is connected and coherent and is consistent with a patient's health needs and personal circumstances
	No	It is likely that that health care services is not connected and coherent and is unlikely consistent with a patient's health needs and personal circumstances
Diagnostic facilities	A lot of diagnostic facilities	Ultrasound scanner, MRI, biopsy, blood/urine sample, plus others.
	Some diagnostic facilities	Blood/urine analysis plus some more.
	A few diagnostic facilities	Blood pressure cuff and apart from blood pressure cuff, it might have other vital sign measurement materials.

3.5.1.2.2 Experimental design

Among the features, using a full factorial design containing five attributes had three levels and one attribute had two levels which gave rise to a total of 486 scenarios (3^5, 2^1) was not feasible.

Hence, a fractional factorial design with orthogonal main effects was created by using SPSS software version 17 (SPSS Inc., Chicago, IL, USA) in order to convert the number of scenarios to satisfactory number in the questionnaire. Sixteen scenarios were generated and by using these scenarios, the questionnaire was written with assuming two hypothetical hospitals that compared them. The questionnaire consisted of 8 comparisons between two hypothetical hospitals. Choice sets in the catalogue were randomized prior to being changed into the questionnaire (Annex 2).

Checking properties of the DCE

The properties of good design of the questionnaire were checked using the properties of level balance, orthogonally, and minimum overlap of attribute levels (168).

- **Orthogonally**

The levels of each attribute vary independently of each other. The correlations for this design, which uses for estimating pair wise correlation coefficients and their significance, were sufficiently low not to cause concern.

- **Level balance**

Level balance requires all levels of each attribute to appear with equal frequency across profiles. Thus for a 2-level attribute, each level should appear in 50% of the profiles, and for a 3 -level attribute each level should appear in 33% of the profiles. In this case each level of the physician attribute should appear in 31.25%-37.75% of the hospital profiles, the same applies to each level of nursing communication, waiting time, drug availability, and diagnostic facilities. For the continuity of care attribute, each level should appear in 50% of the hospital profiles. The level balance of the design applied in this study is in Table 3, which shows that the design has a relatively good level balance.

- **Minimum overlap**

To get maximum information on respondents' trade-offs from the experiment, a repeated attribute level within a choice set should be minimized. If an attribute takes the same level in each choice, no information is revealed about preferences. As can be seen from the design in Table 4, there is no overlaps of attributes within the choice sets in this study.

Table 3: Attribute level balance

Attribute levels	Frequency of appearances	Percent
Physician communication-Good	6	37.5
Physician communication-Moderate	5	31.25
Physician communication-Poor	5	31.25
Nursing communication- Good	5	31.25
Nursing communication-Moderate	5	31.25
Nursing communication-Poor	6	37.5
Waiting Time-1 hour	5	31.25
Waiting Time-2 hours	5	31.25
Waiting Time-3 hours	6	37.5
Drug Availability-Fully available	5	31.25
Drug Availability-Partially available	5	31.25
Drug Availability-Not available	6	37.5
Continuity of care-Yes	8	50.0
Continuity of care-Yes	8	50.0
Diagnostic Facilities-A lot of diagnostic facilities	6	37.5
Diagnostic Facilities- Some diagnostic facilities	5	31.25
Diagnostic Facilities-A few diagnostic facilities	5	31.25

The two hospitals were compared as they are different in their characteristics of the 6 attributes and respondents have to choose between these hospitals (See sample scenario pair in Table 4). According to the patients' choice between the two hospitals, we can prioritize and modeling which hospital types was preferred by the patients.

The DCE questionnaire was tested in a pilot with 30 patients at a hospital to understand the clarity of attributes and levels, whether respondents understood the task or not and to understand how patients experience the exercise.

Table 4: Sample hospital pair scenario

	Attributes	**Hospital A**	**Hospital B**
1	Physician communication	Poor	Good
	Nursing communication	Good	Poor
	Waiting time for the consultation	2 hrs	1hr
	Drug availability in the hospital pharmacy	Fully Available	Partially available
	Continuity of care	No	yes
	Diagnostic facilities	A Few diagnostic facilities	A lot of diagnostic facilities
Which hospital do you prefer?		**A**	**B**

3.5.1.3 Instruments for expectations

Structured questionnaire was adapted the realistic parts of the expectation questionnaire to be used to assess patients' expectation in the processes of health care (169) and questions prepared by the investigator (Annex 3). It contained pre-and post-consultation questionnaire that comprised different sections of questions. In order to customize and adapt the tool to the local situation, we initially pre-tested among 50 patients in the hospital. Based on the findings, minor modifications were made to the questionnaire.

3.5.1.3.1 Pre consultation questionnaire

Information was gathered concerning the patient's realistic expectations about a specific consultation. The questionnaire included questions from the perspective of the patient's expectations in these terms: "Regarding the day's consultation with their health care provider, they were asked to answer what would like to get". They had to answer 20 items scored on a 5-point response scale: "strongly agree, agree, neither agree nor disagree, disagree and strongly

disagree". The 20 items were comprised into 4 categories: Four items were related to finding their way around, 5 items each categorized under health care provider-patient communication style and treatment/ procedures performed and 6 items explored health care provider approach to information. Data were also obtained on health care experiences in the past 12 month.

3.5.1.3.2 Attitudes and characteristics

In this section of the questionnaire, questions related to preferences about making decisions about medical care using as suggested by Degner scale (170), extent of feeling to influence the consultation, extent of agreement to take a positive attitude towards oneself, extent of control over in health, perceived health status and presence of any longstanding illness, disability or infirmity were included.

3.5.1.3.3 Post-consultation questionnaire

As soon as the patient left the health care provider's room and completed their health service, an exit interviewer questionnaire was administered to assess the extent to which patients' expectations of their visit and consultation were met. This questionnaire contained 20 items to assess patients' extent of agreement in relation to their visit and consultation which had been scored on a 5-point scale: "strongly agree, agree, neither agree nor disagree, disagree and strongly disagree". In both the pre-and post-consultation expectation items, the highest expectation could be representing by a value of one. Hence, higher expectations reflected by lower scores.

3.5.1.4 .4 The overall health care visit

Questions that show extent of influence in the consultation, things that needed to be done at this consultation but were not done, or things that disappointed, worth of the consultation, and overall

satisfaction with their visit were included. In the present study, overall patient satisfaction was measured with a single likert type item question asking respondents to rate their overall satisfaction with their consultation, on a 5-point likert rating item ranging from 'very satisfied' to 'very dissatisfied'. The single likert type Global patient satisfaction measurement is validated and used in other studies (80, 151, 171).

3.5.2 Data collector recruitment and training

To collect the quantitative data, five data collectors who had BSC in Clinical Nursing and/or other related fields were recruited. They were recruited based on previous experience, qualification and the local language fluency. Data collectors were given three days training which mainly focused on discussion of the contents of the questionnaire, measurement scales, ethics of data collection and how to administer the questionnaire. The training was conducted in the form of readings, discussions, role plays, mock-interviews and field practices. Data collectors were supervised by a supervisor with at least a BSC degree level of training and experience in survey supervision. A supervisor attended the same training and received additional guidance on their role, about sampling techniques, mechanisms for supporting interviewers, and quality control procedures like spot checks. The supervisor checked the completeness and consistency of the responses on the spot.

3.5.3 Data collection procedures

Hospitals were stratified as referral and district and four of the seven referral and five of the ten general hospitals were selected using the lottery method. For paper I, the data collector began the work by presenting the study to those present in the triage room, gave information about the study, and made appointments for the interviews. Informed consent of respondents was obtained

orally, and the interviews were presented to the respondents at the end of the service, after patients had spent most of the day waiting for a consultation, lab investigation, and dispensing of drugs.

For paper II, patients who received care from outpatient clinics (adult general, medical, and surgical) were interviewed. The information was gathered on two occasions. Right after being selected, the aims of the study were explained to the patient, their participation was requested assuring them the confidentiality of the information they would be providing. First, a questionnaire was administered at pre-consultation stage followed by an exit interview after patients completed their consultation and health care service. The data were collected using the local language Amharic.

3.5.4 Qualitative data collection

The qualitative study in this dissertation applied a phenomenographic approach. Phenomenography is a qualitative explorative approach and has its roots in cognitive-psychological theory. The method most commonly used to collect data in a phenomenographic study is semi structured interviews with use of an interview guide involving a few basic questions (172). During the interview the informants should describe their view of the phenomena in such a way that the researcher can obtain a clear understanding of this view. The researcher should ask follow-up questions in order to obtain a more precise description of the phenomena.

This study has focused on describing the variation in how patients conceive, understand and conceptualize the phenomenon of patient rights practice. Hence, a qualitative design with a phenomenographic approach was chosen (173). Phenomenography has revealed a qualitative research approach for describing the lived experience of the research participants. The

application of phenomenography is relevant in understanding patients' experiences, which is the main research aim of this study. In other words, it is usually applicable to explore patients' experiences of their illness and health service related experiences (174).

Phenomenography takes up a non-dualistic ontology which assumes a person and a phenomenon to have an inseparable relation. There are no two worlds; a real, objective world, on the one hand, and a subjective world of mental representations, on the other. There is only one really existing world which is experienced and understood in different ways by human beings that is simultaneously objective and subjective (175). "The only world that human beings can communicate about is the world as experienced" (176). The epistemological stance of phenomenography assumes that experience is described as an internal relationship between human beings and the world. Hence phenomenography considers that knowledge is constituted through internal relations between people and the world, it is conceptualized as a human-world relationship (175). People differ in experiencing the surrounding world and the differences can be related, described and understood by others. The conception may differ from within the same person or from one person to another as different aspect of the phenomenon are conceived depending on the whole in relation to a given context. Phenomenography gives emphasis a way of examining a collective human rather than individual perspective of a phenomenon.

A qualitative information was collected by the principal investigator at the hospitals with few semi-structured topic guides (Annex 4). The study applied in-depth interviews which enabled participants to display their own understandings and perspectives, and themes be identified during the study that might not have been anticipated initially.

We interviewed patients who were seeking health care in the outpatient and inpatient departments of medical or surgical care that were familiar with the hospital's situation so that they were able to explain their experiences. The criteria to include research participants for this study were: age above 18 years, both sexes, considering residence, educational status, and experience in the outpatient and inpatient departments. Thus, twenty-two patients were interviewed so as to get a wide variety of conceptions by capturing as many aspects as possible of the phenomenon under study. Table 5 shows respondents demographic characteristics in random order.

All interviews were started with an open-ended question- for example, 'could you please tell me what patient rights means to you in hospital health care?' Based on the immediate understanding of what the patients were trying to express, subsequent prompts were used to elicit and clarify the concept under study by using expressions such as 'how…' and 'can you tell me more…'. The suitability of the question was checked among patients who seek health care in the inpatient and outpatient departments. The interviews were conducted in safe room in the hospital and lasted for 30 to 45 minutes. The interviews were conducted using the local Amharic language, audio-taped and later transcribed verbatim and then translated to English.

Table 5: Demographic characteristics of the participant in qualitative study (N=22), Amhara Region, Northern Ethiopia, 2014

Participant. No_	Age	sex	Residence	Educational status	Department	Hospital Type
1	22	Male	Rural	10+1	Outpatient	District
2	37	Male	Urban	12+4	Inpatient	Referral
3	36	Female	Rural	Unable to read & write	Inpatient	District
4	78	Male	Rural	Unable to read & write	Outpatient	District
5	57	Male	Urban	Primary	Inpatient	District
6	29	Female	Urban	10+1	Outpatient	Referral
7	45	Male	Rural	High school	Inpatient	Referral
8	65	Female	Rural	Unable to read & write	Inpatient	Referral
9	31	Female	Rural	Read & write	Outpatient	District
10	44	Male	Rural	Primary	Outpatient	Refferal
11	25	Female	Urban	10+3	Inpatient	Refferal
12	51	Female	Urban	High school	Inpatient	Refferal
13	23	Female	Rural	Primary	Outpatient	District
14	32	Male	Rural	Primary	Inpatient	District
15	27	Male	Rural	Read & write	Outpatient	District
16	67	Female	Rural	Unable to read & write	Inpatient	Refferal
17	34	Male	Urban	12+4	Outpatient	Referral
18	28	Female	Rural	Primary	Outpatient	District
19	45	Male	urban	12+4	Inpatient	District
20	49	Female	Rural	High school	Outpatient	Refferal
21	60	Female	Urban	Read & write	Inpatient	Refferal
22	28	Male	Rural	High school	outpatient	District

3.6 Operational definitions and measurement of variables

Patient Satisfaction is an expression of the gap between the expected and perceived characteristics of a service. In the present study, overall patient satisfaction was measured as Global Patient Satisfaction with a single likert type item question asking respondents to rate their overall satisfaction with their consultation, on a 5-point likert rating item ranging from 'very satisfied' to 'very dissatisfied' (80, 151, 171). The dependent variable took the value of "1" where the patient is satisfied or very satisfied and "0" otherwise**.**

Preferences: In this study, the term patient preference is defined as the value attached by patients to aspects of health and healthcare (attributes) such as physician communication about the illness, drugs and treatment, nursing communication, waiting time for the consultation, drug availability in the hospital pharmacy, diagnostic facilities and continuity of care. In this study patients choose from options of hospitals that have different attribute levels. Preferences refer to some desired state and, as in the above definition, imply that more than one state is possible and that there are some options.

Expectation is defined as the aspects of the hospital characteristics anticipated by prospective patients, regardless of preference, or what could be considered ideal.

Pre-consultation expectation: Can be defined as an anticipation or estimation of the probability of an event occurring. In this case, patients rated their anticipation or estimation of the probability of events during consultation using a 5-point response scale from strongly agree to strongly disagree.

Post consultation met expectation/experience: In this case, patients rated their experience how the expectations were met using a 5-point response scale from strongly agree to strongly disagree. It measures the actual patient experience in health care service.

Fulfillment of expectation: Based on gap model of expectancy model, fulfillment of patient expectation is defined as degree to which a person's perceived occurrence of an event agrees with his or her previous expectations about that event. Thus, the higher the perceived fulfillment of the expectations then the higher the satisfaction, and when fulfillment is lower than expectations then the greater the gap and the lower the satisfaction (177-179). Therefore, in this study if the post consultation met expectation (experience) is greater or equal to pre-consultation expectation we can say that the expectation is fulfilled.

Patient rights: The collection of rights based on human rights principles which individuals have in the healthcare providing system and healthcare providers are required to observe. Patient rights include legal and ethical issues in the provider-patient relationship.

Patient participation: the effort that a patient exerts during a specific health care interaction. This may include sharing information, sharing one's self, and engaging in questioning and discussion (180).

3.7 Data management and analysis

The collected data were checked for inconsistencies and missing values, coded and entered in to SPSS version 17 for analysis. Out of range and missing values were checked by examining the frequency distribution of the variables. The data were confirmed against the raw data and corrections were made in the case of entry errors. In the case of the preference study, data were entered in to SPSS and transferred to STATA version 12 (Stata Corp, College Station, Texas, USA) for ease of data analysis and management. Simple frequencies were used to see the overall distribution of the study subject with the variables under study.

3.7.1 Discrete choice experiment data analysis

The discrete choice experiment data was analyzed using a random effects probit model in STATA version 12, that accounted for many observations from each respondent (101, 181). We treated each respondent's choice between pairs as a single observation and included in the model as the dependent variable. The dependent variable was coded as ''1'' which indicates the option being chosen, and ''0'' indicates the option not chosen. The differences between the levels of each attribute in each pair of scenarios were considered as independent variables of the study.

The equation of the model can be presented as:

$$\Delta Y_{nc} = \beta_0 + \beta_1 \Delta X_{1c} + \beta_2 \Delta X_{2c} + \beta_3 \Delta X_{3c} + \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \beta_n \Delta X_{nc} + + \varepsilon \ldots\ldots\ldots \text{(Eq.1)}$$

where ΔY is the difference in utility between option 1 and option 2; n refers to the individual identification; c refers to the number of choice set; β0 is the constant term included to control and test model misspecifications due to unobserved dimensions or unobserved interactions between respondents' socio-demographic characteristics and dimensions (182) ; β_1, β_2, …. β_n are part-worth utilities; ΔX_1, ΔX_2,… ΔX_n represent differences in attribute levels between option 1 and option 2; and ε is the random error term.

Attributes like waiting time, physician communication, nursing communication, drug availability, continuity of care and diagnostic facilities were used to fit the main effects model. The baseline model was used on $X_1 = X_2 = \ldots X_n = 0$ (physician with poor communication, poor nursing communication, with no drug available that has no continuity of care with a few diagnostic facilities in the hospital). Waiting time" was treated as continuous variable with a linear utility function.

Besides analyzing the main effects (the six main attributes), it was also hypothesized that individual characteristics, such as socio-demographic variables and type of hospital experienced, could also influence preference for a hospital visit. We included variables age, sex, educational status, marital status, occupation, residence, payment status, hospital type and patient status. Hospital type was coded as referral and district and patient status was also coded as outpatient and inpatient. To create a more parsimonious model by including the main effects and interaction terms, variables were excluded stepwise one at a time with P-values greater than 0.10.

Marginal Rate of Substitution (MRS) values were calculated by dividing the coefficient values of the attributes with another one attribute, in this case with "waiting time" attribute (182). Hence, attributes can be compared on a common value scale in terms of "willingness to wait".

Theoretical validity of the study was examined by exploring whether the estimated parameters were in the expected signs. Having good physician communication, nursing communication, drug availability in the hospital pharmacy, presence of continuity of care, availability of diagnostic facilities and less waiting time for the consultation were all anticipated to increase patient satisfaction.

Estimating how much each attribute contributes to the log-likelihood of the model gives the relative impact of the attributes. This can be attained through estimating and re-estimating the model by omitting one attribute at a time and estimating the difference between the full and the reduced model log-likelihoods (183). The more contribution of the attributes in the total log-likelihoods of the model, as shown by the attributes partial log-likelihoods, indicates the attribute was more important.

3.7.2 Data analysis for the pre-and post -consultation expectation study

The pre and post consultation expectation likert data were analyzed at the interval measurement scale (184**).** The mean item scores were calculated for the subscales. Overall pre and post consultation expectation mean scores were created by summing scores for each of the individual domains. Paired samples t-test was used to compare the mean difference between pre and post consultation expectation scores. Satisfaction was dichotomized into satisfied and dissatisfied. Very satisfied and satisfied were categorized under satisfied, and dissatisfied, very dissatisfied and neither satisfied nor dissatisfied were categorized as dissatisfied. Multivariable logistic regression was performed with predictive variables with patient satisfaction. Variables were selected if their bivariate significance showed p=0.1; To accommodate the possibility of variable achieving statistical significance once the confounding effect of another variable was controlled. P values of <0.05 were considered significant. We used SPSS version 17.0 (SPSS, Inc., Apache

Software Foundation, Chicago, IL, USA) for data analyses. Internal reliability for each scale was evaluated by Cronbach's alpha. The Cronbach's alpha for the pre -consultation expectation scale was 0.86, and the Cronbach's alpha for post consultation scale 0.94, which suggest the scales showed good to excellent internal consistency (185).

3.7.3 Qualitative data analysis

As this study applied phenomenographic approach, the data analysis techniques employed six major steps (175). Familiarization phase can be taken as a first step, which means that the interviews were read and re-read again by the researcher to gain the overall idea of the data and to correct errors in the transcripts. The second step involves identifying meaningful responses from data into meaningful statements/description codes. The third step contains a preliminary grouping or classification of similar meaningful statements. The fourth step is a preliminary comparison of categories, which tries to establish borders between the categories. This is a phase which sometimes entails revision of the preliminary groups. The fifth step consists of naming the categories to emphasize their essence. The last step is a contrastive comparison of categories, which contains a description of the unique character of every category as well as a description of resemblances between categories. In this step through interaction between the parts and the whole, based on similarities and differences, four descriptive categories emerged. An iterative process was used throughout the data analysis to check interpretations against the texts and the descriptive categories. Hence, a continual process of iteration between a focus on the whole and the parts was used to check on the interpretation until the descriptive categories that emerged from the data were found to be mutually exclusive. According to Marton and Booth (175), the descriptive categories are used to form the 'outcome space' showing the whole of the findings (Figure 4).

3.8 Data quality assurance

The questionnaires were first prepared in English by the investigators and later translated to the local language Amharic and retranslated back by another translator to English to compare the similarity. A pretest was done on the instrument translation customized to the local culture. Supervisors and data collectors were recruited by considering their level of education and previous experience.

Training was given before data collection which includes the contents of the questionnaire, measurement scales, ethics during data collection and how to administer the questionnaire. The training was conducted in the form of readings, discussions, role plays, mock-interviews and field practices. Onsite supervision was made. Supervisors reviewed each of the questionnaires after the interview to identify any inconsistencies, and missing values. The PI reviewed some of the questionnaires on daily basis. All filled questionnaires were checked for completeness and immediate actions were taken. All patients were informed about the purpose of the study. Patients were assured that the questionnaires were collected by researchers and not shown to their physician. To avoid potential errors every data entry has been counterchecked. After the entry was completed, the PI rechecked the data entered against the raw data, and necessary corrections were made before the analysis. Frequency distribution of variables was conducted to check for missing values, outliers, and other data errors. Errors found in data entry were validated against the questionnaires and corrections were made before analysis. Important assumptions were also checked using standard procedures.

For the qualitative study, data were collected by the PI, who had extensive experience in interviewing and handling qualitative data. The interview setting was a location that was quiet, has minimal distraction and kept their privacy and confidentiality by considering the potentially

sensitive information could be revealed during the interview process. The suitability of the questions was checked among patients who seek health care in the inpatient and outpatient departments. It was also tested in order to assure the interview technique. The interviews were conducted in the local Amharic language, audio-taped. Respondents were free to give details.

3.9 Ethical considerations

The study was approved by the Institutional Review Board of College of Health Sciences, Addis Ababa University, Ethiopia. Written Permission from the Amhara Regional Health Bureau and respective study hospital administrators was also sought. Verbal Informed consent was obtained from all participants prior to the interview, all of whom were legally competent to give their consent. The participant has the right to ask information that is not clear about the research context and content before and or during the research work. Oral information was given to all potential participants concerning the voluntary nature of participation and concerning their right to withdraw at any time. The participant has full right to withdraw from the study at any time. This would have no effect at all on the health benefit or other administrative effect that the respondent gets from the hospital as routine. Moreover, nobody enforced the respondent to explain the reason of withdrawal. Confidentiality was assured, which means that the data has not been linked to the individual. Patients were assured that the questionnaires were collected by researchers and did not show to the physician. The provided information was not disclosed in the way it identified the personal characteristics and privacy. The interviews were conducted with safe private room. During the data collection, if any health care service threats are identified, we informed the hospital medical director and hospital administrative to provide the necessary health care. This research did not have any inhumane treatment of research participants and any physical harm, social discrimination, psychological trauma and economic loss. The study did not

bring any risks that incur compensation. No personal identifiers or names of participants were used at any point during data collection and reporting and dissemination of results by assigned each quotation a pseudo identifier so as to ensure confidentiality.

3.10 Tabular summary of the methods applied in the dissertation

Table 6: Summary table of study objectives and methods

Objective	Design	Study subjects	Sample size	Data collection	Data Analysis
To evaluate patients' preferences for attributes related to health care services	Experimental : DCE	Patients in the outpatient and inpatient of Medical and surgical departments	1005 patients	Structured questionnaire interview	Frequencies Percent Median Standard deviation Random effects Probit Regression
To assess the relation between patients' expectations and their satisfaction	cross-sectional pre-post consultation study	Patients in the outpatient department of Medical and surgical departments	776 patients	Structured questionnaire interview	Frequencies Percent Median Mean Cronbach's alpha coefficient Standard deviation Paired t-tests Logistic regression
To examine the lived experience of patients on patient rights practice	Qualitative-Phenomenographic Approach	Patients in the outpatient and inpatient of Medical and surgical departments	22 patients	In depth interview	Interpretive content analysis

4. RESULTS

4.1 Patients' preferences to health care services (paper I)

4.1.1. Socio-demographic characteristics

One thousand and five responses were achieved from the target number of 1054 questionnaires, which gave a response rate of 95.4%, and this has a potential data set of 8040 pair wise observations (1005X8 questions). Of the total respondents, 580(57.3%) were males, and 209 (21%) of patients reported themselves as illiterate. The median age of the respondents was 34 years, with a range of 18 to 88 years. A summary of socio-demographic characteristics is presented in Table 7.

Table 7: Socio-demographic characteristics of respondents, Amhara Region, Northern Ethiopia, 2014

Characteristics	Number (N=1005)	Percent
Age (years)		
18-34	504	50.1
35-64	461	45.9
>64	40	4.0
Sex		
Female	425	42.3
Male	580	57.3
Marital status		
Married or cohabiting with partner	580	57.7
Divorced or separated	30	3.0
Widowed	57	5.7
Single	338	33.7
Educational Status		
Illiterate	209	20.8
Read & write	115	11.4
Grade 1-8	215	21.4
Grade 9-12	177	17.6
Grade 11-12	91	9.1
Diploma & above	198	19.7
Occupation		
Employed	160	15.9
Merchant	164	16.3
Farmer	515	51.2
No job	95	9.5
other	71	7.1
Residence		
Urban	364	36.2
Rural	641	63.8
Payment Status		
Paying	945	94
Free	60	6

4.1.2 Main-effects model

The result of the main effects model is shown in Table 8. The data were modeled with a good fit with McFadden Pseudo $R^2 = 0.2719$. The model has sensitivity of 87.6%, specificity of 66.7%, negative predictive value of 82.67% and positive predictive value of 74.74%. In general, the model classified correctly 77.75 % of the responses.

All attributes had a significant impact on participants' decisions, as indicated by their coefficients that are significantly different from 0. The waiting time coefficient (β=-.773) is of negative sign as expected showing a higher probability of choosing a hospital with less waiting time for consultation; this entails dissatisfaction related with longer waiting time. The coefficients (β) of the attribute levels on good physician communication (β=0.233), good nursing communication (β=2.06), full drug availability (β=2.525), lots of diagnostic facility (β=0.856) and the presence of continuity of care (β=0.937) are positive and larger than their respective reference attribute levels. This indicates that, participants preferred to visit a hospital which had continuity of care, a good physician and nursing communication, with full drug availability and a lot of diagnostic facility; provided everything else equal.

4.1.3 Marginal rate of substitution

Table 8 presents the Marginal Rate of Substitution (MRS) values between attributes. Calculating the value of one attribute with waiting time for consultation indicates that patients are willing to give up for that attribute if the difference is longer. "Waiting time" is more important than "good nursing communication" if the difference in waiting time was longer than 2.7 hours, suggesting that patients would be willing to wait up to 2.7 hours for a hospital with good nursing communication. "Waiting time for consultation" is more important than "full drug availability and a lot of diagnostic facilities in the hospital" if the difference in waiting time was longer than 3.3 and 1.1 hours respectively, indicating that patients would be willing to wait 3.3 and 1.1 hours to be consulted in a setting with full drug availability and a lot of diagnostic facilities respectively.

Table 8: Main effects model and Marginal Rate of Substitutions- Results from DCE

Variable	β	Std. Err.	P-value	MRS (hr.)	*95% CI (Lower)*	*95% CI (Upper)*
Waiting time	-0.773	0 .348	0.026	-		
Physician communication-good	0.233	0.091	0.011	.301	-.0042	.6076
Physician communication-moderate	0.087	0.101	0.380	.113	-.1414	.3685
Nursing communication.-good	2.060	0.587	0.001	2.66	1.769	3.556
Nursing communication-moderate	0.859	0.622	0.168	1.11	.4882	1.733
Drug availability-full	2.525	0.403	0.001	3.263	1.387	5.139
Drug availability-partial	1.309	0.423	0.002	1.692	1.253	2.13
Continuity of care-yes	0.937	0.254	0.001	1.211	.774	1.649
Diagnostic facilities- a lot of	0.856	0.055	0.001	1.107	1.518	2.062
Diagnostic facilities-some	-0.987	0.772	0.201	-1.276	-2.11	-.439
Constant	0.085	0.357	0.811	-	-	-

4.1.4 Segmented model

Table 9 presents the results of the segmented model. The segmented model has almost similar fit (Pseudo R^2= 0.2744) with that of the main effects model. The model has sensitivity of 84.51%, specificity of 70.74%, and negative predictive value of 80.20% and positive predictive value of 76.5%. In general, the model classified correctly 78.03 % of the responses.

In the segmented model, waiting time, good physician communication, good nursing communication, full drug availability, partial drug availability, presence of continuity of care, and a lot of diagnostic facilities had influence on patient preference in public hospital health care services. Good nursing communication, a lot of diagnostic facilities, partial drug availability and presence of continuity of care present in the interaction effects, demonstrating that these attributes were key for a subgroup of patients.

The statistical significant coefficients of the interaction effects indicate that preferences were differed with the variable sex, occupation and type of hospital. A hospital with good

nursing communication (β=0.089) and partial drug availability (β=0.101) was preferred by farmers. Participants that had no jobs preferred a hospital with partial drug availability (β=0.150). Those respondents who were from referral hospitals preferred a hospital that has continued of care (β=0.081). A hospital with good nursing communication and a facility with lots of diagnostic facilities were not considered by female respondents.

Table 9: Segmented model (DCE)

Variable	β	***Std. Err.***
Waiting time	-0.3177**	0.016
Physician communication-good	0.2261 **	0.039
Nursing communication-good	1.185**	0.043
Drug availability-full	2.048**	0.052
Drug availability-partial	0.7292 **	0.038
Continuity of care-yes	0.5134**	0.032
Diagnostic facilities-A lot of	0.8955 **	0.032
Good nursing communication*Sex-female	-0.0734 *	0`.036
A lot of diagnostic facilities*sex-female	-0.1207**	0.037
Good nursing communication*farmers	0.0894 *	0.041
Partial drug availability*farmers	0.1010 *	0.043
Partial drug availability*no jobs	0.1502 *	0.072
Continuity of care*referral hospital	0.0811*	0.035
Constant	- 0.4262**	0.041

Notes: *P<0.05; **P<0.001.

4.1.5 Relative impact of the attributes

Table 10 presents the relative importance of attributes in the main effect model. The result indicates that a hospital with a lot of diagnostic facilities was ranked at the top which accounted for 65.9% of the log-likelihood. This was followed by full drug availability in the hospital, continuity of care and good nursing communication collectively accounting for 23.5%. Interestingly, attribute levels like moderate nursing communication, some diagnostic facilities and moderate physician communication that are not significant in the main effects model have a negligible impact on the log likelihood.

Table 10: Ranking of attribute importance using partial log-likelihood analysis (main effects)

Attribute level excluded from the analysis	Log-likelihood	Partial effect-change in log-likelihood	Relative effect-% sum of change in log-likelihood	Cumulative	Order of impact
None	-4047.1091				
Diagnostic facilities- a lot of *	-4119.382	-72.2729	0.6592	0.6592	1
Drug availability-full*	-4061.7391	-14.63	0.1334	0.7926	2
Continuity of care*	-4052.6839	-5.5748	0.0508	0.8434	3
Nursing communication-good*	-4052.2646	-5.5155	0.0503	0.8937	4
Drug availability-partial*	-4051.1625	-4.0534	0.0369	0.9306	5
Physician communication-good*	-4050.4455	-3.3364	0.0304	0.9610	6
Waiting time*	-4049.316	-2.2069	0.0201	0.9811	7
Nursing communication-moderate	-4047.9985	-0.8894	0.0082	0.9893	8
Diagnostic facilities-some	-4047.8814	-0.7723	0.0071	0.9964	9
Physician communication-moderate	-4047.4936	-0.3845	0.0036	1.0000	10

Note: *significant in main effects DCE model

4.2 Patient expectations and their satisfaction (paper II)

4.2.1 Socio-demographic characteristics of respondents

Of the target number of 841 patients, 776 participated on the study; giving a response rate of 92.3 %. Higher proportion of the respondents were males, 468 (60%). The median age of the respondents was 31 years, with a range of 18 to 80 years. Approximately twenty-one percent of patients reported themselves as illiterate, and two-third were rural inhabitants. Higher proportion of respondents were farmers, 474 (61%) and paying patients, 753 (97%) *(*Table 11)

Table 11: Individual characteristics of respondents for the patient expectation-satisfaction study, Amhara Region, Northern Ethiopia, 2014
(N=776)

Characteristics	Number (N=776)	Percent
Age		
Median age	31	
Sex		
Female	308	39.7
Male	468	60.3
Marital status		
Married or cohabiting with partner	543	70.0
Divorced or separated	54	7.0
Widowed	19	2.4
Single	160	20.6
Educational Status		
Illiterate	162	20.9
Read & write	152	19.6
Grade 1-8	196	25.3
Grade 9-12	114	14.7
Grade 11-12	4.3	5.5
Diploma & above	109	14.0
Occupation		
Employed	101	13.0
Merchant	125	16.1
Farmer	474	61.1
No job	43	5.5
other	33	4.3
Residence		
Urban	255	32.9
Rural	521	67.1
Payment Status		
Paying	753	97.0
Free	23	3.0

4.2.2 Health care visits by respondents

Table 12 shows that 172 (22.2%) of respondents had previous experience in the medical health care services. In addition, 240 (30.9%) of the respondents mentioned their symptom (health problem) lasted one week or less. Three hundred fifty-nine (46.3%) reported symptom between one week and one month. Of the total of 776 participants, 93.7% visited hospitals for the diagnosis of their health conditions, while 49.3% mentioned prescription refill and/or in need of medical or surgical procedure as reasons for their current consultation.

Table 12: Health care visits and reasons for the current visit, Amhara Region, Northern Ethiopia, 2014

Characteristics	Frequency (N=776)	Percent
Previous experience of health service utilization		
Yes	172	22.2
No	604	77.8
Reasons for the current health service visit*		
To get diagnosis	727	93.7
For reassurance	57	7.3
To get the results of test	41	5.3
Treatment	384	49.3
For a health checkup/appointment	43	5.5
To ask for a referral	36	4.6
Duration of symptom/problem for the current visit		
One week or less	240	30.9
Between one week and one month	359	46.3
1-6 months	91	11.7
6-12 months	42	5.4
≥12 months	44	5.7

Note: *multiple response question

4.2.3 Respondents perception towards decision making in health care and their health conditions

As shown in Table 13, only one-fifth of the respondents preferred to take active role in treatment related decisions; eleven (1.4%) and 145 (18.7%) of participants preferred to make final decisions about medical care and final selection of the treatment after considering health care provider's opinion, respectively. About 488 (62.9%) respondents perceived that they can moderately influence the consultation in order to achieve the outcome they want. Around a

quarter of respondents strongly agree to take a positive attitude towards themselves, where as fewer (18%) perceived that they had a lot of control over their health. Regarding self-perceived health status, approximately two-third of patients perceived that their health status ranged from good to very good, relative to their age. About 87% of patients perceived that they did not have longstanding illness, disability or infirmity. In those respondents with chronic illness, hypertension, diabetes, heart problem, back pain, and headache were mentioned as the most common longstanding health problems.

Table 13: Respondents perception towards decision making in health care and their health conditions, Amhara Region, Northern Ethiopia, 2014

Perceptions	Number (N=776)	Percent
Preference in making decisions about medical care:		
I prefer to make the final decision about which treatment I will receive	11	1.4
I prefer to make the final selection of my treatment after seriously considering my doctor‘s opinion	145	18.7
I prefer that my doctor and I share responsibility for deciding which treatment is best for me	412	53.1
I prefer that my doctor makes the final decision about which treatment will be used, but seriously considers my opinion	138	17.8
I prefer to leave all decisions regarding my treatment to my doctor	70	9.0
Influence the consultation in order to achieve the outcome you want		
A lot	152	19.6
A moderate amount	488	62.9
A little	113	14.6
Not at all	23	3.0
Extent of agreement to take a positive attitude towards him/herself		
Strongly agree	200	25.8
Agree	464	59.8
Neither agree nor disagree	26	3.4
Disagree	86	11.1
Strongly disagree	0	0
Extent of control over your health		
A lot of control	141	18.2
Some control	427	55.0
A little control.	92	11.9
No control	116	14.9
Perceived health status		
Excellent	0	0
Very good	227	29.3
Good	283	36.5
Fair	164	21.1
Poor	76	9.8
Very poor	26	3.4
Presence of longstanding illness, disability or infirmity		
yes	104	13.4
No	672	86.6

4.2.4 Respondents perception of the overall health care visit

About two-third of the respondents were able or attempted to influence the consultation in order to get the outcome they wanted. About 211(27.2%) respondents said that they were disappointed with the consultation. Some of the things that needed to be done at this consultation that were not done were: provider did not get their problem, provider not giving enough time for discussion, provider did not reassure their health condition, provider did not use diagnostic equipment and/or no lab investigations, provider did not conduct physical examination and provider gave short consultation time. About 116 (14.9%) of respondents believed that the consultation was not worth. When we evaluated respondent's global satisfaction level, 243(31.3%) and 351(45.2%) were very satisfied and satisfied, respectively (Table 14).

Table 14: Post visit perceptions and patient satisfaction of consultation in the outpatient department, Amhara Region, Northern Ethiopia, 2014

Post visit perceptions	Number(N=776)	Percent
Extent of influence on the consultation		
A lot	72	9.3
A moderate amount	510	65.7
A little	126	16.2
Not at all	68	8.8
Things that disappointed you:		
No	565	72.8
Yes	211	27.2
Perceived worthiness of the consultation		
Worth it	267	34.4
Too early to say	393	50.6
Not worth it	116	14.9
Overall, how satisfied are you with your visit this time:		
Very satisfied	243	31.3
Satisfied	351	45.2
Neither satisfied nor dissatisfied	123	15.9
Dissatisfied	41	5.3
Very dissatisfied	18	2.3

4.2.5 Differences in pre-consultation expectation and post-consultation experience

Paired sample *t*-test was performed to assess the mean differences between the patient's expectations before and after consultation. The results revealed a significant difference in overall expectation from pre-consultation to post-consultation ($\bar{x}_1 = 39.62 \pm 10.27$) to ($\bar{x}_2 = 47.34 \pm 14.45$) with (t = -12.95, P<0.001). This mean expectation score increased from pre-consultation to post- consultation indicated that patient's had higher expectations in the pre-consultation but did not met post-consultation expectations. Among the subscales, all subscales except the health care provider-patient communication style subscale had significant difference between pre-consultation and post-consultation met expectations (Table 15).

Table 15: Mean differences between pre consultation expectation and post consultation met expectation

Expectations	Pre consultation Mean$\pm s.d.$	Post consultation Mean$\pm s.d.$	t	p
Finding way around	7.9$\pm$2.51	8.80$\pm$3.06	-6.36	<.001
Health care provider -patient communication style	11.24$\pm$3.55	10.92$\pm$3.78	1.71	.087
Treatment given/procedures performed)	9.20$\pm$2.53	11.77$\pm$3.09	-18.23	<.001
Health care provider approach to information	11.24$\pm$3.57	15.85$\pm$6.67	-17.66	<.001
Over all expectation	39.62$\pm$10.27	47.34$\pm$14.45	-12.95	<.001

4.2.6 Predictors of patient satisfaction

Table 16 shows the logistic model to assess factors that have independent associations of patient satisfaction. The logistic model fit well (Hosmer–Lemeshow test, p >0.05), and statistically significant, $\chi 2 = 86.72$, p < .001. The model explained 14.9 % (Nagelkerke R^2) of the variance in patient satisfaction and correctly classified 71.6% of cases.

The probability of patient satisfaction is contingent on post consultation expectation score level. Higher score of post consultation met expectation scores, less likely satisfied. Participants with excellent to good self-perceived health status groups were 3.5 times (OR, 3.53, 95% CI; 2.27-5.49) more likely satisfied than fair to very poor self-perceived health status groups. Similarly, the odd of satisfaction was higher among participants who had a lot of perceived control on their

health compared to with their counter parts. The odds of satisfaction was significantly lower among patients who were disappointed (OR, 0.32, 95% CI; 0.22-0.47) compared to patients who were not disappointed. Similarly, the odds of satisfaction was lower among participants who had previous experience in health care service compared to with their counter parts. On the other hand, compared to patients that had a lot of influence on the consultation, the odds of satisfaction for those with no influence was significantly lower (OR, 0.58, 95% CI; 0.37-0.91).

Table 16: Results of the logistic regression analysis showing independent associations of global patient satisfaction

Variables	β	Sig.	Exp(B)	95% C.I.for EXP(B)	
				Lower	Upper
Post-consultation expectations mean score	-.012	.038	.988	.976	.999
Pre-consultation expectations mean score	-.011	.188	.990	.974	1.005
Perceived control over health (Does not=0, A lot of control=1)	.749	<.001	2.115	1.343	3.329
Perceived health status (fair to very poor=0, Excellent to good=1)	1.263	<.001	3.538	2.277	5.496
Perceived extent of influence to the consultation (Moderate to not at all=0, A lot=1)	-.538	.019	.584	.372	.917
Disappointed (No=0, Yes=1)	-1.121	<.001	.326	.223	.476
Experience(No=0, Yes=1)	-.531	.021	.588	.374	.924
Constant	.908	.106	2.480		

4.3 Lived experience of patients on patient rights practice (paper III)

As shown in Table 17, four different main categories of patients' conception on patient rights practice were extracted from the qualitative study. Patients conceived patient rights practice as patient centered practice, being secured, respect patients' dignity, and referral. The main categories, which are supported by interview from the participants, are described, and finally the whole of the findings are presented.

Table 17: Categories and subcategories-conceptions on the patient rights practice

Categories	Sub categories
1. Patient centered practice	Attentive to patients' concern
	Participation in treatment procedures
2. Being secured	Privacy
	Confidentiality
3. Respecting dignity	Treat as a person
	Respect their independent capability
4. Getting Referral	Getting internal and/or external referral

4.3.1 Patient centered practice

The patient centered practice main category comprises attentive to patients' concern which is a way of understanding patient needs, and participation in treatment procedures that put in shared decision making.

4.3.1.1 Attentive to patients' concern

Some participants described that health care providers did not listen patients' voice. They described that some health care providers rejected their complaints and took their own actions. Patients experienced that health care providers did not give attention to their questions and preferences in their treatment. One participant stated:

"I wanted to urinate but I am in catheter. I do not have knowledge how to use it..... I asked frequently "please come soon I am suffering" but they did not give attention for me……. at that time, I was very sorry. They were working their own personal work". (Participant 7)

But other participants described that some health care providers were eager to know the patients' situation. Patients experienced that their questions were listened by the health care providers. Furthermore, patients appreciated efforts of health care providers to give the care they wanted provided that they were busy. One participant expressed:

"The health professional has talked to me about my personal matters and I responded to him. I have asked him and he responded to me. Despite he was busy; I appreciate his effort in listening my questions and his friendly approach". (Participant 2)

4.3.1.2 Participation in treatment procedures

Patients considered it is important to be engaged in a discussion during the rendered care and details be shared with them. They described that decisions should be taken in an atmosphere of mutual understanding that could enable them to enhance their situation. Some patients experienced that their views were acknowledged during the care provision by health providers. They experienced that the health care provider gave them relevant information to their situation and on what was going on around them. Their smooth relationship with the health care provider builds trust, and this led to continuous discussions related to their health condition. They expressed that their conversation with the health care provider created them wider context for further discussions and mutual understanding on treatment procedures. One participant stated as:

''A health care provider and I were discussing about my illness and treatment procedures……. and reached at a common understanding. While the doctor orders something to be done, this will be done as far as we arrived at consensus on treatment procedures". (Participant 16)

Other patients, on the other hand, expressed that they were not participating in the care they had. They were not invited to ask questions since the health care providers were not in the position to ask questions. Furthermore, patients described that care providers use technical (medical) terms during their communication. Patients did not understand some of the medical terminologies that health care providers talked to them. One participant described that:

"At the beginning, he [the health care provider] asked the symptoms of my illness, and then he observed some of my body parts through his hands. He has not told me the diagnosis but I asked the doctor what my health problem would be? He responded me with vague words in that he

guessed the problem to be related with lung. But I did not understand him. You know why? It was difficult to grasp and understand what the health provider was explaining about". (Participant 8)

4.3.2 Being secured

In this descriptive category, patient right practice as being secured, the patients conceived patient right as a way of real patient provider relation to be protected from any loss of privacy, and keeping secrets of patient information.

4.3.2.1 Keeping their privacy

Patients conceived being secured as privacy. Patients expressed not want to be seen in a place that might expose them during consultation or physical examination. They expect that their private parts should be protected from other health care providers, patients or others during consultation and physical examination. Patients expected that the concern during consultation and physical examination is about them and the health care provider. There is no need of interferences and being exposed from other sides. One participant stated that:

"I do not want to be seen by others…… I believe that patients including myself would like to control over from other people perception". (Participant 13)

Privacy is related with many things to the care and health condition of the patient. It comprises anything related to social problems, relationships and personal feelings related to the patient in the health care continuum. They wanted to be on their own single room that could be silent and not to be exposed to other people. One participant expressed:

"It is very important and I would like to be in a single room that relaxes me. …. you know being in single room means you freely discuss private things with your family". (Participant 5)

4.3.2.2 Keeping secrets of patient information

Patients conceived patient rights as keeping secrets of patient information. Patients give their information to the health care provider. Patients did not disclose their identifiable information to others without their permission. They did not tell all their personal information to their close friends or relatives. Patients did not want their private information to be shared with those health

care providers that are not directly involved for the care as well as other patients and people in community. They described that they would like to tell to their health care providers since they trust them. Hence, the private information needs to be protected. One participant expressed:

"*When patients get a health problem and go to the hospitals for treatment, they (patients) will tell their secrets to the doctor. Do you know why patients tell secretes to the doctor? Patients trust health care providers. Therefore, the doctor should keep the secret and do not tell their problems to others". (Participant 19)*

4.3.3 Respect their dignity

In this category, patients conceived patient rights as being treated as a person, and independent capability.

4.3.3.1 Treated as a person

The patients conceived patient rights as to be treated as a human being when they need medical care. Their views should be valued. Patients described that they need to be understood and require confirmatory remarks. Patients need to be treated as equally regardless of their disease status, residence, educational status, age or sex. Patients do not like to be discriminated but served equally. One participant expressed:

"*since we are human beings, we have equal rights to get the treatment and consultation…. the staffs are so good for some patients….and I also expect the same kind of treatment support…. but I thought it has to be due to, he/she is from urban and well educated". (Participant 7)*

4.3.3.2 Respect their independent capability

Patients described patient rights as respect their independent capability. Patients want to be seen as the person they were having the capacity to work and being healthy. Patients experienced different health problems while coming to the hospital for caring. They may have damaged body in case of physical harm or in ability to carry out their work in case of mental or social problems. In this case they may lose their previous capability. For example, one participant described:

"I experienced unpleasant feeling when I got sick. I was no longer able to cope up with all and have become dependent on physical aids. The physician realized me in that the situation is

simple, and advised me to be psychologically strong. In the then time, I was really optimistic and I do good take care of myself. You know why? I was so eager to be seen as a person as healthy before". (Participant 11)

4.3.4 Getting referral

In this category patients conceived patient rights as a getting referral they perceive the experienced health care provider for better diagnosis and treatment. Patients are keen to get a better treatment in the hospital they visited. They anticipate to be seen by experienced health care provider that is named in the hospital. Patients believed that experienced health care providers are skilled who could understand them and better know their health problem. One participant described that:

"Oh, I prefer to be treated by doctor M [the name of the doctor]. He is an experienced health care provider. He knows the details of my health problem well, so I wish I had to be treated by him". [Participant 15]

But some patients described that most health care providers influenced their views concerning health care provider choice, as either by disagreeing with the question or they have no ability to refer to the named health care provider. This restriction of internal referral to a choice health care provider is a concern for most patients as they perceived that their recovery is better with the named health care provider. One participant stated as:

"In this hospital, Dr N [the name of the doctor] is the best individual, who behaves well. As a result, patients prefer him. So I witnessed that most patients, who had been treated by him were recovered from their illness. If referrals are allowed based on patients' choice, most patients, I think, could choose him. But you can't do that since health care providers have restricted us to do it". (Participant 4)

4.3.5 The Outcome Space

The outcome space of the study showed a hierarchical relationship between the four main descriptive categories (see figure 4). It was interpreted to represent patients' collective understanding of patient right practice. The findings indicate that patient centered practice is a comprehensive way of illustrating patient rights practice in the hospital setting. Patient centered practice was interpreted patients as a center of health care practice. This understanding aims at making patients to have a positive experience of health care and maximizing patient satisfaction, positioned as being the core of patients' conception of patient rights practice. Considering patients at first in the health care practice rests on as the key component in patient rights practice as participate in their own care. Making patient conversation with the health care provider and acknowledging patients' views create a better health care provider-patient relationship. It also initiates discussion and shared decision making. Patient centered practice was immediately supported by patient rights practice as getting referral. Patients considered patient rights practice that was aimed at treated by the reputation health care provider. They needed internal referral within the hospital or external referral to the hospital to get a better diagnosis and treatment. This happens when patients are participated in health care and the health care providers are attentive to patients' concerns.

Patient rights practice as respect dignity, and being secured was positioned at the lowest level in the outcome space. Patient rights practice as being secured was described as keeping their privacy during consultation or physical examination. It was also described as their information did not disclose others unless they permit it. This view was mainly associated with respecting patient as a person, and contributes to patient participation, thus closely linked with respect their dignity. Patient rights practice as respect patients' dignity was described as patient views was valued as a human being and not be discriminated in spite of their different characteristics. Furthermore, despite their illness, patients were wanted to be seen as the person they were having the capacity to work and being healthy. The interplay between patient right practice conception as being secured and respect dignity makes patients at the center and closely linked with getting referral to for a better diagnosis and treatment in and/or out of the hospital. Patient rights practice as being secured and respect dignity was also considered as the constituent of patient centered practice, as these categories put patients first and value their views.

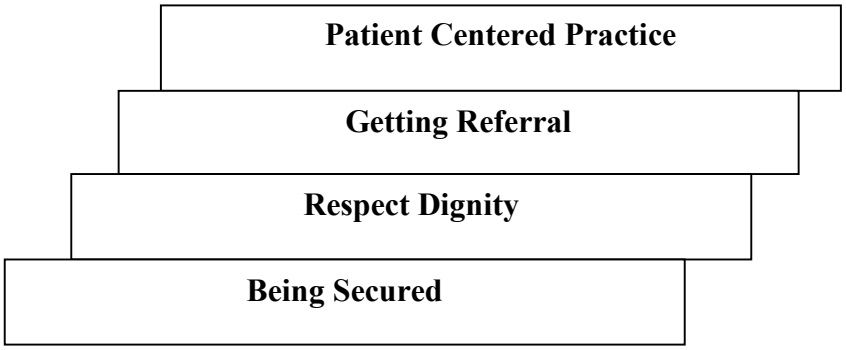

Figure 4: Patients understanding of patient rights practice-the outcome space

4.4 Summary of the main findings

Table 18: Summary of the main findings of the papers included in the dissertation

Paper No.	Title	Main Findings
I	Patients' preferences for attributes related to health care services at hospitals in Amhara Region, northern Ethiopia: a discrete choice experiment	• About 6 main attributes related to hospital health care services were identified: physician communication, nursing communication, waiting time, drug availability, diagnostic facilities, and continuity of care. • All attributes had a significant impact on participants' decisions. • Patients were willing to wait 3. 3 and 2.7 hours to be consulted in a hospital with full drug availability and good nursing communication respectively. • preferences differed with the variables sex, occupation, and type of hospital • Hospitals with lots of diagnostic facilities were reported important and ranked at the top, followed by full drug availability in the hospital, continuity of care, and good nursing communication.
II	Patient expectations and their satisfaction in public hospitals of Amhara Region	• Major reasons for consultation were to get a diagnosis and treatment. • About 594 (76.5%) participants were satisfied (very satisfied and satisfied) with the global measure of patient satisfaction. • Significant mean difference was reported in overall expectation from pre-consultation to post-consultation ($\bar{x}_1$ =39.62±10.27) to ($\bar{x}_2$= 47.34±14.45) with (t = -12.95, P<0.001). • Post consultation met expectation, perceived health status, and perceived control on health were factors identified as increase patient satisfaction. Whereas, any presence of disappointments, had a lot of perceived influence on the consultation and had previous health care service experience were factors that decrease their satisfaction.
III	The live experience of patients on Patient rights practice at hospitals in Amhara Region, northern Ethiopia	• Participants described four qualitatively different main categories of patient rights practice: patient centered practice, being secured, respecting dignity and getting referral. • Patient rights practice was understood from compressive to the lowest level hierarchically: patient centered practice, getting referral, respect dignity, and being secured. • Patient centered practice was a comprehensive way of illustrating patient rights practice in the hospital setting.

5 DISCUSSION

5.1 Patients' preferences in health care service

Our results show that, generally, preferences for the levels under each hospital attribute are consistent with the a priori expectation that a hospital with less waiting time that had good physician and nursing communication, full drug availability and had continuity of care and with a lot of diagnostic facilities are more preferred than with poor physician and nursing communication, no drug availability, no continuity of care and few diagnostic facilities of a hospital. These directions of the coefficient signs provide a check on internal / theoretical validity of the DCE model.

In this study good physician and nursing communication were among the most important characteristics of health care services preferred by respondents. Patient-physician communication and nursing communication are the key parts of the overall quality of the hospital care and treatment and hence are the key factors which enhance patient satisfaction (186, 187). Good physician and nursing communication is considered as patient centered approach of health care that increases patient involvement in decisions of treatment. This is shown by a study that increasing patient involvement has resulted in decreasing decisional conflict which is very important for mutual decisions of treatment, and hence predicts higher patient satisfaction with the health care provider (188).

Another study showed that patient centered approach of health care that is doctor's friendly approach, the interpersonal relationship and information-sharing were all high. Factors associated with shared-decision making had a lower (doctor-centered) score. A high educational level was associated with a more patient-centered scoring, an association that was most pronounced in the female population (189). Patients' described their preferences from physicians and nurses through aspects of caring, time and hope (190). But in this study, respondents did not prefer moderate physician and nursing communication. This may indicate respondents expected good communication and they were not tolerant for moderate communication from physicians and nurses.

Full and partial drug availability in the hospital compound was also highly preferred by respondents in the current study. Stated preference research in the hospital markets has

shown that the availability of medicines in the hospital compound is a predominant factor in hospital choice (91). This finding has the highest marginal rates of substitution suggesting that patients want consistent drug availability in the hospital compound. This is probably explained by when drugs are not available in the hospital compound, patients should purchase outside of the hospital. This has more negative implications for time to search the drug as well as costs to purchase. The regulatory control of the quality and price of drugs and services is uncommon hence drugs are expensive in the private sector (191). This is also similar to other developing countries (192). Our result suggests consistent drug availability in the hospital compound can be a policy measure.

Continuity of care in the hospital was also one of the important attributes of hospital choice. This is the most valued attributes of care even in other preference studies of health care (193) .Respondents marginal rates of substitution in terms of willing to wait is moderately longer than other attributes. Studies also showed that when patients needed a routine check-up, had a problem causing uncertainty or serious health problem, they preferred to wait longer to be seen by a familiar health care provider who is informed about their case (194). This is also shown in other studies that revealed self-reported continuity of care as a strongly preferred with higher patient satisfaction (195).

Respondents preferred lots of diagnostic facilities though they did not opt for some diagnostic facilities in the hospital. This may be due to the option respondents would necessarily preferred as they expect thorough examination during their visit of a hospital with lots of diagnostic facilities that patients are more ready to pay for.

The results of interaction terms showed that preferences differ with sex, occupation and type of hospital. A hospital with good nursing communication and partial drug availability in the compound was preferred by farmers. Participants that had no jobs preferred a hospital with partial drug availability. This may be due to jobless respondents have low expectations of drugs in the hospital or there is too much heterogeneity in preferences of this attribute. Those respondents who were from referral hospitals preferred a hospital that has continuity of care. This may be due to respondents from referral hospital were associated with a serious acute illness and/or chronic diseases hence expected in need of continuity of care for good health outcomes.

A lot of diagnostic facilities had relatively large impact on patients' valuation of health care, although full drug availability, presence of continuity of care and good nursing communication had relatively moderate impact on patients' preference and are considered as relatively important attributes.

5.2 Patient expectations and their satisfaction

The reasons for hospital visits mentioned by majority of the participants were either to get a diagnosis for their health condition, or for prescription refill, medical or surgical procedure. According to Degner Scale (170), to measure the preference in making decisions about medical care, about half of participants expressed a desire for sharing responsibility for which treatment is best for them. This is a collaborative process that the patient and health care provider shared in the decision of the treatment selection.

When we compared the summed mean values of pre- and post- consultation, there was increment in mean values during post- consultation. This was also showed in all the sub-categories of expectation. This indicates that patients had high expectations before consultation but faced difficulty in the actual medical setting in fulfilling these expectations. Results of this study pointed out that there was a difference between pre-consultation expectation and post-consultation met expectation/experience. Among the subscales, finding way around, treatment given/procedures performed, and health care provider approach to information subscales showed significant difference, but health care provider-patient communication style did not show significant difference.

Too look at determinants of patient satisfaction, relevant variables were entered in the model. Multivariable regression analysis illustrated that post- consultation met expectation, perceived control on health, perceived health status, perceived extent of influence on the consultation, any disappointments, and experience in health care were determinates of patient satisfaction.

Our result indicates that pre-consultation expectation was not a predictor for patient satisfaction. Patient satisfaction was determined by the actual experiences but not the expectations fulfilled. This result is inconsistent with prior studies which underlined the importance of fulfilled expectation for patient satisfaction (196, 197). Patient satisfaction

was determined by post-consultation met expectation. This relationship between met expectations and high patient satisfaction is supported by other studies (112, 171, 198-201).

Among the socio-demographic variables, age was significantly associated with patient satisfaction in the bivariate analysis but insignificant in the final model. Surprisingly, previous experience in medical care had negative association with patient satisfaction. This could be due to patients' lack of acknowledgement of previous experiences, which could be attributed to previous exposure to a hospital with less or no satisfactory service which might raise a concern on patient's safety and clinical effectiveness.

We found that patients were more satisfied when they had a lot of perceived control over their own health. This is in line with a prior study that showed the personal ability to control ones' environment to have positive effect on satisfaction (150). This is also supported by a research finding that has shown a positive satisfaction with perceived control over the childbirth environment, even though the setting was in the maternity care (202).

Interestingly, patients concerned with the consultation or disappointed with the consultation were unsatisfied. This could be explained by several reasons. Since patients expect hospital is a place to diagnose or confirm the diagnose about their problem and get well, their expectation have not been met. This is also expressed by emotional feelings where disappointments with the current health care service depict the patients' satisfaction. They might have also be described by the condition of their current illness, either they have debilitating and incurable disease and/or not sure about their future health.

Patients who perceived their health status was relatively good to their counter parts satisfied more. This is supported by a study done in Ethiopia, perceived health status is a determinant of patient satisfaction (11). This is also supported by other studies, reporting that a low perceived health status is associated with lower patient satisfaction (79-81). Moreover, Larsson and Wilde-Larsson (35) explained in their study that patients could never acknowledged their satisfaction when they assume that their health condition is deteriorating, and lack of hope to be cured. Patients' who are felt a lot extent influence on the consultation had negatively predicted patient satisfaction. This finding needs further investigations.

5.3 **Lived experience of patients on patient rights practice**

Patients described variation in the patients' conception of patient rights practice in hospital setting. Patients' conceived their rights in different ways. Patients described patient rights in the hospital health care in the following categories: patient centered practice, being secured, respects patients' dignity, and getting referral.

The participants in this study envisaged that patient-centered practice is the main category that patients conceived as a patient rights practice. Patients described the care they get were attentive listening, participate in treatment procedures with understandings of the patient on the disease. This is supported by a study by Amy Marshal et al, (203) that patients wanted their care from the health care providers equated as connected and attentive. In another study patients wanted provider behaviors that encouraged a helpful clinical relationship, that explains procedures step-by step, and attentive to body language (204). This finding is supported by another similar study, which describes that health care providers have a duty focusing on patients rather than doing their jobs without patient focused care (205). This is closely related to the point that health care providers should provide their utmost to the patients with person-centered care (206).

Patients conceived that information was an aspect of patient right. Patients want to participate in their treatment and take part in decision making. They considered it important and that health care providers invited them to participate to give them advice and did not withhold information. In their opinion, decisions should be taken in an atmosphere of mutual understanding, thus enabling them influence their situation and the care. Studies reported that patients were motivated to involve and value participation (207, 208). But another study showed that patients only partly participated in their care and were not actually invited to take part in decision making, due to the fact that health care providers believed that patients did not have enough knowledge as well as wishing to have control over the patient (209). It is therefore essential for health care providers to change such attitudes involve patients in care, and support them & empowered. Health care providers who use a language that patients do not understand create a barrier to the patient's participation. A shared dialogue between patient and health care provider creates

commitment that they can discuss to each other for shared decision making. It is also important to create trust between patient and the health care provider (210).

In this study patients reiterated that they have to feel secured in the processes of health care delivery services. They claim control over their privacy not to expose them to the vision of others during consultation or physical examination. Other studies support this patient needed their private sphere during treatment (211). Carolyn Doyle & Mirko Bagaric (212) argued that there is a need to re-assess the desirability of introducing a separate cause of action protecting privacy interests in health care.

The current study also revealed that keeping secrets related to the disease was an important conception related to patient rights practice. This is also related to patients' conception of keeping secrets of patient information. Health care providers have the responsibility of keeping information confidential about professional relationship with the patients and the disease affecting them. Patients needed their consultation and care in a private room so as to minimize information leakage. This indicates that health care providers have responsibility of respecting their privacy and confidentiality to feel them secured. This is supported by other similar studies as every patient has the right to control over information about them and right to privacy (213, 214). Another study also shows that patients expectation from the care should be comprehensive and performed in respecting ethical principles (215). But, a qualitative study by Jay Woogara (216) on patients' privacy of the person showed that patients had little privacy in the wards.

Respect their dignity was among the categories of patient rights. Patients aspired to be seen as valuable and treated as human being. They need respect and attentive care regardless of disease status, ethnicity, residence, occupation, income status or sex. This is also related to the need to preserve independent identity as they want to be seen as the person they were having the capacity to do and being healthy. This is related to study report on patients expectation in dignity, as respecting patient's dignity by, prompt attention, treating patients as equals, being sensitive as equals and make the patient comfortable (217). Similarly, other studies show that illness (218), or hospitalization hampered patients' dignity (219). Furthermore, the study showed that privacy of the person and dignity are interrelated (216).

Patients anticipated to be seen by the experienced health care provider. But this can be possible if patients get direct referral to the named health care provider in the hospital. Patients also needed referral to other hospitals if they experienced that shortage of diagnostic materials and drugs in the hospital, or to get a better skilled health care provider.

6 VALIDITY and GENERALIZABILITY

6.1 Validity

The validity of this study was addressed through different approaches: To maintain the validity for the discrete choice experiment, we considered different stages in choosing the final attributes and levels. Relevant attributes related to the health care service were identified through literature review and previous studies. These attributes were evaluated by the experts for their opinion, to prioritize and forward any additional comments. Patient opinion was also sought about the selected attributes to end up the 6 final attributes. The study used standard procedures for discrete choice experiment in designing the questionnaire. The questionnaire was tested on patients to assess the clarity of attributes and levels, whether respondents understood the task or not, and to assess how patients experience the exercise. Warm up choices were included with participants to assess the task better.

We also tested the validity of responses using the willingness of participants to trade-off the attributes in decision making where individuals have a tendency to choose an attribute which has best level. The study also checked attribute parameter signs and significance of result was in consistent with theoretical predictions.

As the experiment was done in choices made by patients in hypothetical settings instead of real-life situations, it was likely prone to hypothetical bias, but we tried to minimize the hypothetical bias by informing respondents about the importance of the study despite the hypothetical nature of the experiment and using attribute levels which is relatively certain and short for the respondents.

The study instruments were pretested; questionnaire was translated to the local language Amharic. Training of data collectors, close supervision, precautions in data entry were done. Data cleaning and coding were employed before analysis. Advanced statistics were applied to control confounders. There might be professional bias since data collectors were health professionals. This was addressed during training of data collectors by giving emphasis on not lead the participants in a particular answer.

6.2 Reliability

Cronach's alpha was used to test the internal consistency of the instrument by computing the average correlation coefficient which was reported 0.7 or higher indicating acceptable scale reliability (185). Cronbach's alpha for the pre and post consultation expectation questionnaire was greater than 0.8 indicating good to excellent, degree of internal consistency. Further statistical analysis of the data showed that no single item seemed to affect the overall reliability of the questionnaire if this specific item was deleted; therefore, the questionnaire was believed to be of considerable reliability for measuring pre-post consultation expectations.

6.3 Rigour of the qualitative study

For the qualitative study that applied a phenomenographic approach, the need to reconsider the rigour of phenomenographic research approaches, in particular validity and reliability, is necessary. Justification of validity lies in a full and open account of a study's method and results. The judgment of credibility and trustworthiness then lies with the person reading the study. In general, the rigour of the qualitative study in this dissertation was addressed through with assumptions evaluating phenomenographic research. In evaluating the trustworthiness of the interpretive research, Sandberg recommended the criteria of communicative validity, pragmatic validity and reliability (220).

Communicative validity: we addressed communicative validity through data collection, analysis and reporting of the findings. Informed consent was given before interview and assured that there were no right or wrong responses. The purpose of the interview was explained as to the participants. Interviews were conducted through friendly approach through discussion with few open ended questions. Participant statements were checked by repeating the reflected thoughts using follow up questions such as "What do you mean when you say this?", or "Could you explain further?". In the data analysis process, interpretations were made in relation to the data. The descriptions were made going back and forth to the data, as reading each respondent's statements in context and the whole.

In the reporting of the findings, the rigour of the study was considered at least by describing the characteristics of participants who involved in the study, which provides background information

for any effort at applying the results in other contexts. The research question under investigation and how data were collect were described. Data analysis and interpretation were done in an open mind and discussed the steps in detail. The findings are presented which permits informed scrutiny. The categories of description were described and illustrated with quotes. Furthermore, the findings were discussed and presented with other researchers and reviewers.

Pragmatic validity: The findings of this study are useful to give an understanding of patients the way in which patients experience patient rights practice in the hospital health care setting. The findings may guide the development of patients' bill of rights and in medical ethics education.

Reliability: During the process of interpretation, we tried to withhold previous experiences in achieving truthful interpretations. Pretesting was done for the aim that to exercise the interview style. we stressed in the interview to achieve rich descriptions rather than explanations on the lived experience of patient rights practice. During data collection and analysis, participant responses were treated as equally significant.

6.4 Generalizability

The participants had been patients in the out patients and/or inpatient departments of General Outpatient's departments, medical and surgical departments and in the inpatient departments of medical and surgical ward. Patients with other clinical departments were not included in the study. However, the findings of this study could be generalized to areas having similar hospital context in the country, in particular in public hospitals in the Amhara Region. In addition, the identified categories from the qualitative study might be transferable to similar contexts.

7 STRENGTH and LIMITATIONS

7.1 Strength

The use of mixed method in this study can be considered as strength. Since health care research is complex and multidimensional area, applying quantitative and qualitative methods was important. The application of mixed methods is suggested in healthcare quality research to obtain complete picture of the health care service.

As we mentioned earlier, health care service research is complex and multidimensional, this study addresses major health care service improvement areas linking patient preferences, expectations and patient rights practice to patient satisfaction. The study of such broader and major focus areas was taken as strength.

The study has included adequate sample size for the study. In both studies of the quantitative part, we achieved greater than 90% response rate. Achieving high response rate was considered as strength. The number of participants involved in the in-depth- responses have enabled a 'rich description of the phenomenon under study.

Studying patient preferences using an experimental study design can be taken as strength as it helped to understand individual choices in health care services. The patient rights practice study using a phenomenographic approach is also taken as strength. Despite its importance in health service, the area on patient rights is not yet explored much in the Ethiopian context. The application of phenomenographic approach for such study opens for other researchers to motivate applying different approaches and helped to understand the problem in detail.

Data analysis was employed using advanced and appropriate statistical methods. Qualitative data analysis was employed using appropriate procedures to analyze phenomenographic researches.

7.2 Limitations

There are some limitations to this study. This study is mainly focused on the processes of hospital health care and did not include the structural as well as outcome of health care. The result is only from the patients' point of view about the consultation; it did not assess the providers' perspective of consultation. As the discrete choice experiment is done in choices made

by patients in hypothetical settings instead of real life situations, it is likely prone to hypothetical bias but we tried to minimize the hypothetical bias by informing respondents about the importance of the study despite the hypothetical nature of the experiment and using scales which is relatively certain and short for the respondents.

Another limitation is that a "neither" option was not included in the choice questionnaire. Therefore, respondents who could potentially choose the "neither" option were not included in the analysis; hence the results may not explain some of the respondents' behavior. In addition, some attributes of health care could be considered essential core features of health care and not optional extras. For example, it is hard for decision makers to trade off diagnostic facilities against medication supply.

The study only includes patients in the outpatient and /or inpatient department of general, medical and surgical departments. Hence, we cannot generalize this result to the inpatient departments and the other outpatient and inpatient departments of respective hospitals. The study included patients from public hospitals only, and thus, difficult to generalize this to the private hospital context. Patient satisfaction is measured using only a singly likert item, thus, it only measures global level of patient satisfaction. Even though a global measure of patient satisfaction is valid in other researches, it may not be sensitive for some parts of the measurement.

8 CONCLUSIONS

This dissertation examined patient preferences, expectations and patients' rights practice as a factor of patient satisfaction. The current study used DCE to examine patient preferences for attributes related to public hospital health care services, and relative attribute impacts on patients' preference. Changes to the diagnostic facilities of a hospital are likely to have the greatest impact on patients' preference on hospital health care. Patients have a decreasing order of attribute impact on preference: A lot of diagnostic facilities, full drug availability, continuity of care, good nursing communication, partial drug availability, good physician communication and waiting time for consultation. Results from this study should however be considered by decision-makers, to identify important features of hospital health care that are essential to patients and contribute to the understanding of preference, hence are important to enhance patient satisfaction and compliance of the treatment. All the six attributes that are statistically significant provides evidence that the decision makers have variety of measures available that could improve hospital quality.

The study revealed that post- consultation met expectation, perceived health status, perceived control on health were factors positively influencing global measure of patient satisfaction, and any presence of disappointments or worries, felt extent of influencing to the consultation, and previous experience in health care service were factors negatively influence patient satisfaction. There was a significant difference between pre-consultation expectations and post- consultation met expectations.

As rights determined from understandings from the local context, the study showed that patients' conceptions of patient rights practice in the hospital context are categorized differently. By recognizing patient rights as patient centered practice, being secured, respect their dignity, and getting referral, practicing patient rights could influence the patient's experiences and satisfaction in relation to their hospital stay.

The study findings could potentially enable health care providers to effectively and adequately respond to the dynamic medical encounter situation and to each patient's individualized needs. It can also be used for improving clinical management strategies and influencing policies and guidelines related to preferences, expectations and patient rights so as to improve services in the

hospital and this also leads to further studies by including the health provider perspective by including public and private hospitals in different regions of the country.

Overall, the study showed that patient satisfaction is a complex concept with multiple determinants. Patient preferences, expectations and patient rights practice were main factors that impacts patient satisfaction.

9 RECOMMENDATIONS

Health Care Managers:

- Managers should create enabling environment to put into effect the practice of patient rights that anticipated to patient satisfaction. They should also need to put on view essential information about patients' rights.
- Focus on patient experience and work on their preferences to enhance patient satisfaction
- Should make a system to identify situations that violates patients' rights and focus on to practice with their best effort.
- Hospitals have a duty to serve patients according to their preferences to consult a health service and to choose health service provider.

Health care service providers:

- Service providers should at least have focus on patient centered care, dignity, personal security related to privacy and confidentiality and in or out of referral to other health provider/health care institution.
- Should work on improving patient experience and work on their preferences to enhance patient satisfaction.
- Patient values should be incorporated into medical decisions.
- Service providers get to know patients' own experience of the illness/ health condition and their values and preferences.
- Service providers need to obtain the patients' perspectives to guarantee that health care services are built around their needs.

Researchers:

- Future research on the preferences for health care in a specific hospital's department/ward may be important to elicit disease-specific preferences for hospital health care.
- Future research should also include other attributes such as cost that could have an impact on preferences.

- Other studies should also be done which incorporate health service provider to see the complete picture of patient satisfaction and the match in expectation between patients and health service providers.
- The reason for patients felt a lot to influence on the consultations negatively associated with satisfaction, and the reason why previous experience of health care was associated with dissatisfaction.
- The patient rights practice from the health care provider's perspective to examine how health care providers see their experience.

Policy Makers:

- Health care ethics training both in the pre-service and in-service as well as ethical reasons in daily activities should be given due attention.
- Policy makers should use the results of this study in drafting patients' bill of rights in the Ethiopian context.
- Draft a frame work which includes patients have the right to choose to consult a health service, and which one to consult. Furthermore, patients should be free to decide which treatment they want out of a range of treatments available for their conditions, or to refuse any treatment/procedures, or to give up the decision about treatment/procedures to someone else with what the patient prefers, as well as considering scientific knowledge.
- Incorporating patient centered care in health care based on the values and standards established by the patient and the health profession.

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12 **ANNEXES**

Annex I: Original papers (I-III)

Paper I

Patient Preference and Adherence

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ORIGINAL RESEARCH

Patients' preferences for attributes related to health care services at hospitals in Amhara Region, northern Ethiopia: a discrete choice experiment

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Background: Information from the patient's point of view is essential in policy and clinical decisions. Prioritizing what patients value, need, and prefer in various aspects of a health program can be helpful in evaluating and designing hospital health care services.

Objective: To examine patients' preference for attributes related to health care services and to ascertain the relative impact of attributes at hospitals in Amhara Region, northern Ethiopia.

Methods: A stated-preference discrete choice experiment survey was performed in multistage, stratified, and systematic sampling of patients who visited the hospitals. Attributes were selected based on a literature review of the most important characteristics of hospital health care service and reviewed and validated with inputs from patients and researchers in the field. Attributes included in the study were waiting time, physician communication, nursing communication, drug availability, continuity of care, and diagnostic facilities. A random-effects probit model was used to perform the analysis.

Results: One thousand and five respondents who received care in the outpatient and inpatient departments participated in the study. All attributes included in the study affected the choice of hospital. Patients were willing to wait up to 3.3 hours and 2.7 hours to get full drugs in the hospital and good nursing communication, respectively. The interaction terms indicate that preferences differ with the variables sex, occupation, and type of hospital. Patients expressed clear preferences in a decreasing order of all the significant attribute levels: a lot of diagnostic facilities, full drug availability, continuity of care, good nursing communication, partial drug availability, good physician communication, and shorter waiting time for the consultation.

Conclusion: Different hospital care attributes had a significant and different influence on patients' choice of hospital. The study informs about patients' preferences and the trade-offs among different possible process-related attributes. Decision makers should focus on patient preferences and consider selected attributes when designating hospital services, and hence to maximize patient satisfaction.

Keywords: patient preference, hospital health care, hospital choice, patient satisfaction

Introduction

Examining the quality and efficiency of services given for the patient is the main concern of the public health sector, and studying patients' preferences with the quality of hospital services is an important method for evaluation of health services.[1,2] Patients differ from each other in their social, biologic, or cultural characteristics as well as in their preferences, and the need for a more patient-centered approach in clinical practice and evaluation studies is widely acknowledged. Previous reports have shown that

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patients' preferences have significantly impacted patients' willingness to use health care services.[3–5]

Hospitals should put in place priority techniques in the case of resource limitations.[6] Even though this is of powerful interest to the public, customers are not asked about their preferences and views. They are also not involved in the decision-making process. The patient's point of view is important in relation to policy and clinical decisions. Studying what patients value and need, and how patients prefer different features of hospital health care, can be valuable in evaluating and designing hospital health care services. Whenever hospital processes are reorganized or new products are designed, the needs and preferences of patients have to be considered to assess patients' priorities and their willingness to wait. The discrete choice experiment (DCE) technique is frequently applied to identify patients' preferences;[7] this is a stated-preference approach that confronts patients with hypothetical scenarios, of which only one can be chosen. Currently, this technique is applied to elicit patient preferences in hospital health care.[7,8]

The foundation of DCEs lies in the hypothesis that services can be explained with the attributes they have, and the value of a service depends on the level and nature of these attributes.[9] These attributes might explain the effect of the services on health outcomes or the process by which the services are delivered for the non-health outcomes.[10] Techniques for determining customers' preferences, as preferred by health economists, are based on random utility theory; ie, patients choose the alternative that gives them the highest utility.[10]

A DCE should capture the main attributes so as to avoid concerns about the omitted attributes by the majority of the respondents.[11] DCE can quantify the relative weight of attributes and trade off between attributes that describe respondents preference in a hospital health care service.[12] DCEs also presume that each hospital service is able to be explained with different features and that these features provide different service characteristics,[13] and this approach is valuable to setting priorities in giving health care services by measuring the benefit or satisfaction from the services. Despite the Ethiopian government's efforts in improving the quality of health services delivered to the people, health services are limited and of poor quality. Making health services more congruent with patients' preferences can be done through fulfilling with different attributes. But this is difficult within the constraints of budgets. Therefore, patients may be required to choose among attributes, and this leads to the necessity of a method for assessing priorities.[6] Thus, the aim of this study was to examine patients' preferences for attributes related to hospital health care services. We were also interested in the level of patients who were willing to trade off between time and other attributes, and to determine the relative importance of these attributes.

Materials and methods

Study setting and design

The study was conducted in nine public hospitals that are located in the Amhara Region of Ethiopia. The Amhara Region is one of the nine regions of Ethiopia located in the northern parts of the country. This was an experimental design, as it combined different levels of attributes, for the purpose of eliciting information about the hospital characteristics in order for patients to decide between the choice of two hypothetical hospital health care services.[14]

Establishing attributes and levels

The key attributes were established by the main features of patient satisfaction in hospital health care that might differ with the type of health care service. Six attributes were identified through literature review and adopted from other studies: waiting time for the consultation, physician communication, nursing communication, drug availability in the hospital pharmacy, continuity of care, and diagnostic facilities.[1,13,15] These attributes were reviewed and validated with outputs from patients and experts in the field, and should practically differ with the type of service provided. The attribute levels were selected to reveal the range of conditions that patients might anticipate experiencing (Table 1).

Experimental design

In this study, using a full factorial design based on the selected hospital attributes, ie, five attributes had three levels and one attribute had two levels which gave rise to a total of 486 scenarios (3^5, 2^1) was not feasible. Hence, a fractional factorial design with orthogonal main effects was created by using an SPSS software version 17 (SPSS Inc., Chicago, IL, USA) in order to convert the number of scenarios to a satisfactory number in the questionnaire. Sixteen scenarios were generated, and the questionnaire was written to compare these scenarios between two hypothetical hospitals. The questionnaire consisted of eight comparisons between two hypothetical hospitals. Choice sets in the catalog were randomized prior to being written into the questionnaire. Properties of good design of the questionnaire were checked using the properties of level balance, orthogonality, and minimum overlap of attribute levels.[14] The correlation between different attribute levels was minimal as a check for orthogonality of the design.

Table 1 Attributes and levels

Attribute	Level	Conceptual definitions
Waiting time for the consultation	1 h 2 h 3 h	Waiting time between arrivals at the outpatient departments of the hospital and getting the consultation.
Physician communication	Good	Likelihood that the physician has a friendly approach; provides patient information with understandable language about the illness, lab investigation, and treatment; reassures the patient; plus involves the patient in decisions.
	Moderate	Likelihood that physician is friendly approached; provides information with understandable language about the illness, lab investigation, and treatment; and apart from the stated key parameters, physician might have additional good qualities.
	Poor	Likelihood that the physician is not approached friendly; unlikely that the physician provides information with understandable language about the illness, lab investigation, or treatment.
Nursing communication	Good	Likelihood that the nurse is friendly approached; provides patient information with understandable language about the patient care and reassurance for the patient; plus involves the patient in decisions.
	Moderate	Likelihood that the nurse is friendly approached, provides information with understandable language about the patient care, and some more.
	Poor	Likelihood that the nurse is not approached friendly; unlikely that the nurse provides information with understandable language about the patient care; and some more.
Drug availability in the hospital pharmacy	Fully available	It is likely that all the drugs will be available.
	Partially available	It is likely that you will have to look for some of the drugs elsewhere.
	Not available	It is likely that you will have to look for all of the drugs elsewhere.
Continuity of care	Yes	It is likely that health care services are connected and coherent and are consistent with a patient's health needs and personal circumstances.
	No	It is likely that that health care services are not connected and coherent and are unlikely consistent with a patient's health needs and personal circumstances.
Diagnostic facilities	A lot of diagnostic facilities	Ultrasound scanner, MRI, biopsy, blood/urine sample, plus others.
	Some diagnostic facilities	Blood/urine analysis plus some more.
	A few diagnostic facilities	Blood pressure cuff and apart from blood pressure cuff, it might have other vital sign measurement materials.

Abbreviations: h, hour(s); MRI, magnetic resonance imaging.

We checked for level balance, ie, each attribute level in the questionnaire appeared approximately an equal number of times. In addition, the two hospital scenarios that rarely appeared together in a choice had the same attribute levels, which showed that there was minimum overlap.

The two hospitals were compared as they were different in their characteristics of the six attributes, and respondents had to choose between these hospitals (see the sample scenario pair in Table 2). According to the patients' choices between the two hospitals, we prioritized and modeled which hospital type was preferred by the patients.

The DCE questionnaire was pilot tested with 30 patients at a hospital to understand the clarity of attributes and levels, to determine whether respondents understood the task or not, and to understand how patients experienced the exercise.

Sample size determination, sampling, and data collection

Sample size determination

Sample size was determined using a formula of sample size for discrete choice models:[16]

$$n \geq \frac{z^2\, q}{r\, p\, a^2}, \quad (1)$$

where p is the choice share, z is the level of statistical significance and q is failure in choice share; q=1–p; r is the number of replications; and a is the allowable error margin. Choice share p for a particular preference is a share of a single attribute over the total attribute; hence, in our case, p is 1/6. Here, 6 is the number of attributes. Let us assume

Table 2 A sample pair of scenarios

Attributes	Hospital 1	Hospital 2
Physician communication	Poor	Good
Nursing communication	Good	Poor
Waiting time for the consultation	2 hours	1 hour
Drug availability in the hospital pharmacy	Fully available	Partially available
Continuity of care	No	Yes
Diagnostic facilities	A few diagnostic facilities	A lot of diagnostic facilities
Which hospital do you prefer?	1	2

a heterogeneous population, ie, p=0.167, q=0.833. We want to be 95% confident in our result, ie, z=1.96. Our allowable margin of error is 5%. Our design had 16 replications, meaning the 16 scenarios generated from fractional factorial design changed into the 16 types of hospitals using the given attribute levels; therefore, r=16. We used a design effect value of 2 to accommodate sampling variance and 10% contingency. The final required sample size was 1,054.

Sampling and data collection

In Amhara Region, we sampled nine of the 17 functional public hospitals. Public hospitals are government-owned hospitals. The study focus was only public hospitals, as most of the population in the region use public hospitals. In this region, private hospitals are few in number and serve a lower number of people compared to public hospitals, which serve all segments of the population. Study participants were recruited from the nine selected public hospitals in Amhara Region.

Ethical approval was obtained from the Institutional Review Board of College of Health Sciences at Addis Ababa University (Addis Ababa, Ethiopia). In addition, permission from the Amhara Regional Health Bureau and the respective study hospital administrators was also sought.

A multistage, stratified technique of sampling was used to select the study population. In stage 1, hospitals were stratified as referral and district. Hence, four of the seven referral and five of the ten district hospitals were selected using the lottery method. In stage 2, hospitals were stratified as outpatient and inpatient departments. Proportional allocation of the sample was done to each selected hospital and its departments according to their previous year's total patient visits for hospital services. All patients had to be at least 18 years of age and either be seeking health care at adult general, medical, or surgical outpatient departments or be patients of medical or surgical wards in an inpatient department.

We used a systematic sampling technique to select respondents among inpatients and outpatients in the selected departments. We took samples based on the average number of patients per day per selected departments everyday from Monday to Friday of the week. For the purpose of this study, every fifth patient attending an outpatient or inpatient department was taken. If the fifth patient was critically ill or died, we excluded them from the study and interviewed the next patient.

The data collector began the work by presenting the study to those present in the triage room, gave information about the study, and made appointments for the interviews. Informed consent of respondents was obtained orally, and the interviews were presented to the respondents at the end of the service, after patients had spent most of the day waiting for a consultation, lab investigation, and dispensing of drugs. The data were collected using the local language Amharic from August to October 2014.

Data analysis

The DCE data were analyzed using a random-effects probit model in STATA version 12 (StataCorp, College Station, Texas, USA), with the assumption that the distribution of the error term was normal and accounted for many observations from each respondent.[12,17] We treated each respondent's choice between pairs as a single observation and included this in the model as the dependent variable. The dependent variable was coded as "1", which indicated the option being chosen, and "0" indicated the option not being chosen. The differences between the levels of each attribute in each pair of scenarios were considered as independent variables of the study. The variables for analysis are shown in Table 1.

The equation of the model can be presented as:

$$Y_{nc} = \beta_0 + \beta_1\,\Delta\text{WAIT}_c + \beta_2\,\Delta\text{PHYSICIAN}_c + \beta_3\,\Delta\text{NURSING}_c + \beta_4\,\Delta\text{DRUG}_c + \beta_5\,\Delta\text{CONTINUITY}_c + \beta_6\,\Delta\text{DIAGNOSTIC}_c + \varepsilon \quad (2)$$

where ΔY is the difference in utility between option 1 and option 2; $_n$ refers to the individual identification; $_c$ refers to the number of choice set; β_0 is the constant term included to control and test model misspecifications due to unobserved dimensions or unobserved interactions between respondents' sociodemographic characteristics and dimensions;[18] β_1, β_2, β_3, …, etc are part-worth utilities; ΔWAIT, ΔPHYSICIAN, etc represent differences in attribute levels between option 1 and option 2; and ε is the random error term.

Attributes such as waiting time, physician communication, nursing communication, drug availability, continuity of care, and diagnostic facilities were used to fit the main-effects model.

The model baseline (reference level used for all attributes expressed in the constant) was based on poor physician and nursing communication, drug unavailability, and no continuity of care with a few diagnostic facilities in the hospital. Waiting time was treated as a continuous variable with a linear utility function.

Besides analyzing the main effects (the six main attributes), it was also hypothesized that individual characteristics, such as sociodemographic variables and type of hospital visited, could influence preference for a hospital visit. We included variables for age, sex, educational status, marital status, occupation, residence, payment status, hospital type, and patient status. Hospital type was coded as referral and district, and patient status was coded as outpatient and inpatient.

To create a more parsimonious model by including the main effects and interaction terms, the insignificant variables were excluded stepwise one at a time with *P*-values greater than 0.10.

Marginal rate of substitution (MRS) values were calculated by dividing the coefficient values of the attributes with another attribute, in this case by the waiting time attribute.[18] Hence, attributes could be compared on a common value scale in terms of willingness to wait.

Theoretical validity of the study was examined by exploring whether the estimated parameters were in the expected sign. Having good physician communication, good nursing communication, full drug availability in the hospital pharmacy, presence of continuity of care, availability of lots of diagnostic facilities, and less waiting time for the consultation were all anticipated to increase patient satisfaction.

Estimating how much each attribute contributes to the log-likelihood of the model gives the relative impact of the attributes. This can be attained through estimating and reestimating the model by omitting one attribute at a time and estimating the difference between the full and the reduced model log-likelihoods.[19] More contribution of the attributes in the total log-likelihoods of the model, as shown by the attributes' partial log-likelihoods, indicates the attribute was more important.

Results

Sociodemographic characteristics

One thousand and five responses were obtained from the target number of 1,054 questionnaires, which gave a response rate of 95.4%, and this has a potential dataset of 8,040 pairwise observations (1,005× eight questions). Of the total respondents, 580 (57.3%) were males and 209 (21%) of the patients reported themselves as illiterate. The median age of the respondents was 34 (standard deviation =13.5) years, with a range of 18–88 years. A summary of sociodemographic characteristics is presented in Table 3.

Table 3 Sociodemographic characteristics of respondents (N=1,005)

Characteristics	Number	%
Age (years)		
18–34	504	50.1
35–64	461	45.9
>64	40	4.0
Median (+ standard deviation)	34 (13.5)	
Sex		
Female	425	42.3
Male	580	57.3
Marital status		
Married or cohabiting with partner	580	57.7
Divorced or separated	30	3.0
Widowed	57	5.7
Single	338	33.7
Educational status		
Illiterate	209	20.8
Can read and write	115	11.4
Grades 1–8	215	21.4
Grades 9–12	177	17.6
Grades 11–12	91	9.1
Diploma and above	198	19.7
Occupation		
Employed	160	15.9
Merchant	164	16.3
Farmer	515	51.2
No job	95	9.5
Other	71	7.1
Residence		
Urban	364	36.2
Rural	641	63.8
Payment status		
Paying	945	94
Free	60	6

Main-effects model

The result of the main-effects model is shown in Table 4. The model result showed a good fit with McFadden's pseudo R^2=0.2719. The model had sensitivity of 87.6%, specificity of 66.7%, negative predictive value of 82.67%, and positive predictive value of 74.74%. In general, the model correctly classified 77.75% of the responses.

All attributes had a significant impact on participants' decisions, as indicated by their coefficients that were significantly different from 0.

The waiting time coefficient (β=–0.773) was of a negative value, as expected, showing a higher probability of choosing a hospital with less waiting time for a consultation; this entails dissatisfaction related with longer waiting time. Coefficients (β) of the attribute levels of good physician communication (β=0.233), good nursing communication (β=2.06), full drug availability (β=2.525), a lot of diagnostic facilities (β=0.856), and the presence of continuity of care (β=0.937) were positive and larger than their respective reference attribute levels, which indicates that, by assuming everything else is equal, participants preferred to visit a hospital which had continuity of care, good physician and nursing communication, full drug availability, and a lot of diagnostic facilities.

MRSs

Table 4 also presents the MRS values between attributes. Calculating the value of one attribute with waiting time for consultation indicated that patients were willing to give up for that attribute if the difference was longer. Waiting time was more important than good nursing communication if the difference in waiting time was longer than 2.7 hours,

Table 4 Main-effects model and MRSs – results from the discrete choice experiment

Variable	β	Standard error	*P*-value	MRS (h)	95% CI (lower)	95% CI (upper)
Waiting time	–0.773	0.348	0.026	–	–	–
Physician communication – good	0.233	0.091	0.011	0.301	–0.0042	0.6076
Physician communication – moderate	0.087	0.101	0.380	0.113	–0.1414	0.3685
Nursing communication – good	2.060	0.587	0.000	2.66	1.769	3.556
Nursing communication – moderate	0.859	0.622	0.168	1.11	0.4882	1.733
Drug availability – full	2.525	0.403	0.000	3.263	1.387	5.139
Drug availability – partial	1.309	0.423	0.002	1.692	1.253	2.13
Continuity of care – yes	0.937	0.254	0.000	1.211	0.774	1.649
Diagnostic facilities – a lot of	0.856	0.055	0.000	1.107	0.1518	2.062
Diagnostic facilities – some	–0.987	0.772	0.201	–1.276	–2.11	–0.439
Constant	0.085	0.357	0.811	–	–	–

Notes: Number of pairwise observations =8,040. LR $\chi^2(10)$=3,022.91. Probability >χ^2=0.0000. Pseudo R^2=0.2719. Log-likelihood =–4,047.1091.
Abbreviations: CI, confidence interval; h, hours; MRS, marginal rate of substitution; LR, likelihood ratio.

suggesting that patients would be willing to wait up to 2.7 hours for a hospital with good nursing communication. Waiting time for consultation was more important than full drug availability and a lot of diagnostic facilities in the hospital if the difference in waiting time was longer than 3.3 and 1.1 hours, respectively, indicating that patients would be willing to wait 3.3 and 1.1 hours to be consulted in a setting with full drug availability and a lot of diagnostic facilities, respectively.

Segmented model

Table 5 presents the results of the segmented model. The segmented model had almost similar fit (pseudo R^2=0.2744) with that of the main-effects model. The model had sensitivity of 84.51%, specificity of 70.74%, negative predictive value of 80.20%, and positive predictive value of 76.5%. In general, the model correctly classified 78.03% of the responses.

Table 5 Segmented model

Variable	β	Standard error
Waiting time	–0.3177**	0.016
Physician communication – good	0.2261**	0.039
Nursing communication – good	1.185**	0.043
Drug availability – full	2.048**	0.052
Drug availability – partial	0.7292**	0.038
Continuity of care – yes	0.5134**	0.032
Diagnostic facilities – a lot of	0.8955**	0.032
Good nursing communication^sex – female	–0.0734*	0.036
A lot of diagnostic facilities^sex – female	–0.1207**	0.037
Good nursing communication^farmers	0.0894*	0.041
Partial drug availability^farmers	0.1010*	0.043
Partial drug availability^no jobs	0.1502*	0.072
Continuity of care^referral hospital	0.0811*	0.035
Constant	–0.4262**	0.041

Notes: Number of pairwise observations =8,040. Log-likelihood =–4,033.3225. LR $\chi^2(13)$=3,050.49. ^McFadden's pseudo R^2=0.2744. *P<0.05; **P<0.001.

In the segmented model, waiting time, good physician communication, good nursing communication, full drug availability, partial drug availability, presence of continuity of care, and a lot of diagnostic facilities had an influence on patient preference in public hospital health care services. Good nursing communication, a lot of diagnostic facilities, partial drug availability, and presence of continuity of care were present in the interaction effects, demonstrating that these attributes were key for a subgroup of patients.

The statistically significant coefficients of the interaction effects indicated that preferences differed with the variables sex, occupation, and type of hospital. A hospital with good nursing communication (β=0.089) and partial drug availability (β=0.101) was preferred by farmers. Participants with no jobs preferred a hospital with partial drug availability (β=0.150). Those respondents who were from referral hospitals preferred a hospital that has continuity of care (β=0.081). A hospital with good nursing communication and a facility with a lot of diagnostic facilities were less likely preferred by female respondents.

Relative impact of the attributes

Table 6 presents the relative importance of attributes in the main-effects model. The results indicated that a hospital with a lot of diagnostic facilities was ranked at the top, which accounted for 65.9% of the log-likelihood. This was followed by full drug availability in the hospital, continuity of care, and good nursing communication collectively accounting for 23.5%. Interestingly, attribute levels like moderate nursing communication, some diagnostic facilities, and moderate physician communication that were not significant in the main-effects model had a negligible impact on the log-likelihood.

Table 6 Ranking of attribute importance using partial log-likelihood analysis (main effects)

Attribute level excluded from the analysis	Log-likelihood	Partial effect: change in log-likelihood	Relative effect: % sum of change in log-likelihood	Cumulative (%)	Order of impact
None	–4,047.1091				
Diagnostic facilities – a lot of*	–4,119.382	–72.2729	0.6592	0.6592	1
Drug availability – full*	–4,061.7391	–14.63	0.1334	0.7926	2
Continuity of care*	–4,052.6839	–5.5748	0.0508	0.8434	3
Nursing communication – good*	–4,052.2646	–5.5155	0.0503	0.8937	4
Drug availability – partial*	–4,051.1625	–4.0534	0.0369	0.9306	5
Physician communication – good*	–4,050.4455	–3.3364	0.0304	0.9610	6
Waiting time*	–4,049.316	–2.2069	0.0201	0.9811	7
Nursing communication – moderate	–4,047.9985	–0.8894	0.0082	0.9893	8
Diagnostic facilities – some	–4,047.8814	–0.7723	0.0071	0.9964	9
Physician communication – moderate	–4,047.4936	–0.3845	0.0036	1.0000	10

Note: *Significant in main-effects discrete choice experiment model.

Discussion

This study examined patients' preferences in health care, focusing on patients' priorities, their willingness to wait, and relative attribute impact at public hospitals. Generally, preferences for the levels under each hospital attribute were consistent with the a priori expectation that a hospital with less waiting time that had hospital levels with good physician and nursing communication, full drug availability, and continuity of care with a lot of diagnostic facilities would be more preferred than hospital levels with poor physician and nursing communication, no drug availability, no continuity of care, and few diagnostic facilities. These directions of the coefficient values provided a check on internal/theoretical validity of the DCE model.

In this study, good physician and nursing communication were among the most important characteristics of health care services preferred by respondents. Similarly, previous studies showed that patient–physician and nursing communication are the key parts of the overall quality of hospital care and treatment[20,21] and are the key factors which enhance patient satisfaction with the health care providers.[22] This is shown by increasing patient involvement and participation in decision making regarding their treatment.[22]

Another study also showed that a patient-centered approach to health care, ie, a doctor's friendly approach, would result in a high score of information and shared decision making, and that a higher educational level is associated with more patient-centered scoring.[23] Patients have also explained their preferences for physicians and nurses who demonstrate aspects of caring, time, and hope.[24] But in this study, respondents did not prefer moderate physician and nursing communication. This may indicate that respondents expected good communication and were not tolerant of moderate communication from physicians and nurses.

Full and partial drug availability in the hospital were also highly preferred by respondents in the current study. This is in line with Hanson et al's study,[2] which showed that the availability of medicines in the hospital is a predominant factor in hospital choice. This finding also suggests the highest MRSs, indicating that patients want consistent drug availability in the hospital. This is probably because lack of drugs in a hospital would force patients to purchase them outside of a hospital. This has more negative implications for time to search for the drugs, and regulation of quality and price of drugs in the private sector is not common,[25] hence drugs are expensive in such sectors. This has, specifically, a cumbersome effect in developing countries,[26] and our results also suggest consistent drug availability in the hospital can be a policy measure.

Continuity of care in the hospital was also one of the important attributes in hospital choice. This was the most valued attribute of care even in an other study of health care preference.[27] Respondents' MRSs in terms of willing to wait were moderately longer than for other attributes. Turner et al[28] also showed that when patients needed a routine checkup or had a problem causing uncertainty or a serious health problem, patients preferred to be seen by the health care provider who is already familiar with their health problem. This was also indicated by other studies in which self-reported continuity of care was strongly preferred by patients and hence was associated with higher patient satisfaction.[21,29]

Respondents preferred a lot of diagnostic facilities, but did not prefer only some diagnostic facilities in the hospital. This may be due to the option that respondents would necessarily prefer, as they would expect, a more thorough examination in a visit to a hospital with a lot of diagnostic facilities and may be willing to pay more for this.

The results of interaction terms showed that preferences differed with sex, occupation, and type of hospital. A hospital with good nursing communication and partial drug availability in the hospital was preferred by farmers. Participants with no jobs preferred a hospital with partial drug availability. This may be due to jobless respondents having low expectations of drug availability in the hospital or there being too much variation in preferences of this attribute. Those respondents who were from referral hospitals preferred a hospital that has continuity of care. This may be due to respondents from a referral hospital being associated with a serious acute illness and/or chronic diseases, and hence they are in need of continuity of care for better health outcomes.

A lot of diagnostic facilities had a relatively large impact on patients' valuation of health care, although full drug availability, presence of continuity of care, and good nursing communication had relatively moderate impacts on patients' preferences and considered as relatively important attributes with a moderate impact.

There are some limitations to this study. As the experiment was done in choices made by patients in hypothetical settings instead of real-life situations, it was likely prone to hypothetical bias, but we tried to minimize the hypothetical bias by informing respondents about the importance of the study despite the hypothetical nature of the experiment and using attribute levels which is relatively certain and short for the respondents.

Another limitation is that a "neither" option was not included in the choice questionnaire. Therefore, respondents who could potentially choose the "neither" option were not included in the analysis; hence the results may not explain some of the respondents' behavior. In addition, some attributes of health care could be considered essential core features of health care and not optional extras. For example, it is hard for decision makers to trade off diagnostic facilities against medication supply.

Conclusion

The current study used a DCE to examine patient preferences for attributes related to public hospital health care services and relative attribute impacts on patients' preferences. Changes to the diagnostic facilities of a hospital are likely to have the greatest impact on patients' preferences for hospital health care. Patients had the following decreasing order of attribute impact on preference: a lot of diagnostic facilities, full drug availability, continuity of care, good nursing communication, partial drug availability, good physician communication, and waiting time for consultation. Results from this study should, however, be considered by decision makers, to identify important features of hospital health care that are essential to patients and contribute to the understanding of preference, hence are important to enhancing patient satisfaction and compliance with treatment. Attributes that were statistically significant provide evidence that decision makers have a variety of measures available that could improve hospital quality. Stakeholders should be aware of the differences in preferences among individual patients and aim to address hospital quality with the purpose of strengthening health care practice and to maximize patient satisfaction.

Future research on the preferences for health care in a specific hospital's department/ward may be important to elicit disease-specific preferences for hospital health care. In addition, future research should also include other attributes such as cost that could have an impact on preferences.

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Disclosure

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Paper II

Patient expectations and their satisfaction in the context of public hospitals

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Abstract

Background: Patient expectations have been recognized as a factor for patient satisfaction in medical consultations. Although various studies explored the relationship between patient expectations and patient satisfaction in developed countries, there is a lack of research evidence in Ethiopia where the meeting of patient expectations could relate to satisfaction.

Objective: To assess the relation between patients‟ expectations and satisfaction in the consultation of patients at the out-patient department.

Study design: Data were collected regarding pre-consultation expectations and post-consultation experiances of 776 adult patients attending nine public hospitals. A systematic random sampling method was used to select every 5 adult patients who sought health care. The patients were interviewed about their expectations before consultation, and whether or not they are meeting their expectations and their satisfaction after the consultation. Cronbach‟s alpha statistic was used for to assess the reliability of the questionnaires and paired t-test was used to assess any differences between pre-visit expectations and post-visit experiences. Logistic regression techniques were used to assess variables considered as independent factors for patient satisfaction.

Results: A total of 776 patients were interviewed; giving a response rate of 92.3%. About 93.7% mentioned a diagnosis for their condition as reason for the current hospital visits. There is significant difference between pre-consultation expectation and post-consultation met expectation. Post- consultation met expectation, perceived health status, and perceived control on health, were factors identified as

increase patient satisfaction. In addition, any presence of disappointments or worries, previous experience and felt extent of influence on the consultation had negative influence on satisfaction.

Conclusions: Post- consultation met expectation impacts patient satisfaction. Health care service providers should emphasis the actual experience of consultation.

Keywords: *Patient expectation, patient satisfaction, hospital health care, Ethiopia*

Introduction

Patients have a specific agenda when visiting their general practitioners (GPs), which usually reflects concerns and problems they want the GP to address during consultation; it might also include their desires for specific services (1). Many studies were concerned with measuring patients‟ expectations in different perspectives ranging from the general expectations about facilities and accessibility, to the more specific expectations related to GPs‟ clinical and interpersonal skills. Interestingly, most of the patients‟ expectations are reported to be of a general nature, mainly receiving information or the GP listening to them and showing interest (2). Other studies suggested that the most common expectations were GPs' understanding, showing interest, and discussing problems or doubts (2, 3).

Also, expectations are related to receiving information on pain management and advice on how to return to normal life (4), or information about prognosis and prevention (5). Overall, specific expectations for tests, prescriptions, or referral seem to be far fewer than those for information, diagnosis, listening or understanding (2). Although it might seem that technical interventions (for instance, tests or prescriptions) are high priority for patients, evidence suggests that, in general, desires for information or support are more valued than medical interventions (2, 6).

Several studies used theconcept of met expectations as a valid measure of satisfaction with the provided service, suggesting a direct relationship between unmet expectations and lower satisfaction, and vice versa (6-9). However, other studies showed controversial results regarding this relationship (10-12), while others relating fulfilled expectations to a more important consultation outcomes than satisfaction, such as adherence and seeking further medical care (2, 13).

It seems that some form of relationship exists between perceived service quality, patient expectations and satisfaction(14). However, high reported satisfaction ratings cannot be taken to indicate that patients had good experience in relation to particular services, for example - experiences do not necessarily correlate with the user's evaluations of the services (15). Consequently, evaluating the quality of the service in terms of higher patient satisfaction and met expectations is tricky, as a previous review of the literature revealed that only 20% of studies considered expectations as determinants of satisfaction(16). In that review (16), patient satisfaction is shaped by prior satisfaction with the health care and personal predisposition, as

well as age and health status, which make it a very subjective evaluation of the service that would substantially differ according to the individual.

According to the literature, overall patient satisfaction was defined as a patient-reported outcome measure, while structures and processes were represented by patient-reported experiences (17). A previous study demonstrated that patient-reported experiences and fulfillment of expectations were the most important predictors of overall patient satisfaction (18). Meeting patients‟ expectations is one measure of the quality of health care systems (18). The evidence-base in this area has been growing, but there is still a relatively sparse studies and encounters some difficulties (2, 19). Among these are the nature and great diversity of expectations, various ways of communicating them, and the disagreement in the literature regarding methods to identify, elicit, and monitor expectations (2).

Little is understood from the patient‟s perspective of health care experiences, especially in the developing country context. Therefore, this study was designed to assess the relationship between patients‟ expectations and patient satisfaction in the consultation by health care providers in the out- patient department of public hospitals in Ethiopia.

Materials and Methods

Study design and patients

A cross-sectional study which deployed interviewer administered questionnaires was carried out to assess patient expectation and its relation to patient satisfaction on outpatient services. Adult patients who received care from outpatient clinics (general, medical, and surgical) were the subjects of the study.

Sampling and data collection method

Sample size determination

A single population proportion sample size determination formula was used with the following assumptions: Proportion of patients satisfied with hospital care services was taken to be 53%, according to a study done in Amhara Region (20), margin of error of 0.05, non- response rate of 10%, the desired confidence level of 95% and design effect of 2. Thus, the required sample size calculated was 841.

Sampling procedure

Proportional allocation of sample was done by considering the average number of patient flow of the outpatient departments in the same month of the preceding year and the month prior to the actual data collection period. The sample is regarded as a multistage systematic random sample because we had use a sampling frame of selecting hospitals as estimating average daily patient flow which used patients‟ registration book in the outpatient departments. We used a systematic sampling technique to select respondents among outpatients everyday from Monday to Friday of the week. For the purpose of this study, every fifth patient attending an outpatient department was selected.

Questionnaire

We adapted the realistic parts of the expectation questionnaire to be used to assess patients‟ expectation in the processes of health care (21). In order to evaluate the validity and usability of the patient expectation questionnaire, we initially piloted among 50 patients in one hospital. The piloting revealed difficulties in understanding due to some ambiguities of words, and amended accordingly.

Data collection

The information was gathered on two occasions. Right after being selected, the aims of the study were explained to the patient, their participation was requested assuring them the confidentiality of the information they would be providing, and a first questionnaire was interviewed and filled the pre- consultation data and the second questionnaire was interviewed after they completed their consultation and treatment at their exit. Due to low literacy among the study population, the research assistants did the interviewing using structured interview guide.

Study measurements

Pre-consultation questionnaires

- **Expectation items**

The questionnaire included questions from the perspective of the patient‟s expectations regarding that day‟s consultation with health care provider. They had to answer 20 items scored on a 5 point scale: “strongly agree, agree, either agree nor disagree, disagree and strongly disagree”. The 20 items were comprised into 4 categories: Four items related to finding their way around, 5

items each categorized under health care provider-patient communication style and treatment/ procedures performed, and 6 items explored health care provider approach to information. The questionnaire also contains past experiences on health care services.

- **Attitudes and characteristics**

The interview contained questions about personal attitudes and related characteristics. In this section, questions related to preferences about making decisions about medical care, extent of feeling to influence the consultation, extent of agreement to take a positive attitude towards onself, extent of control over in health, perceived health status and presence of any long standing illness, disability or infirmity were included. Data on socio demographic charactersistcs (age, sex, marital status, educational status, occupation, residence and payment status) were also collected.

Post- consultation questionnaire.

- **Met expectation items**

As soon as the patient left the health care provider‟s room and completed their treatment and at their exit, the post-visit questionnaire was administered to assess the extent to which patients‟ expectations of their visit and consultation were met. This questionnaire contained 20 items to assess patients‟ extent of agreement in relation to their visit and consultation which had been scored on a 5 point scale: “strongly agree, agree, either agree nor disagree, disagree and strongly disagree”.

The visit overall

Questions that show extent of influence in the consultation, things that needed to be done at this consultation but were not done, or things that disappointed, worth of the consultation, and overall satisfaction with their visit were included. In the present study, overall patient satisfaction was measured with a single likert type item question asking respondents to rate their overall satisfaction with their consultation, on a 5-point likert rating item ranging from „very satisfied‟ to „very dissatisfied‟. The single likert type Global Patient Satisfaction Measurement is validated and used in other studies (21-24).

Statistical analysis

The pre- and post- consultation expectation likert data were analyzed at the interval measurement scale (25)**.** Overall pre- and post- consultation expectation mean scores were calculated by

summing scores for each of the individual domains .Paired samples t-test was used to compare the mean difference between pre- and post- consultation expectation scores. Satisfaction was dichotomized into satisfied and dissatisfied. Very satisfied and satisfied were categorized under the satisfied group, and dissatisfied, very dissatisfied and neither satisfied nor dissatisfied were categorized as dissatisfied group. Multivariable logistic regression was performed with predictive variables with patient satisfaction. Variables were selected if their bivariate significance was p=0.1 to accommodate the possibility of variable achieving statistical significance once the confounding effect of another variable was controlled.

P values of <0.05 were considered statistically significant. We used SPSS version 17.0 (SPSS, Inc., Apache Software Foundation, Chicago, IL, USA) for data analyses. Internal reliability for each scale was evaluated by Cronbach‟s alpha. The Cronbach‟s alpha for the pre -consultation expectation scale was 0.86, and the Cronbach‟s alpha for post consultation scale 0.94, which suggest the scales showed good to excellent internal consistency (26).

Results

Sociodemographic characteristics

A total of 776 patients were interviewed giving a response rate of 92.3 %. Higher proportion of the respondents were males, 468 (60%). The median age of the respondents was 31(SD=± 11.36) years, with a range of 18 to 80 years. Approximately twenty-one percent of patients reported as being illiterate, and two-third were rural inhabitants. Higher proportion of respondents were farmers, 474(61%) and almost all (97%) were paying patients (**Table 1**).

Table 1: Socio demographic characteristics of respondents (N=776)

Characteristics	Frequency	Percent
Age(in years)		
Median age	31	
Sex		
Female	308	39.7
Male	468	60.3
Marital status		
Married or cohabiting with partner	543	70.0
Divorced or separated	54	7.0
Widowed	19	2.4
Single	160	20.6
Educational Status		
Illiterate	162	20.9
Read & write	152	19.6
Grade 1-8	196	25.3
Grade 9-10	114	14.7
Grade 11-12	4.3	5.5
Higher education	109	14.0
Occupation		
Employed	101	13.0
Merchant	125	16.1
Farmer	474	61.1
No job	43	5.5
other	33	4.3
Residence		
Urban	255	32.9
Rural	521	67.1
Payment Status		
Paying	753	97.0
Free	23	3.0

Health care visits by respondents

Of the total of 776 participants, 93.7% visited hospitals for the diagnosis of their health conditions, while 49.3% mentioned prescripition refill and/or in need of medical or surgical procedure as reasons for their current consultation.

Table 2 shows that 172 (22.2%) of respondents had previous experience in the medical health care services. In addition, 240 (30.9%) of the respondents mentioned their symptom(health problem) lasted one week or less. Three hundred fifty nine (46.3%) reported symptom between one week and one month (Table 2).

Table 2: Health care visits and reasons for the current visit (N=776)

Characteristics	Frequency	Percent
Previous experience of health service utilization		
Yes	172	22.2
No	604	77.8
Reasons for the current health service visit*		
To get diagnosis	727	93.7
For reassurance	57	7.3
To get the results of test	41	5.3
Treatment	384	49.3
For a health check up/appointment	43	5.5
To ask for a refferal	36	4.6
Duration of symptom/problem for the current visit		
One week or less	240	30.9
Between one week and one month	359	46.3
1-6 months	91	11.7
6-12 months	42	5.4
≥12 months	44	5.7

Note:*multiple response question

Respondents perception towards decision making in health care and their health conditions

As shown in Table 3, only one-fifth of of the respondents preferred to take active role in treatment related decisions; eleven (1.4%) and 145(18.7%) of participants preferred to make final decisions about medical care and final selection of the treatment after considering health care provider‟s opinion, respectively. More than half of the participants preferred a shared responsibility for deciding which treatment is best for them. The remaining of participants preferred a health care provider driven decision approach.

About 488 (62.9%) respondents perceived that they can moderately influence the consultation in order to achieve the outcome they want. Around a quarter of respondents strongly agree to take a positive attitude towards themselves, whereas only 18% perceived that they had a lot of control over their health. Regarding self perceived health status, approximately two-third of patients perceived that their health status was ranged from good to very good, compared to their age.

About 87% of patients perceived that they did not have longstanding illness, disability or infirmity. In those respondents with chronic illness, hypertension, diabetes, heart problem, back pain, and headache were mentioned as the most common longstanding health problems.

Table 3: Respondents perception towards decision making in health care and their health conditions

Characteristics	Number (N=776)	Percent
Preference in making decisions about medical care:		
I prefer to make the final decision about which treatment I will receive	11	1.4
I prefer to make the final selection of my treatment after seriously considering my doctor,s opinion	145	18.7
I prefer that my doctor and I share responsibility for deciding which treatment is best for me	412	53.1
I prefer that my doctor makes the final decision about which treatment will be used, but seriously considers my opinion	138	17.8
I prefer to leave all decisions regarding my treatment to my doctor	70	9.0
Influence the consultation in order to achieve the outcome you want		
A lot	152	19.6
A moderate amount	488	62.9
A little	113	14.6
Not at all	23	3.0
Extent of agreementto take a positive attitude towards him/herself		
Strongly agree	200	25.8
Agree	464	59.8
Neither agree nor disagree	26	3.4
Disagree	86	11.1
Strongly disagree	0	0
Extent of control over your health		
A lot of control	141	18.2
Some control	427	55.0
A little control.	92	11.9
No control	116	14.9
Perceived health status		
Excellent	0	0
Very good	227	29.3
Good	283	36.5
Fair	164	21.1
Poor	76	9.8
Very poor	26	3.4
Presence of longstanding illness, disability or infirmity		
yes	104	13.4
No	672	86.6

Respondents perception of the overall health care visit

About two-third of the respondents were able or attempted to influence the consultation in order to get the outcome they wanted. About 211(27.2%) respondents said that they were disappointed with the consultation. Some of the things that needed to be done at this consultation that were not done were: provider did not get their problem, provider not giving enough time for discussion, provider did not reassure their health condition, provider did not use diagnostic equipment and/or no lab investigations, provider did not conduct physical examination and provider gave short consultation time. About 116 (14.9%) of respondents believed that the consultation was not worth. When we evaluated respondent‟s global satisfaction level, 243(31.3%) and 351(45.2%) were very satisfied and satisfied, respectivel(Table 4).

Table 4: Post- visit perceptions and patient satisfaction of consultation

Characteristics	Number(N=776)	Percent
Extent of influence on the consultation in order to get the outcome you wanted:		
A lot	72	9.3
A moderate amount	510	65.7
A little	126	16.2
Not at all	68	8.8
Things that needed to be done at this consultation that were not done or things that disappointed you:		
No	565	72.8
Yes	211	27.2
To sum up, do you think that the consultation (with the journey, wait, any treatment and everything) was worth it or not?		
Worth it	267	34.4
Too early to say	393	50.6
Not worth it	116	14.9
Overall, how satisfied are you with your visit this time:		
Very satisfied	243	31.3
Satisfied	351	45.2
Neither satisfied nor dissatisfied	123	15.9
Dissatisfied	41	5.3
Very dissatisfied	18	2.3

Differences in pre-consultation expectation and post-consultation experience

Paired sample *t*-test was performed to assess the mean differences between the patient‟s expectations before and after consultation. The results revealed a significant difference in overall expectation from pre-consultation to post-consultation ($\bar{x}1 = 39.62 \pm 10.27$) to ($\bar{x}2 =$

47.34±14.45) with (t = -12.95, *P*<0.001). This mean expectation score increased from pre-consultation to post- consultation indicated that patient‟s had higher expectations in the pre-consultation but didno‟t met post-consultation expectations.Among the subscales, all subscales except the health care provider-patient communication style subscale had significant differencebetween pre-consultation and post-consultation met expectations (Table 5).

Table 5: Mean differences between pre consultation expectation and post consultation met expectation

Expectations	**Pre consultation Mean±*s.d.***	**Post consultation Mean±*s.d.***	**t**	**p**
Finding way around	7.9±2.51	8.80±3.06	-6.36	<.001
Health care provider -patient communication style	11.24±3.55	10.92±3.78	1.71	.087
Treatment given/procedures performed)	9.20±2.53	11.77±3.09	-18.23	<.001
Health care provider approach to information	11.24±3.57	15.85±6.67	-17.66	<.001
Over all expectation	39.62±10.27	47.34±14.45	-12.95	<.001

Abbreviations: *s.d.,* standard deviation; d.f., degrees of freedom.
Notes:low mean values =highexpectations and vice versa

Predictors of patient satisfaction

Table 6 showed that independent predictors of patient satisfaction. The logistic model fit well (Hosmer–Lemeshow test, p>0.05), and statistically significant, χ^2 = 86.72, p< .0001. The model explained 14.9 % (Nagelkerke R^2) of the variance in patient satisfaction and correctly classified 71.6% of cases.

The multivariable logistic regression showed that the probability of patient satisfaction is contingent on post consultation expectation score level. Higher score of post consultation met expectation scores, less likely satisfied. Participants with excellent to good self perceived health status groups were 3.5 times (OR, 3.53, 95% CI; 2.27-5.49) more likely satisfied than fair to very poor self perceived health status groups. Similarly, the odds of satisfaction were higher among participants who had a lot of perceived control on health compared to with their counter parts. The odds of satisfaction were significantly lower among patients who disappointed (OR, 0.32, 95% CI; 0.22-0.47) compared to patients who do not disappointed. Similarly, the odds of satisfaction were lower among participants who had previous experience in health care service

compared to with their counter parts. Unfortunately, compared to patients that felt a lot of influence on the consultation, the odds of satisfaction was significantly lower (OR, 0.58, 95% CI; 0.37-0.91).

Table 6: Results of the logistic regression analysis showing independent associations of global patient satisfaction

Variables	β	**Sig.**	**Exp(B)**	**95% C.I.for EXP(B)**	
				Lower	Upper
Post visit met expectations mean score	-.012	.038	.988	.976	.999
Pre-visit expectations	-.011	.188	.990	.974	1.005
Perceived control over health(Does not=0, A lot of control=1)	.749	<.001	2.115	1.343	3.329
Perceived health status(fair to very poor=0, Excellent to good=1)	1.263	<.001	3.538	2.277	5.496
Felt extent of influence to the consultation(Moderate to not at all=0, A lot=1)	-.538	.019	.584	.372	.917
Disappointed(No=0, Yes=1)	-1.121	.000	.326	.223	.476
Experience(No=0, Yes=1)	-.531	.021	.588	.374	.924
Constant	.908	.106	2.480		

Abbreviations: C.I., Confidence Interval

Notes: N =776. Nagelkerke R2=0.149. $\chi 2 = 86.72$, $p < .0001$.Negative β values for the pre-visit expectation and for the post visit met expectation =higher odds to be included in the satisfied group. For other variables postive β values= higher odds to be included in the satisfied group.

Discussion

To the best of our knowledge, this is the first pre-post consultation study, aimed to assess any differences between pre -consultation expectation and post- consultation met expectations and to examine the relation with service satisfaction in patients attending outpatient departments across nine public hospitals in Ethiopia.

The reasons for hospital visits mentioned by majority of the participants were either to get a diagnosis for their health condition, or for prescription refill, medical or surgical procedure.. According to Degner Scale (27), to measure the preference in making decisions about medical care, about half ofparticipants expressed a desire for sharing responsibility for which treatment is best for them. This is a collaborative process that the patient and health care provider shared in the decision of the treatment selection.

When we compared the summed mean values of pre- and post- consultation, there was increment in mean values during post- consultation. This was also showed in all the sub-categories of expectation. This indicates that patients had high expectations before consultation but faced difficulty in the actual medical setting in fulfilling these expectations. Results of this study pointed out that there was differences between pre-consultation expectation and post-consultation met expectation/experience. Among the subscales, finding way around, treatment given/procedures performed, and health care provider approach to information showed significant difference but health care provider-patient communication style did not show significant difference.

Looking at determinants of patient satisfaction, relevant variables were entered in the model. Multivariable regression analysis illustrated that post- consultation met expectation, perceived control on health, perceived health status, perceived extent of influence on the consultation, any disappointments, and experience in health care were determinates of patient satisfaction.

Our result indicates that pre- consultation expectation was not a predictor for patient satisfaction. Patient satisfaction was determined by the actual experiences but not the expectations fulfilled. This result is inconsistent with prior studies which underlined the importance of fulfilled expectation for patient satisfaction (28, 29). The finding reflects what determines patient satisfaction is the actual care conditions during medical consultation. This relationship between met expectations and high patient satisfaction is supported by other studies (6-9, 21, 30).

Among the socio-demographic variables, age was significantly associated with patient satisfaction in the bivariate analysis but insignificant in the final model. Previous experience in medical care had negative association with patient satisfaction. This might be, due to a previous exposure to a hospital with less or no satisfactory service which might inturn raise a concern on patient‟s safety and clinical effectiveness.

We found that patients were more satisfied when they had a lot of perceived control over their own health. This is in line with a prior study that showed the personal ability to control one‟s environment have positive effect on satisfaction (31). This is also supported by a research finding that has shown a positive satisfaction with perceived control over the childbirth environment, eventhough the setting was in the maternity care (32).

Interestingly, patients concerned with the consultation or disappointed with the consultation were unsatisfied. This could be explained by several reasons. Since patients expect hospital is a place to diagnose or confirm the diagnose about their problem and get well, their expectation have not been met. This is also expressed by emotional feelings where disappointment with the current health care service depict the patients‟ satisfaction. They might have also described by the condition of their current illness, either they have debilitating and incurable disease and/or not sure about their future health.

Patients who perceived their health status was relatively good were satisfied more. This is supported by a study done in Ethiopia, perceived health status is a determinant of patient satisfaction (33). This is also supported by other studies, reporting that a low perceived health status is associated with lower patient satisfaction (24, 34, 35). Besides, Larsson and Wilde-Larsson (35) explained in their study that patients could never acknowledged their satisfaction when they assume that their health condition is deteriorating, and lack of hope to be cured. Surprisingly, patients‟ felt a lot extent influence on the consultatationhad negatively predicted patient satisfaction.

The findings of this study should be interpreted with the consideration of the following limitations. This study mainly focused on the processes of hospital health care and did not include the structural as well as outcome of health care. The result is only from the patients‟ point of view about the consultation; it did not assess the providers‟ perspective of medical consultation. The study only includes patients in the outpatient department of general, medical and surgical departments. Hence, we can not generalized this result to the inpatient departments and the other outpatient departments of respective hospitals. The study included patients from public hospitals only, and thus, difficult to generalize the findings to the private hospital context. The dependent variable is measured using only a singly likert item, thus, it only measures global level of patient satisfaction. Even though a global measure of patient satisfaction is valid in other researches, it may not sensitive for some parts of the measurement.

Despite these limitations, the findings of this study may have implications for the health care consultation. Thus, health service providers focused on the actual experience rather than struggling to fulfill the expectations.

Based on our findings, we recommend health service providers and managers should focus on patient experience to enhance patient satisfaction. We recommend that studies which incorporate health service providers to assess the complete picture of patient satisfaction and the match in expectation between patients and health service providers. Future research also needed to explore the reasons for patients influence on consultations negatively associated with satisfaction, and the reason why previous experience of health care was associated with dissatisfaction.

Conclusion

Considering the complex nature of patient satisfaction and with its multiple determinants, it is not clear what an acceptable level of patient satisfaction. However, it is clear at least from this study that post- consultationt met expectation, perceived health status, perceived control on health were factors positively influence patient satisfaction, and any presence of disappointments or worries, felt extent of influence to the consultation, and previous experience in health care service were factors negatively influence patient satisfaction. There was a significant difference between pre-consultation expectations and post- consultation met expectations

Authors' contributions

AB contributed in the conception, design, data collection, analysis and write up of the manuscript. FE contributed in the design, analysis and critically reviewed the manuscript. All authors read and approved of the manuscript.

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Coonflicts of Interests

The authors declare that they have no conflicting interests

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Paper III

Patient Intelligence

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ORIGINAL RESEARCH

The lived experience of patients regarding patients' rights practice at hospitals in Amhara Region, northern Ethiopia

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Background: There are a number of different international guidelines promoting the practice of observing patients' rights in the health care service. Patients experience greater satisfaction in the health care service when their rights are protected. The purpose of this study was to examine patients' experiences regarding their rights in hospital settings in northern Ethiopia.

Patients and methods: Data were collected using semistructured interviews of 22 patients, who have had experience of health care service in the hospital setting. The patients were selected from the outpatient and inpatient departments of referral and district hospitals in northern Ethiopia. The interview data were tape-recorded, transcribed, translated, reviewed, and analyzed using a phenomenographic approach. Categories of descriptions were constructed based on the patients' conceptions and ways of understanding the phenomenon of patients' rights practice.

Results: The findings revealed four main qualitatively different ways of understanding patients' rights practice from the patients' perspective. These main categories of description were patient-centered practice, being secured, respecting patients' dignity, and getting referral.

Conclusion: The different conceptions of patient rights give us a deeper understanding of how patients may experience patients' rights practice. The result provides a foundation for developing health care practice that equips the patient with a positive experience, thus contributing in drafting patients' bill of rights in the local context.

Keywords: patient rights, phenomenography, hospital health care, patient experience

Introduction

Given the preface of the human rights declaration introduced by the United Nations in 1948, patients' rights legislations have been accepted in many countries worldwide.[1] The constitution of the World Health Organization (WHO)[1] focuses on relationships between health care and human rights. It affirms that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of religion, race, political belief, social, and economic condition".[2] The Universal Declaration of Human Rights in 1948 and the International Covenant on Economic, Social, and Cultural Rights in 1966 articulate the aptness of human rights and health to the well-being of individuals as well as the family.[3,4] The Declaration of Alma Ata[5] of "health for all" in 1978 with the Ottawa Charter for Health Promotion[6] in 1986 further squeezed the need for social and economic inputs to improve the health well-being of the population. Therefore, there is a deep affiliation between human rights and health.

Many declarations define the importance of the right to lead a healthy life.[7–9] The Lisbon Declaration of World Doctors Association, for instance, was the first study to look at patients' rights.[10] The WHO published a detailed document (A Declaration on

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the Promotion of Patients' Rights in Europe) stating that the principles and strategies of patients' rights in Amsterdam have all drawn up legislation covering patients' rights.[11] Concerns related to respect for patients' values, choices, and preferences are becoming more multifaceted. Patients' expectations are higher, and they want the best. They want to actively participate in decision making and wished for treatments or procedures and their different options.[12]

Many countries have guaranteed patients' rights to process for resolving dissatisfactions with health care providers.[13,14] In health care services, the quality of care, such as patient satisfaction, empowerment and treatment, and access to health personnel, is found to be important to patients. Furthermore, regular sources of care and convenient services are key issues in medical care services.[15–17]

In giving effective care, the patient generally demands their rights, while the hospital is responsible for fulfilling this particular expectation.[6] The charter of the patient's rights is a protection of human rights, with the assumption to preserve patient's honor and dignity and to ensure that the patient receives a good quality of care in illness situations, specifically in medical emergencies, without any age or sex discrimination and irrespective of his/her financial position, life, and health. Patients' rights charter claims that the basic rights of the patients who receive care from health institutions need to be explained.[18] In addition, the WHO has also presented solution that mostly involve active participation by the service providers and service recipients in formulating health care service policy.[19]

The research group on citizens' empowerment and patients' rights by WHO recommended that every state should articulate its priorities and concerns based on its own social and cultural needs to protect and promote patients' rights.[11,18] Many countries have recognized health care organization charters or regulations for patients' rights, and have stated and applied them to attain patients' satisfaction.[20] Hospitals may adapt routine policies for informing customers about their rights for safe, effective, and efficient health care provision.[21]

The government of Ethiopia as mentioned in the constitution of Article 41 under Economic, Social and Cultural Rights states that every Ethiopian citizen has the right to have equal access to publicly funded social services.[22] The Ethiopian Government is committed to ensuring access of all people to quality health care services as indicated in the Health Sector Development IV of Ethiopia.[23] Health care is a major social service sector in Ethiopia. There have been some structural changes in the health sector regarding patients' value judgments, health care centers, and health personnel. There have been changes regarding patients' value judgments, from health care providers previous sense of gratitude and respect to health care, based on the interests of the patient. Patients need to communicate with the health care provider and participate in decisions. Patients may complain, and provide their feelings of dissatisfaction with the service, health care centers, and health care providers.[24] To understand the current patient value judgments, research on patients' conception of patients' rights practice is essential for the understanding and implementing of health care service according to conceptions on their rights thus it may contribute to improve patients.[18] Therefore, this study was conducted to examine patients' experience in the practice of their rights in the hospital setting and to explore different categories of meaning in a hierarchical order.

Patients and methods

Settings and participants

The study was conducted in the northern region of Ethiopia. There were a total of 17 functional public hospitals in the region which served a population of 17,214,056, of whom 8,636,875 were male and 8,577,181 were female. Urban inhabitants' number estimated was 2,112,220 or 12.27% of the population. The population receives health services mainly from public health institutions. During the time of data collection, ~296 physicians, 1,343 health officers, and 9,593 nurses served the people of the region creating high provider-to-population ratios.[25] Public hospitals service people in outpatient and inpatient departments. The referral hospitals provide specialist health care services at departments, such as medical, surgical, gynecological, and pediatric, using specialists. The district hospitals provided general health care services with general practitioners or other health care practitioners in case there were shortages of general practitioners.

Data were collected from nine (four referral and five district) public hospitals. We interviewed adult patients who were seeking health care in the outpatient and inpatient departments or medical or surgical care, that were familiar with the hospital's health care environment so that they were able to explain their experiences. Participant inclusion criteria for this study were as follows: age >18 years, differ by sex, residence, educational status, and current experience in the outpatient and inpatient departments.. Twenty-two patients were chosen using maximum variation sampling technique by fulfilling the criteria mentioned, so as to get a wide variety of conceptions by capturing as many aspects as possible of the phenomenon under study. Table 1 shows respondents' demographic characteristics in random order.

Design

The study focus was to describe the variation in how patients conceive, understand, and conceptualize the phenomenon of

patients' rights practice. Hence, a qualitative design with a phenomenographic approach was chosen.[26] Phenomenography has revealed a qualitative research approach for describing the lived experience of the research participants. The application of phenomenography is relevant in understanding patients' experiences, which is the main research aim of this study. In other words, it is usually applicable to explore patients' experiences of their illness and health-service-related experiences.[27]

Phenomenography takes up a nondualistic ontology which assumes a person and a phenomenon to have an inseparable relationship. There are no two worlds: the real, objective world, on one hand; and a subjective world of mental representations, on the other hand. There is only one real existing world, that is experienced and understood in different ways by human beings, which is simultaneously objective and subjective.[28] "The only world that human beings can communicate about is the world as experienced".[29] The epistemological stance of phenomenography assumes that experience is described as an internal relationship between human beings and the world. Hence, phenomenography considers that knowledge is constituted through internal relationships between people and the world, it is conceptualized as a human–world relationship.[28] People differ in experiencing the surrounding world, and these differences can be related, described, and understood by others. The conception may differ from within the same person, or from one person to another, as different aspects of the phenomenon are conceived depending on the whole in relation to a given context. Phenomenography gives emphasis to a way of examining a collective human, rather than individual perspective of a phenomenon. In phenomenography, there are distinctions between what something really is; that is, the actual phenomenon which is said to be the first-order perspective, and how something is conceived to be and how a phenomenon is conceptualized by the people, which is said to be the second-order perspective.[28] Therefore, this study focuses on how patients practice their rights as conceived by those who seek health care in the hospital.

Data collection

We used a semistructured interview data collection technique, since it is an appropriate method in phenomenography.[28] Interviews were conducted by the principal author from August to October 2014. All interviews were started with an open-ended question, for example, "Could you please tell me what patient rights means to you in hospital health care?" Based on the immediate understanding of what the patients were trying to express, subsequent prompts were used to elicit and clarify the concept under study by using expressions, such as "how…" and "can you tell me more…". The suitability of the question was checked among patients who seek health care in the inpatient and outpatient departments. The interviews were conducted in a safe room in the hospital and lasted for 30–45 minutes. The interviews were conducted using the local Amharic language, audiotaped, and later transcribed verbatim and then translated to English.

Table 1 Demographic characteristics of the respondents (N=22)

Participant no	Age (years)	Sex	Residence	Educational status	Department	Hospital type
1	22	Male	Rural	10+1*	Outpatient	District
2	37	Male	Urban	12+4*	Inpatient	Referral
3	36	Female	Rural	Unable to read and write	Inpatient	District
4	78	Male	Rural	Unable to read and write	Outpatient	District
5	57	Male	Urban	Primary	Inpatient	District
6	29	Female	Urban	10+1*	Outpatient	Referral
7	45	Male	Rural	High school	Inpatient	Referral
8	65	Female	Rural	Unable to read and write	Inpatient	Referral
9	31	Female	Rural	Read and write	Outpatient	District
10	44	Male	Rural	Primary	Outpatient	Referral
11	25	Female	Urban	10+3*	Inpatient	Referral
12	51	Female	Urban	High school	Inpatient	Referral
13	23	Female	Rural	Primary	Outpatient	District
14	32	Male	Rural	Primary	Inpatient	District
15	27	Male	Rural	Read and write	Outpatient	District
16	67	Female	Rural	Unable to read and write	Inpatient	Referral
17	34	Male	Urban	12+4*	Outpatient	Referral
18	28	Female	Rural	Primary	Outpatient	District
19	45	Male	Urban	12+4*	Inpatient	District
20	49	Female	Rural	High school	Outpatient	Referral
21	60	Female	Urban	Read and write	Inpatient	Referral
22	28	Male	Rural	High school	Outpatient	District

Note: *In Ethiopia, Comprehenisve School Leaving Examination is taken at grade 10; according to students Grade Point Average, they may continue Vocational training for 1, 2, and 3 years. So, for example, students who complete Grade 10 and took 1 year vocation training labelled as 10+1.

Data analysis

The data analysis techniques used six major steps.[28] Familiarization phase was the first step, meaning that the interviews were read and reread by the researcher to gain the overall idea of the data and to correct errors in the transcripts. The second step involved transferring meaningful responses from data into meaningful statements/description codes. The third step contained a preliminary grouping or classification of similar meaningful statements. The fourth step was a preliminary comparison of categories, attempting to establish borders between the categories. This is a phase that sometimes entails revision of the preliminary groups. The fifth step consisted of naming the categories to emphasize their essence. The last step is a contrastive comparison of categories, which contains a description of the unique character of every category as well as a description of resemblances between categories. In this step, through interaction between the parts and the whole, based on similarities and differences, four descriptive categories emerged. An iterative process was used throughout the data analysis to check interpretations against the texts and the descriptive categories. Hence, a continual process of iteration between a focus on the whole and the parts was used to check on the interpretation until the descriptive categories that emerged from the data were found to be mutually exclusive. According to Marton and Booth,[28] the descriptive categories are used to form the "outcome space" showing the whole of the findings (Figure 1).

Ethical considerations

The study was approved by the Institutional Review Board of the College of Health Sciences, Addis Ababa University (Addis Ababa, Ethiopia). In addition, consent from the Amhara Regional Health Bureau and the respective hospital administrator was also sought. Verbal informed consent was used to obtain permission from the participants. Participants were also informed that they could withdraw from the study at any time. No personal identifiers or names of participants were used at any point during the data collection, reporting, and dissemination of results. Each quotation was assigned by pseudo-identifiers to ensure confidentiality.

Results

In this study, four different main categories of patients' conception on patients' rights practice were extracted. Patients conceived patients' rights practice as patient-centered practice, being secured, respect patients' dignity, and referral. The main categories were explained by different subcategories (Table 2). The categories, which are supported by interviews with the participants, are described, and finally the findings are presented as a whole.

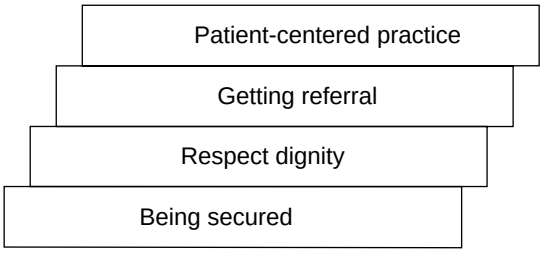

Figure 1 Patients understanding of patients' rights practice – the outcome space.

Patient-centered practice

The patient-centered practice category of patients' rights practice comprises; attentive to patients' concerns, which is a way of understanding patient needs, and participation in treatment procedures that put in shared decision making.

Attentive to patients' concerns

Some participants described that health care providers did not listen to patients' voice. Patients felt that some health care providers rejected their complaints and took their own actions. They described that health care providers did not give attention to their questions and preferences in their treatment. One participant stated:

> I wanted to urinate but I have a catheter. I do not have knowledge how to use it…. I asked frequently "please come soon I am suffering" but they did not give attention to me… at that time I was very upset. They were working their own personal work. (Participant 7)

But other participants described that some health care providers were eager to know the patients' situation. Patients experienced that their questions were listened to by the health care providers. Furthermore, patients appreciated their efforts to give the care that they wanted though they were busy. One participant expressed:

> The health professional has talked to me about my personal matters and I responded to him. I have asked him and he responded to me. Despite him being busy; I appreciate his effort in listening to my questions and his friendly approach. (Participant 2)

Participation in treatment procedures

Patients considered that it is important to be engaged in a discussion during the rendered care, and for the details to be

Table 2 Categories and subcategories

Categories	Subcategories
1. Patient-centered practice	Attentive to patients' concern
	Participation in treatment procedures
2. Being secured	Privacy
	Confidentiality
3. Respecting dignity	Treat as a person
	Respect their independent capability
4. Getting referral	Getting internal and/or external referral

shared with them. In their opinion, decisions should be taken in an atmosphere of mutual understanding that could enable them to enhance their situation.

Some patients experienced that their views were acknowledged during the care provision by health care providers. They experienced that the health care provider gave them relevant information to their situation and on what was going on around them. Furthermore, some patients were asked questions related to their illness. Their smooth relationship with the health care provider builds trust, and this led to continuous discussions related to their health condition. They expressed that their conversation with the health care provider created a wider context for further discussions and mutual understanding on treatment procedures. One participant stated:

> A health care provider and I were discussing my illness and treatment procedures…and reached a common understanding. While the doctor orders something to be done, I have to perform it after we arrived at a consensus on treatment procedures. (Participant 16)

Some patients, on the other hand, expressed that they were not participating in the care they received. They were not invited to ask questions since the health care providers were not in the position to answer questions. Furthermore, patients described that care providers use technical (medical) terms during their communication. Patients did not understand some of the medical terminology that health care providers used when talking to them. One participant described:

> At the beginning, he (the health care provider) asked the symptoms of my illness, and then he observed some of my body parts through his hands. He did not tell me the diagnosis but I asked the doctor what my health problem would be? He responded with vague words that he guessed the problem to be related with my lung. But I didn't understand him. You know why? It was difficult to grasp and understand what the health provider was explaining about. (Participant 8)

Being secured

In this descriptive category, patients' rights practice as being secured, the patients conceived patient rights as a way of real patient–provider relationship, to be protected from any loss of privacy, and keeping patient information secret.

Keeping their privacy

Patients conceived being secure as privacy. Patients may not want to be seen in a way that might expose them during consultation or physical examination. They expected that their private parts should be protected from other health care providers, patients, and others during consultation and physical examination. Patients expected that the concern during consultation and physical examination be about them and the health care provider. There is no need for interferences and being exposed from other sides. One participant stated that:

> I do not want to be seen by others…I believe that patients including myself, would like control of other people's perceptions. (Participant 13)

Privacy is related with many areas in the care and health condition of the patient. It comprises anything related to social problems, relationships, personal feelings, and any other things related to the patient in the health care continuum. Patients wanted to be in their own, single room that could be silent and not to be exposed to other people. One participant expressed:

> It is very important and I would like to be in a single room so I can relax…you know being in a single room means you can freely discuss private things with your family. (Participant 5)

Keeping patient information secret

Patients conceived patient rights as keeping patient information secret. Patients give their information to the health care provider. Patients did not want to disclose their identifiable information to others without their permission. They may not tell patients personal information to their close friends or relatives. Patients do not want their private information to be shared with those health care providers who are not directly involved for the care, or other patients and people in community. They described that they tell their health care providers because they trust them. Hence, private information needs to be protected. One participant expressed:

> When patients get a health problem and go to the hospitals for treatment, they (patients) will tell their secrets to the

> doctor. Do you know why patients tell secrets to the doctor? Patients trust health care providers. Therefore, the doctor should keep the secret and not tell their problems to others. (Participant 19)

Respect their dignity

In this category, patients conceived patient rights as being treated as a person and respecting their independent capability.

Treated as a person

The patients conceived patient rights to be treated as a human being when they need medical care. Patients described that their views should be valued. They need to be understood and require confirmatory remarks. Patients need to be treated equally regardless of their disease status, residence, educational status, age, or sex. Patients do not like to be discriminated against but served equally. One participant expressed:

> Since we are human beings, we have equal rights to get treatment and consultation… the staff are so good to some patients….and I also expect the same kind of treatment and support….but I thought it has to be due to, he/she (the other patient) is from urban and well educated. (Participant 7)

Respect their independent capability

Patients described patient rights in terms of respecting their independent capability. Patients want to be seen as the person that they were, having the capacity to work and being healthy. Patients experienced different health problems while coming to the hospital for care. They may have a damaged body in case of physical harm, or inability to carry out their work in case of mental or social problems. In this case, they may lose their previous capability. For example, one participant described:

> I experienced unpleasant feelings when I got sick. I was no longer able to cope and have become dependent on physical aids. The physician realized I was in that situation, and advised me to be psychologically strong. Then, I was really optimistic and I do good take care of myself. You know why? I was so eager to be seen as a person as healthy as before. (Participant 11)

Getting referral

In this category, patients conceived that patients' rights practice might extend to getting a referral; in this regard, patients perceived that an experienced health care provider might provide them better diagnosis and treatment.

Patients are keen to get better treatment in the hospital they visited. They anticipate being seen by an experienced health care provider who is famous in the hospital. Patients believed that experienced health care providers are skillful and could easily understand them and better know their health problem. One participant described:

> Oh, I prefer to be treated by doctor M (the name of the doctor). He is an experienced health care provider. He knows the details of my health problem well, so I wish I had to be treated by him. (Participant 15)

But, some patients described that most health care providers influenced their views concerning health care provider choice, either by disagreeing with the question or having no ability to refer to the named health care provider. This restriction of internal referral to a chosen health care provider is a concern for most patients as they perceived that their recovery is better with the named health care provider. One participant stated:

> In this hospital, Dr N (the name of the doctor) is the best individual, who behaves well. As a result, patients prefer him. So I witnessed that most patients, who had been treated by him were recovered from their illness. If referrals are allowed based on patients' choice, most patients, I think, could choose him. But you can't do that since health care providers have restricted us. (Participant 4)

The outcome space

The outcome space of the study showed a hierarchical relationship between the four main descriptive categories (Figure 1). It was interpreted to represent patients' collective understanding of patients' rights practice. The findings indicate that patient-centered practice is a comprehensive way of illustrating patients' rights practice in the hospital setting. Patient-centered practice interpreted patients as a center of health care practice. This understanding aims at making patients have a positive experience of health care and maximizing patient satisfaction, positioned as being the core of patients' conception of patients' rights practice. Considering patients at the center of health care practice is the key component in their rights practice as most patients participate in their own care. Making patients converse with the health care provider and acknowledging patients' views create a better health care provider–patient relationship. It also initiates discussion and shared decision making. Patient-centered practice was immediately supported by getting referral in practicing patient rights. Patients considered

patients' rights practice that was aimed at treatment by the reputable health care provider. Patients needed internal referral within the hospital or external referral to the hospital to get a better diagnosis and treatment. This happens when patients are participants in health care, and the health care providers are attentive to patients' concerns. Patients' rights practice in terms of respecting dignity, and being secured, was positioned at the lowest level in the outcome space. patients' rights practice as being secured was expressed in the form of keeping their privacy during consultation or physical examination. It was also described as their information was not disclosed to others unless they permit it. This view was mainly associated with respecting the patient as a person and contributes to patient participation, thus closely linked to respecting their dignity. Patients' rights practice in terms of respecting patients' dignity was described as patients' views were valued as a human being and to not be discriminated in spite of their different characteristics. Furthermore, despite their illness, patients want to be seen as the person that they were before, having the capacity to work and being healthy. The interplay between patients' rights practice conception as being secured and respecting dignity makes patients at the center of health care and closely links with getting referral for a better diagnosis and treatment in and/or out of the hospital. This was also considered as the constituent of patient-centered practice, as these categories put patients first and value their views.

Discussion

The finding of this study shows a considerable variation in the patients' conception of patients' rights practice in hospital setting. The study entails patients' conceptions of their rights in different ways. Patients described diverse views in practicing patient rights in the hospital health care that falls under the following categories: patient-centered practice, being secured, respecting patients' dignity, and getting referral. Different conceptions of patient rights in the study context are important since rights determined from perspectives in a social context,[30] and everything that encompasses is considered as patients' rights.[31]

The patients in this study envisaged that patient-centered practice is the main category that patients conceived as a patients' rights practice. Patients described the care that they get as attentive listening, shared decision making, and understanding the patient behind the disease. This is supported by a study by Marshal et al[32] where patients wanted their care from the health care providers equated as connected and attentive. In another study, patients wanted provider behaviors that encouraged a helpful clinical relationship that explains procedures step-by-step and is attentive to body language.[33] This finding is supported by another similar study, which describes that health care providers have a duty focusing on patients rather than doing their jobs without patient-focused care.[34] This is closely related to the point that health care providers should provide the utmost person-centered care to their patients.[35]

Patients conceived that information was an aspect of patients' rights. Patients want to participate in their treatment and take part in decision making. They considered it important that health care providers invited them to participate, to give them advice, and did not withhold information. In their opinion, decisions should be taken in an atmosphere of mutual understanding, thus enabling them to influence their situation and care. Previous studies reported that patients were motivated to be involved and value their participation.[36,37] But, another study showed that patients only partly participated in their care and were not actually invited to take part in decision making, due to the fact that health care providers believed that patients did not have enough knowledge, as well as wishing to have control over the patient.[38] It is, therefore, essential for health care providers to change such attitudes in involving patients in care and support them to be empowered. Health care providers who use a language that patients do not understand create a barrier to the patient's participation. A shared dialog between the patient and the health care provider creates a commitment that they can discuss to each other for shared decision making. It is also important to create trust between the patient and the health care provider.[39]

In this study, patients reiterated that they have to feel secured in the processes of health care delivery services. They claim control over their privacy not to expose them to the vision of others during consultation or physical examination. Other studies also support this that patients needed a private atmosphere during treatment.[40] Doyle and Bagaric[41] argued that there is a need to reassess the desirability of introducing a separate cause of action protecting privacy interests in health care.

This study also reveals that keeping secrets related to the disease was an important conception related to patients' rights practice. This is also related to patients' conception of keeping patient information secret. Health care providers have the responsibility of keeping information confidential about professional relationship with the patients and the disease affecting them. Patients needed their consultation and care in a private room so as to minimize information

leakage. This indicates that health care providers have responsibility of respecting their privacy and confidentiality to feel them secured. This is supported by other similar studies as every patient has the right to control over information about them and right to privacy.[42,43] Another study also shows that patients' expectation from the health care provider should be comprehensive and performed with respect to ethical principles,[44] but a qualitative study by Woogara[45] on patients' privacy showed that patients had little privacy in the wards.

Respect patients' dignity was among the categories of patient rights. Patients aspired to be seen as valuable and treated as human beings. They need respect and attentive care regardless of disease status, ethnicity, residence, occupation, income status, or sex. This is also related to the need to preserve independent identity as they want to be seen as the person they were before having the capacity to work and being healthy. This is related to a study report on patients' expectation in dignity, that is, respecting patient's dignity will prompt attention, treat patients as equals, feel secured, and make the patient comfortable.[46] Similarly, other studies show that illness[47] or hospitalization[43] hampered patients' dignity, and most importantly, privacy of the person and dignity are interrelated.[10]

Patients anticipated being seen by an experienced health care provider. But this can only be possible if patients have obtained a direct referral to the reputable health care provider in the hospital. Patients also needed a referral to other hospital(s) if they experienced a shortage of diagnostic materials and drugs in the hospital, or to search for a better skilled health care provider.

This study has some limitations. The participants were patients in the adult general, medical, or surgical outpatient departments or patients of medical or surgical wards in an inpatient. Patients in other clinical departments were not included in the study. The identified categories, however, might still be transferable to similar contexts.

Conclusion and recommendations

Rights flow from outlooks in a social context[28] and everything that encompasses is considered as patients' rights.[18] Therefore, the results showed that patients' conceptions of patients' rights practice in the hospital context are categorized differently. By recognizing patient rights as patient-centered practice, being secured, respecting their dignity, and getting referral, practicing patient rights could influence the patient's experiences and satisfaction in relation to their hospital stay. Any health care can be characterized by considering patient rights. It is important that health care providers should acknowledge patient rights in the health care continuum. Health care ethics training in both pre-service and in-service overall, as well as ethical reasons in daily activities, should get due attention. Policy makers should take responsibility in drafting patients' bill of rights in the Ethiopian context, and health care providers and managers should take part in identifying situations that violate patients' rights. Future research on the patients' rights practice from the health care provider's perspective should also be conducted to examine how health care providers see their experience.

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Author contributions

AB contributed to the conception, design, data collection, analysis, and writing of the article. FE contributed to the design and analysis and critically revised the article. Both authors read and approved the article.

Disclosure

The authors report no conflicts of interest in this work.

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Annex II: Preference Questions

I. Choice Questions

Scenario

Imagine that you have an illness presented with cough with sputum, intermittent fever, nausea and loss of appetite. You had also recognized your weight loss. In addition you had fatigue. These symptoms had been seen over the last two months. For the last few days your illness worsens and due to this problem you decided to seek a medical opinion. Given this medical scenario, if you were offered options A and B which one you choose? First start with a warm up choice question and then the main choice question.

Warm up choice question

	Attributes	**Hospital A**	**Hospital B**
	Physician communication	Good	Poor
	Nursing communication	Moderate	Good
	Waiting time for the consultation	1 hr	3 hrs
	Drug availability in the hospital pharmacy	Fully available	Partially available
	Continuity of care	yes	No
	Diagnostic facilities	A lot of diagnostic facilities	A few diagnostic facilities
Which hospital do you prefer?		***A***	***B***

Main choice Questions

	Attributes	**Hospital A**	**Hospital B**
101	Physician communication	Moderate	Good
	Nursing communication	Moderate	poor
	Waiting time for the consultation	1 hr	3hrs
	Drug availability in the hospital pharmacy	Fully available	Not available
	Continuity of care	yes	No
	Diagnostic facilities	Some diagnostic facilities	A lot of diagnostic facilities
Which hospital do you prefer?		***A***	***B***
102	Physician communication	Moderate	Good
	Nursing communication	Good	Moderate
	Waiting time for the consultation	2 hrs	1 hr
	Drug availability in the hospital pharmacy	Fully Available	Partially available
	Continuity of care	No	yes
	Diagnostic facilities	A Few diagnostic facilities	A lot of diagnostic facilities
Which hospital do you prefer?		***A***	***B***

103	Physician communication	Poor	Good
	Nursing communication	Moderate	Poor
	Waiting time for the consultation	2 hrs	1 hr
	Drug availability in the hospital pharmacy	Fully available	Not available
	Continuity of care	No	yes
	Diagnostic facilities	A Few diagnostic facilities	Some diagnostic facilities
Which hospital do you prefer?		***A***	***B***
104	Physician communication	Moderate	Good
	Nursing communication	Poor	Moderate
	Waiting time for the consultation	2 hrs	3 hrs
	Drug availability in the hospital pharmacy	Partially available	Not available
	Continuity of care	No	yes
	Diagnostic facilities	Some diagnostic facilities	A few diagnostic facilities
Which hospital do you prefer?		***A***	***B***
	Attributes	**Hospital A**	**Hospital B**
105	Physician communication	Good	poor
	Nursing communication	Moderate	Good
	Waiting time for the consultation	3 hrs	1 hr
	Drug availability in the hospital pharmacy	Fully available	Not available
	Continuity of care	yes	No
	Diagnostic facilities	A few diagnostic facilities	A lot of diagnostic facilities
Which hospital do you prefer?		***A***	***B***
106	Physician communication	Moderate	Poor
	Nursing communication	poor	Good
	Waiting time for the consultation	3 hrs	2 hrs
	Drug availability in the hospital pharmacy	Not available	Partially available
	Continuity of care	No	yes
	Diagnostic facilities	A lot of diagnostic facilities	A few diagnostic facilities
Which hospital do you prefer?		***A***	***B***
107	Physician communication	Moderate	poor
	Nursing communication	Poor	Good
	Waiting time for the consultation	1 hr	2 hrs
	Drug availability in the hospital pharmacy	Partially available	Fully available
	Continuity of care	No	yes
	Diagnostic facilities	Some diagnostic facilities	A lot of diagnostic facilities

Which hospital do you prefer?		***A***	***B***
108	Physician communication	Moderate	Poor
	Nursing communication	Moderate	Good
	Waiting time for the consultation	2 hrs	3 hrs
	Drug availability in the hospital pharmacy	Not available	Partially available
	Continuity of care	yes	No
	Diagnostic facilities	A lot of diagnostic facilities	Some diagnostic facilities
Which hospital do you prefer?		***A***	***B***

II: Socio-demographic Questions

201	Age(in years)----------
202	Sex: 1. Female 2. Male
203	Are you currently: *(please circle the number that applies)*
	Married or cohabiting with partner... 1 Divorced or separated..... 2 Widowed..... 3 Single, never married..... 4
204	Illiterate----------1 Read & write----------2 Grade 1 – 8----------3 Grade 9 – 10----------4 Grade 11 – 12----------5 Diploma and above----------6
205	Occupation Employed----------1 Merchant----------2 Farmer----------3 No job----------4 Other----------5
206	Address Urban----------1 Rural----------2
207	Payment status Paying----------1 Free----------2
208	Do you have any other comments you would like to make?

Annex III. Questionnaire for Patients' Expectations of Health Care

1. Pre-consultation Questionnaire

Thank you for taking part in our study of patients' expectations for health care. All the information you provide is completely confidential. Please answer the following questions before your consultation. Thank you for your help.

These questions are about your expectations of your health care. To what extent do you agree with the following in relation to your visit and consultation?

S.No_		**Strongly agree (1)**	**Agree (2)**	**Neither agree Nor disagree (3)**	**Disagree (4)**	**Strongly disagree (5)**	
I	**Finding way around**						
1	Be given clear information about where to go	☐	☐	☐	☐	☐	
2	Be given an appointment for a convenient date/time	☐	☐	☐	☐	☐	
3	Be seen on time	☐	☐	☐	☐	☐	
4	The reception staff will be Helpful	☐	☐	☐	☐	☐	
II	**Health care provider-patient communication style**	☐	☐	☐	☐	☐	
	The health care provider I see will be						
5	Helpful						
6	Respectful and treats me with dignity	☐	☐	☐	☐	☐	
7	Knowledgeable about/understand my health condition/problem	☐	☐	☐	☐	☐	
8	Be clear and easy to understand	☐	☐	☐	☐	☐	

9	Involve me in decisions about my treatment	☐	☐	☐	☐	☐	
III	**Treatment given/procedures performed**						
	I will be given:						
10	A physical examination	☐	☐	☐	☐	☐	
11	Tests/investigations	☐	☐	☐	☐	☐	
12	A diagnosis or to have a previous diagnosis confirmed	☐	☐	☐	☐	☐	
13	A new, changed or repeat prescription	☐	☐	☐	☐	☐	
14	A referral to another doctor/specialist/	☐	☐	☐	☐	☐	
IV	**Health Care provider Approach to Information**:						
	Information will be given						
15	Reassurance about my condition	☐	☐	☐	☐	☐	
16	Advice about my health/condition	☐	☐	☐	☐	☐	
	I will be given a full explanation, in clear language about:						
17	What caused my condition/problem	☐	☐	☐	☐	☐	
18	How to manage the condition/symptoms/ pain	☐	☐	☐	☐	☐	
19	The benefits/side effects or complications/ risks of treatment	☐	☐	☐	☐	☐	
	I will be given the opportunity to:						
20	Discuss the problems in my life	☐	☐	☐	☐	☐	

Section II: These questions are about experience of health services

21	Any experiences of health services in the past 12 months	
	Yes----------1 NO----------0	
22	What is the reason for your current consultation? *(please circle all the numbers that apply)*	
	To find out what is wrong/to get a diagnosis..... 1 For reassurance..... 2 To get the results of test/investigations..... 3 Treatment (prescription, procedure or surgery)..... 4 For a health check-up or health screening..... 5 Seeing the doctor on behalf of someone else..... 6 To ask for a referral.....7	
23	How long have you had the health condition/symptom/problem that you are consulting about? *(please circle the number that applies)*	
	One week or less..... 1 More than one week - less than one month..... 2 One month - less than six months..... 3 Six months – less than one year..... 4 One year or more..... 5	

Section III: Attitudes and characteristics

24	How do you feel about making decisions about your medical care? *(please circle only one of these numbers to indicate the statement that applies best to you)*	
	I prefer to make the final decision about which treatment I will receive..... 1 I prefer to make the final selection of my treatment after seriously considering my doctor's opinion ..... 2 I prefer that my doctor and I share responsibility for deciding which treatment is best for me..... 3 I prefer that my doctor makes the final decision about which treatment will be used, but seriously considers my opinion..... 4 I prefer to leave all decisions regarding my treatment to my doctor.....5	
25	In general, to what extent do you feel that you can influence the consultation in order to achieve the outcome you want: *(please circle the number that applies)*	
	A lot..... 1 A moderate amount..... 2 A little.....3 Not at all..... 4	
26	To what extent do you agree or disagree that you take a positive attitude toward yourself: *(please circle the number that applies)*	
	Strongly agree..... 1 Agree..... 2	

	Neither agree nor disagree... 3 Disagree..... 4 Strongly disagree..... 5	
27	How much control do you feel over your health? *(please circle the number that applies*	
	A lot of control..... 1 Some control..... 2 A little control..... 3 No control..... 4	
	Now some general questions about your health:	
28	In general, compared with other people your age, would you say that your current health is:*(please circle the number that applies)*	
	Excellent..... 1 Very good..... 2 Good..... 3 Fair..... 4 Poor..... 5 Very poor..... 6	
29	Do you have any longstanding illness, disability or infirmity? *(please circle the number that applies)*	
	Yes..... 1 IF YES: What is this/these condition/s..... No..... 0	

Section IV: Socio-demography characteristics

30	Age (in years).....	
31	Sex: 1. Female 2. Male	
32	Are you currently: *(please circle the number that applies)*	
	Married or cohabiting with partner... 1 Divorced or separated..... 2 Widowed..... 3 Single, never married..... 4	
33	Educational Status Illiterate----------1 Read & write----------2 Grade 1 – 8----------3 Grade 9 – 10----------4 Grade 11 – 12----------5 Diploma and above----------6	
34	Occupation Employed----------1 Merchant----------2	

	Farmer----------3 No job----------4 Other----------5	
35	Address Urban----------1 Rural----------2	
36	Payment status Paying----------1 Free----------2	
37	Do you have any other comments you would like to make?	

Thank you for your valuable help with this part of the study

Questionnaire for patients' expectations of health care

2. Post-consultation Questionnaire

Thank you for taking part in the second part of our study of patients' expectations for health care. All the information you provide is completely confidential.

Please answer the following questions after your consultation. Thank you again for your help.

We would like to ask you about the extent to which your expectations of the visit and consultation were met.

To what extent do you agree with the following in relation to your visit and consultation?

S.No-		Strongly agree (1)	agree (2)	Neither nor disagree (3)	Disagree (4)	Strongly Disagree (5)	
I	**Finding way around**						
1	I was given clear information about where to go	☐	☐	☐	☐	☐	
2	I was given an appointment for a convenient date/time	☐	☐	☐	☐	☐	
3	I was seen on time	☐	☐	☐	☐	☐	
4	I found that the reception/liaison staff were helpful	☐	☐	☐	☐	☐	
II	**Health care provider-patient communication style**	☐	☐	☐	☐	☐	
	The health care provider I saw:						
5	Was helpful	☐	☐	☐	☐	☐	
6	Was respectful and treated me with dignity	☐	☐	☐	☐	☐	
7	Was knowledgeable about/understood my health condition/problem	☐	☐	☐	☐	☐	
8	Was clear and easy to understand	☐	☐	☐	☐	☐	
9	Involved me in decisions about my	☐	☐	☐	☐	☐	

	treatment						
III	**Treatment given/procedures performed**						
	I was given:						
10	A physical examination	☐	☐	☐	☐	☐	
11	Tests/investigations	☐	☐	☐	☐	☐	
12	A diagnosis or had a previous diagnosis confirmed	☐	☐	☐	☐	☐	
13	A new, changed or repeat prescription	☐	☐	☐	☐	☐	
14	A referral to another doctor/specialist/	☐	☐	☐	☐	☐	
IV	**Health Care provider Approach to Information**						
	I was given:						
15	Reassurance about my condition	☐	☐	☐	☐	☐	
16	Advice about my health/condition	☐	☐	☐	☐	☐	
	I was given a full explanation, in clear language about						
17	What caused my condition/problem	☐	☐	☐	☐	☐	
18	How to manage the condition/symptoms/ Pain	☐	☐	☐	☐	☐	
19	The benefits/side effects or complications/ risks of treatment	☐	☐	☐	☐	☐	
20	I was given the opportunity to discuss problems in my life	☐	☐	☐	☐	☐	

The visit overall

S. No-		
23	To what extent were you able to influence the consultation in order to get the outcome you wanted: *(Please circle one number only)* A lot.....1 A moderate amount..... 2 A little..... 3 Not at all..... 4	
24	Were there any things that needed to be done at this consultation that were not done, or things that disappointed you? *(Please circle one number only)*	

	No..... 0 Yes..... 1 If Yes; what were these:	
25	To sum up, do you think that the consultation (with the journey, wait, any treatment and everything) was worth it or not? *(Please circle one number only)* Worth it..... 1 Too early to say..... 2 Not worth it..... 3	
26	Overall, how satisfied are you with your visit this time: *(Please circle one number only)* Very satisfied..... 1 Satisfied..... 2 Neither satisfied nor dissatisfied..... 3 Dissatisfied..... 4 Very dissatisfied..... 5	
27	Is there anything else you would like to mention:_____	

Annex IV: Semi-structured Questionnaire

I. Main interview entry questions

1. What does the word ‘patient right’ mean to you in hospital health care?
2. Based on your experience, how patient rights are practiced in hospitals?
3. How does patient rights practice play a part in giving effective health care?

II. Socio-demographic characteristics

1. ID. No._____
2. Age (years)_____
3. Sex_____
4. Educational status_____
5. Address_____
6. Hospital department_____
7. Hospital type_____

Annex V: Amharic Version Questionnaire

አባሪ 2፡- የምርጫ ጥያቄዎች

ትዕይንት

እርስዎ የህመም ስሜት አለዎት እንበልና የህመምዎ ምልክቶችም አክታ ያለዉ ሳል ያስልዎታል፤ አልፎ አልፎ ትኩሳት፤ የማቅለሽለሽ ስሜትና፤ የምግብ ፍላጎትዎም ቀንሷል፡፡ ከብደትዎም እየቀነሰ መሆኑን ተረድተዋል፡፡በተጨማሪም የድካም ስሜት አለዎት፡፡ እነዚህ ምልክቶች መታየት ከጀመሩ 2 ወራትን አስቆጥሯል፡፡ ከቅርብ ቀናት ወዲህ ግን ህመምዎ ስለተባባሰብዎት የህክምና አገልግሎት ለማግኘት ይወስኑና ወደ ሆስፒታል መሄድ ይፈልጋሉ፡፡ የእርስዎን የህመም ሁኔታ እንዉሰድና ሁለት የተለያዩ ሆስፒታሎች A እና B እንደ አማራጭ ቢቀርብላችሁ የትኛዉን ይመርጣሉ?

<u>የማነቃቂያ የምርጫ ጥያቄ</u>

	የሐኪሙ ንግግር	ጥሩ	ደካማ
	በስራ ላይ ያለ ነርስ ንግግር	መካከለኛ	ጥሩ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	1 ስዓት	3 ስዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	ሁሉም ያለዉ	በከፊል ያለዉ
	የህክምና ቀጣይነት	ያለዉ	የለዉም
	የላብራቶሪ መሣሪያዎች	ብዙ የምርመራ መሣሪያዎች ያሉት	ትቂት የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B

<u>ዋና የምርጫ ጥያቄ</u>

	Attribute	Hospital A	Hospital B
101	የሐኪሙ ንግግር	መካከለኛ	ጥሩ
	በስራ ላይ ያለ ነርስ ንግግር	መካከለኛ	ደካማ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	1 ስዓት	3 ስዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	ሁሉም ያለዉ	የለዉም
	የህክምና ቀጣይነት	ያለዉ	የለዉም
	የላብራቶሪ መሣሪያዎች	የተወሰኑ የምርመራ መሣሪያዎች ያሉት	ብዙ የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
102	የሐኪሙ ንግግር	መካከለኛ	ጥሩ
	በስራ ላይ ያለ ነርስ ንግግር	ጥሩ	መካከለኛ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	2 ስዓት	1 ስዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	ሁሉም ያለዉ	የለዉም
	የህክምና ቀጣይነት	የለዉም	ያለዉ
	የላብራቶሪ መሣሪያዎች	ትቂት የምርመራ መሣሪያዎች ያሉት	ብዙ የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
103	የሐኪሙ ንግግር	ደካማ	ጥሩ
	በስራ ላይ ያለ ነርስ ንግግር	መካከለኛ	ደካማ

	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	2 ሰዓት	ነ ሰዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	በከፊል ያለዉ	የለዉም
	የህክምና ቀጣይነት	የለዉም	ያለዉ
	የላብራቶሪ መሣሪያዎች	ትቂት የምርመራ መሣሪያዎች ያሉት	ብዙ የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
104	የሐኪሙ ንግግር	መካከለኛ	ጥሩ
	በስራ ላይ ያለ ነርስ ንግግር	ደካማ	መካከለኛ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	2 ሰዓት	3 ሰዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	በከፊል ያለዉ	የለዉም
	የህክምና ቀጣይነት	የለዉም	ያለዉ
	የላብራቶሪ መሣሪያዎች	የተወሰኑ የምርመራ መሣሪያዎች ያሉት	ትቂት የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
105	የሐኪሙ ንግግር	ጥሩ	ደካማ
	በስራ ላይ ያለ ነርስ ንግግር	መካከለኛ	ጥሩ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	3 ሰዓት	ነ ሰዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	ሁሉም ያለዉ	የለዉም
	የህክምና ቀጣይነት	ያለዉ	የለዉም
	የላብራቶሪ መሣሪያዎች	ትቂት የምርመራ መሣሪያዎች ያሉት	ብዙ የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
106	የሐኪሙ ንግግር	መካከለኛ	ደካማ
	በስራ ላይ ያለ ነርስ ንግግር	ደካማ	ጥሩ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	3 ሰዓት	2 ሰዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	የለዉም	በከፊል ያለዉ
	የህክምና ቀጣይነት	የለዉም	ያለዉ
	የላብራቶሪ መሣሪያዎች	ብዙ የምርመራ መሣሪያዎች ያሉት	ትቂት የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
107	የሐኪሙ ንግግር	መካከለኛ	ደካማ
	በስራ ላይ ያለ ነርስ ንግግር	ደካማ	ጥሩ
	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	ነ ሰዓት	2 ሰዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	በከፊል ያለዉ	ሁሉም ያለዉ
	የህክምና ቀጣይነት	የለዉም	ያለዉ
	የላብራቶሪ መሣሪያዎች	የተወሰኑ የምርመራ መሣሪያዎች ያሉት	ብዙ የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
108	የሐኪሙ ንግግር	መካከለኛ	ደካማ
	በስራ ላይ ያለ ነርስ ንግግር	መካከለኛ	ጥሩ

	ህክምናዉን ለማግኘት የጠበቁት ጊዜ	2 ስዓት	3 ስዓት
	በሆስፒታሉ ፋርማሲ ውስጥ መድኃኒት የመኖር ሁኔታ	የለዉም	በከፊል ያለዉ
	የህክምና ቀጣይነት	ያለዉ	የለዉም
	የላብራቶሪ መሣሪያዎች	ብዙ የምርመራ መሣሪያዎች ያሉት	የተወሰኑ የምርመራ መሣሪያዎች ያሉት
የትኛውን ሆስፒታል ይመርጣሉ?		A	B
201	ዕድሜዎ(በዓመት)----------		
202	ፆታ፡- 1. ሴት 2. ወንድ		
203	በአሁኑ ጊዜ (እባክዎን የሚመለከተውን ቁጥር ያክብቡ)		
	አግብተዋል ወይም ከትዳር አጋርዎ ጋር እየኖሩ ነው ----------1 የተፋታ ወይም የተለያየ ----------2 በሞት የተለየ ----------3 ላጤ ያላገባ/ች ----------4		
204	የትምህርት ሁኔታ መጻፍና ማንበብ የማይችል ----------1 መጻፍና ማንበብ የሚችል ----------2 ከነኛ እስከ 8ኛ ክፍል ----------3 ከ9ኛ እስከ 10ኛ ክፍል ----------4 ከ11ኛ እስከ 12ኛ ክፍል ----------5 ዲፕሎማ ወይም ከዚያ በላይ ----------6		
205	ሥራ ተቀጥሮ የሚሰራ ----------1 ነጋዴ ----------2 አርሶ አደር ----------3 ስራ አጥ ----------4 ሌላ ----------5		
206	አድራሻ ከተማ ----------1 ገጠር----------2		
207	የክፍያ ሁኔታ ከፋይ ----------1 ነጻ ----------2		
208	ሌላ ተጨማሪ አስተያየት ካለዎት----------		

አባሪ 3፡- ታካሚዎች ስለ ጤና አገልግሎት የሚጠብቁት ነገር ላይ የቀረበ ቃለ-መጠየቅ

1፡- የቅድመ ማማከር መጠይቅ

ታካሚዎች ስለ ጤና አገልግሎት በሚጠብቁት ላይ በምናደርገው ጥናት ስለተሳተፉ እናመሰግናለን፡፡ የሚሰጡን መረጃ ሙሉ በሙሉ ሚስጢራዊነቱ የተጠበቀ ይሆናል፡፡ የማማከር አገልግሎት ከማግኘትዎ በፊት እባክዎን የሚከተሉትን ጥያቄዎች ይመልሱ፡፡ ለትብብርዎ እናመሰግናለን፡፡ እነዚህ ጥያቄዎች በጤና አገልግሎት ዙሪያ ስለሚጠብቁት ነገር ላይ የቀረቡ ነገሮች ናቸው፡፡

ተ.ቁ		በጣም እስማማለሁ (1)	እስማማለሁ (2)	እስማማለሁም አልስማማም (3)	አልስማማም (4)	በጣም አልስማማም (5)	
I	የጤና አገልግሎት ሂደት መረጃን/አገልግሎት መስጠትን በሚመለከት እንደሚከተለው ይሆናል						
1	ወዴት መሄድ እንዳለብኝ ግልጽ መረጃ ይሰጠኛል	☐	☐	☐	☐	☐	
2	በአመቺ ጊዜ እና ሰዓት ቀጠሮ ይሰጠኛል	☐	☐	☐	☐	☐	
3	በወቅቱ የማማከር አገልግሎት/አገኛለሁ	☐	☐	☐	☐	☐	
4	ዕንግዳ ተቀባይ/የካርድ ክፍል ሰራተኞች ተባባሪዎች ይሆናሉ	☐	☐	☐	☐	☐	
II	የጤና ባለሙያ-ታካሚ ግንኙነት/ አቀራረብ/ዘይቤ						
	የማገኘው ዶ/ር/የጤና ባለሙያ						
5	ለመርዳት ዝግጁ የሆነ ይሆናል	☐	☐	☐	☐	☐	
6	በአክብሮትና ሰብዓዊ ክብሬን በመጠበቅ ያክመኛል	☐	☐	☐	☐	☐	
7	ስለ ጤና ችግሬ/ሁኔታ ያውቅልኛል/ይረዳኛል	☐	☐	☐	☐	☐	

8	ግልጽና ለመረዳት ቀላል የሆነ ይሆናል	☐	☐	☐	☐	☐	
9	ስለ ሕክምናዬ በውሳኔ አሰጣጥ ያሳትፈኛል	☐	☐	☐	☐	☐	
III	ምክርና ሕክምና መስጠትን በተመለከተ						
	የሚከተሉት ምክርና ሕክምና ይሰጡኛል						
10	የአካል ምርመራ	☐	☐	☐	☐	☐	
11	የላብራቶሪ ምርመራዎች	☐	☐	☐	☐	☐	
12	ምርመራ ይደረግልኛል ወይም ከዚህ በፊት የተደረገልኝ ምርመራ ይረጋገጣል	☐	☐	☐	☐	☐	
13	መድሃኒት አዲስ፣ የተለወጠ ወይም በድጋሚ ይታዘዝልኛል	☐	☐	☐	☐	☐	
14	ወደ ሌላ ሐኪም/ስፔሻሊስ/ ሪፈር እደረጋለሁ	☐	☐	☐	☐	☐	
IV	የጤና ባለሙያዉ/ዶ/ር/ የምክር አሰጣጥ/አገላለጽ ዘዴን በተመለከተ						
15	ስለ ጤና ሁኔታዬ በድጋሚ ያረጋገጥልኛል	☐	☐	☐	☐	☐	
16	ስለ ጤናዬ/ሁኔታዬ ምክር ይሰጠኛል	☐	☐	☐	☐	☐	
	የሚከተሉትን በግልጽ ቋንቋ ሙሉ ማብራሪያ ይሰጡኛል ብየ እጠይቃለሁ						
17	ችግሬን/የጤና ሁኔታዬን ምንድን እንዳመጣዉ	☐	☐	☐	☐	☐	
18	ምልክቶቹን/ሁኔታዎቹን/ሕመሞቹን እንዴት መቆጣጠር እንደምችል	☐	☐	☐	☐	☐	
19	ሕክምናው የሚያስከትለው ጥቅሞች/ጉዳቶች ወይም	☐	☐	☐	☐	☐	

	አደጋዎች						
	ዕድል ሰለመስጠት						
20	በሕይወቴ ያለብኝን ችግር እንድወያይ ዕድል ይሰጠኛል	☐	☐	☐	☐	☐	

ክፍል 2፡- እነዚህ ጥያቄዎች ስለ ጤና አገልግሎት ማናቸውም ተሞክሮዎች የሚመለከቱ ናቸው::

21	ባለፉት 12 ወራት ማናቸውም አይነት የጤና አገልግሎት አግኝተዋልን?	
	አዎ----------1 የለም----------0	
22	ለአሁኑ የጤና ባለሙያ የማማከር/አገልግሎት መፈለግዎ/ ምክንያቱ ምንድን ነው? (እባክዎን የሚመለከታቸውን ቁጥሮቹ ሁሉ ያክብቡ)	
	ምን ችግር እንዳለብዎ ለማወቅ/ምርመራ ለማድረግ ----------1 በድጋሚ እርግጠኛ ለመሆን ----------2 የምርመራ ውጤትዎን ለመቀበል ----------3 ሕክምና ለማድረግ (ታዞሎት፣ በሂደት ላይ ወይም ቀዶ ሕክምና)------4 ለጤና ምርመራ ወይም ለጤና ምርመራ ውጤት ----------5 በሌላ ሰው ቦታ ሆኖ ሐኪሙን ለማነጋገር ----------6 ሪፈራል ለመጠየቅ ----------7	
23	***ለሁን የሚያማክሩትን የጤና ችግር/ምልክት ለምን ያህል ጊዜ ሆኗል ? (እባክዎን የሚመለከታቸውን ቁጥሮቹ ሁሉ ያክብቡ)***	
	ከ1 ሳምንት ወይም ከዚያ በታች ----------1 ከ 1 ሳምንት በላይና ከ1 ወር በታች ----------2 ከ1 ወር በላይ ከ6 ወራት በታች ----------3 ከ6 ወር በላይ ከ1 ዓመት በታች ----------4 1 ዓመት ወይም ከዚያ በላይ ----------5	

ክፍል 3፡- ለመለካከትና ባህሪያት

24	**ስለ ጤና አጠባበቅዎ ውሳኔ አሰጣጥ ምን ይሰማዎታል? (እባክዎን ከተሰጡት ቁጥሮች የእርሶን ሁኔታ በደንብ የሚገልጸውን ብቻ ያክብቡ)**	
	ስለሚሰጠኝ ሕክምና የመጨረሻውን ውሳኔ ማድረግ እፈልጋለሁ ----------1 የሐኪሜን ሃሳብ በደንብ ከተገነዘብኩ በኋላ የመጨረሻ ውሳኔ ላይ መድረስ እፈልጋለሁ ----------2 እኔና ሐኪሜ ለእኔ የተሻለውን ሕክምና በመወሰን ኃላፊነት እንድንወስድ እመርጣለሁ ----------3 ሐኪሜ የእኔን ሃሳብ በደንብ ከተገነዘበ በኋላ የትኛው ሕክምና ለእኔ የተሻለ እንደሆነ እንዲወስንልኝ እፈልጋለሁ--4 ስለ እኔ ሕክምና ሁሉንም ውሳኔ ለሐኪሜ መተው እፈልጋለሁ ----------5	
25	**በአጠቃላይ የሚፈልጉትን ውጤት ለማግኘት እርሶ ማሳደር የሚችሉት ተጽእኖ ምን ያህል እንደሆነ ይሰማዎታል? (እባክዎን የሚመለከታቸውን ቁጥሮቹ ሁሉ ያክብቡ)**	

	ብዙ ----------1 የተወሰነ ----------2 ጥቂት ----------3 በፍጹም አልችልም ----------4	
26	**ስለ እራስዎ ምን ያህል መልካም አመለካከት እንዳለዎት ምን ያህል ይስማማሉ? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ)**	
	በጣም እስማማለሁ ----------1 እስማማለሁ ----------2 እስማማለሁም አልስማማም----------3 አልስማማም---------- ----------4 በጣም አልስማማም ----------5	
27	**እራስዎ የእራስዎን የጤንነት ሁኔታ ምን ያህል መቆጣጠር እንደሚችሉ ይሰማዎታል? (እባክዎን የሚመለከታቸውን ቁጥሮቹ ሁሉ ያክብቡ)**	
	ብዙ ----------1 የተወሰነ ----------2 ጥቂት ----------3 በፍጹም አልችልም ----------4	
28	**በአጠቃላይ በዕድሜ እኩያዎ ከሆኑ ሰዎች ጋር እራስዎን ሲያወዳድሩ የአሁኑ የጤና ሁኔታዎት እንዴት ነው ይላሉ? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ)**	
	እጅግ በጣም ጥሩ ----------1 በጣም ጥሩ ----------2 ጥሩ ----------3 አጥጋቢ ----------4 ዝቅተኛ ----------5 በጣም ዝቅተኛ ----------6	
29	**ለረጅም ጊዜ የቆየ ሕመም፣ የአካል ጉዳት ወይም የጤና ችግር አለብዎት? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ)**	
	አዎ ----------1 አዎ ካሉ ችግሩ ምንድን ነው ---------- የለም ----------2	
	በመጨረሻም ስለ እራስዎ የተወሰኑ ጥያቄዎች እጠይቅዎታለሁ	
30	ዕድሜዎ(በዓመት)----------	
31	ፆታ፡- 1. ሴት 2. ወንድ	
32	በአሁኑ ጊዜ (እባክዎን የሚመለከተውን ቁጥር ያክብቡ)	
	አግብተዋል ወይም ከትዳር አጋርዎ ጋር እየኖሩ ነው ----------1 የተፋታ ወይም የተለያየ ----------2	

	በሞት የተለየ ----------3 ላጤ ያላገባ/ች ----------4	
33	የትምህርት ሁኔታ መጻፍና ማንበብ የማይችል ----------1 መጻፍና ማንበብ የሚችል ----------2 ከ1ኛ እስከ 8ኛ ክፍል ----------3 ከ9ኛ እስከ 10ኛ ክፍል ----------4 ከ11ኛ እስከ 12ኛ ክፍል ----------5 ዲፕሎማ ወይም ከዚያ በላይ ----------6	
34	ሥራ ተቀጥሮ የሚሰራ ----------1 ነጋዴ ----------2 አርሶ አደር ----------3 ስራ አጥ ----------4 ሌላ ----------5	
35	አድራሻ ከተማ ----------1 ገጠር----------2	
36	የክፍያ ሁኔታ ከፋይ ----------1 ነጻ ----------2	
37	ሌላ ተጨማሪ አስተያየት ካለዎት----------	

በዚኛው የጥናቱ ክፍል ስላደረጉልን መልካም ትብብር እናመሰግናለን::

ታካሚዎች ስለ ጤና አገልግሎት የሚጠብቁት ነገር ላይ የቀረበ ቃለ-መጠየቅ
2፡- የድህረ-ማማከር መጠይቅ

ታካሚዎች ስለ ጤና አገልግሎት በሚጠብቁት ላይ በምናደርገው ጥናት ስለተሳተፉ እናመሰግናለን፡፡ የሚሰጡን መረጃ ሙሉ በሙሉ ሚስጢራዊነቱ የተጠበቀ ይሆናል፡፡ የድህረ-የማማከር አገልግሎት ካገኙ በኃላ እባክዎን የሚከተሉትን ጥያቄዎች ይመልሱ፡፡ ለትብብርዎ እናመሰግናለን፡፡

እነዚህ ጥያቄዎች በጤና አገልግሎት ዙሪያ ስለሚጠብቁት ነገር ላይ የቀረቡ ነገሮች ናቸው፡፡ በዓገኛችሁት የጤና አገልግሎት ዙሪያ መስማማታችሁ ምን ያህል እንደሆነ ይግለፁልን፡፡

ተ.ቁ		በጣም እስማማለሁ (1)	እስማማለሁ (2)	እስማማለሁም አልስማማም (3)	አልስማማም (4)	በጣም አልስማማም (5)	
I	የጤና አገልግሎት ሂደት መረጃን/አገልግሎት መስጠትን በሚመለከት እንደሚከተለው ሆኗል						
1	ወዴት መሄድ እንዳለብኝ ግልጽ መረጃ ተሰቶኛል	☐	☐	☐	☐	☐	
2	በአመቺ ጊዜ እና ሰዓት ቀጠሮ ተሰቶኛል	☐	☐	☐	☐	☐	
3	በወቅቱ የማማከር አገልግሎት አግኝቻለሁ	☐	☐	☐	☐	☐	
4	ዕንግዳ ተቀባይ/የካርድ ክፍል ሰራተኞች ተባባሪዎች ነበሩ	☐	☐	☐	☐	☐	
II	የጤና ባለሙያ-ታካሚ ግንኙነት/ አቀራረብ/ዘይቤ						
	የማገኘው ዶ/ር/የጤና ባለሙያ						
5	ለመርዳት ዝግጁ ነበሩ	☐	☐	☐	☐	☐	
6	በአክብሮትና ሰብዓዊ ክብሬን በመጠበቅ አከመዉኛል	☐	☐	☐	☐	☐	
7	ስለ ጤና ችግሬ/ሁኔታ ያውቅልኛል/ተረድተዉኛል	☐	☐	☐	☐	☐	

8	ግልጽና ለመረዳት ቀላል የሆነ ነበር	☐	☐	☐	☐	☐	
9	ስለ ሕክምናዬ በውሳኔ አሰጣጥ አሳትፈዉኛል	☐	☐	☐	☐	☐	
III	**ምክርና ሕክምና መስጠትን በተመለከተ**						
	የሚከተሉት ምክርና ሕክምና ተሰጥተዉኛል						
10	የአካል ምርመራ	☐	☐	☐	☐	☐	
11	የላብራቶሪ ምርመራዎች	☐	☐	☐	☐	☐	
12	ምርመራ ተደርጎልኛል ወይም ከዚህ በፊት የተደረገልኝ ምርመራ ተርጋግጧል	☐	☐	☐	☐	☐	
13	መድሃኒት አዲስ፣ የተለወጠ ወይም በድጋሚ ታዞልኛል	☐	☐	☐	☐	☐	
14	ወደ ሌላ ሐኪም/ስፔሻሊስት/ ሪፈር ተደርጊያለሁ	☐	☐	☐	☐	☐	
IV	የጤና ባለሙያዉ/ዶ/ር/ የምክር አሰጣጥ/አገላለጽ ዘዴን በተመለከተ						
15	ስለ ጤና ሁኔታዬ በድጋሚ ተረጋገጥልኛል	☐	☐	☐	☐	☐	
16	ስለ ጤናዬ/ሁኔታዬ ምክር ተሰጠቶኛል	☐	☐	☐	☐	☐	
	የሚከተሉትን በግልጽ ቋንቋ ሙሉ ማብራሪያ ተሰጥቶኛል ብየ እገምታለሁ						
17	ችግሬን/የጤና ሁኔታዬን ምንድን እንዳመጣዉ	☐	☐	☐	☐	☐	
18	ምልክቶቹን/ሁኔታዎቹን/ሕመሞቹን እንዴት መቆጣጠር እንደምችል	☐	☐	☐	☐	☐	
19	ሕክምናው የሚያስከትለው ጥቅሞች/ጉዳቶች ወይም አደጋዎች	☐	☐	☐	☐	☐	
20	በሕይወቴ ያለብኝን ችግር እንድወያይ ዕድል ተሰቶኛል	☐	☐	☐	☐	☐	

አጠቃላይ ጉብኝቱን በሚመለከት

ተ.ቁ		
21	የፈለጉትን ውጤት ለማግኘት ምክክሩ ላይ ምን ያህል ተጽእኖ አሳድረዋል? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ) ብዙ ----------ነ መጠነኛ ----------2 ጥቂት ----------3 በፍጹም አልቻልኩም ---------- 4	
22	በዚህ ምክክር ወቅት መደረግ የነበረባቸው ነገሮች ሳይደረጉ የቀሩ ወይም የተከፉባቸው ነገሮች አሉ? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ) የሉም ----------0 አዎ ----------ነ አዎ ካሉ ምንድን ናቸው ----------	
23	ለማጠቃለል ያህል የምክር አገልግሎቱ (ጉዞውን፣ መጠበቁን፣ ማንኛውንም ሕክምናና እያንዳንዱን ነገር የሚገባው ያህል ነበር ወይስ አይደለም? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ) ይገባል ----------ነ በዚህ ጊዜ አስተያየት ለመስጠት ያስቸግራል----------2 አይገባውም ----------3	
24	በአጠቃላይ በዚህ ጊዜ ባደረጉት ጉብኝት ምን ያህል እረክተዋል? (እባክዎን የሚመለከተውን ቁጥር ያክብቡ) በጣም እረክቻለሁ ----------ነ ረክቻለሁ ----------2 አልረካሁምም ረክቻለሁም ለማለት ያስቸግራል ----------3 አልረካሁም----------4 በጣም አልረካሁም----------5	
25	***ሌላ መጥቀስ የሚፈልጉት ነገር ካለ_____***	

አባሪ 4- በከፊል የተዋቀረ መጠይቅ

I. Main Interview Entry Questions

1 “የታማሚ መብት” ማለት ለእርስዎ ምን ማለት ነው?

2 የታማሚ መብትን መተግበር በሚመለከት የእርስዎ ተሞክሮዎ እንዴት ነው?

3 የታማሚ መብትን መተግበር የጤና/የህክምና አገልግሎትን ዉጤታማ እንዴት ሊያደርገዉ ይችላል?

II. Socio-demographic Characteristics

1. የተሳታፊዉ መለያ _____
2. ዕድሜዎ(በዓመት)_____
3. ፆታ_____
4. የትምህርት ደረጃ _____
5. አድራሻ _____
6. የሆስፒታል ዲፓርትመንት_____
7. የሆስፒታል ዓይነት_____

Annex VI: DECLARATION FORM

LETTER FOR DECLARATION (Dissertation work)

I, the under signed, declared that this is my original work, has never been presented in this or any other University, and that all the resources and materials used for the dissertation, have been fully acknowledged.

Name: _____

Signature: _____

Date: _____

Place: _____

Date of submission: _____

This dissertation has been submitted for examination with my approval as University Supervisor.

Name: _____

Signature: _____

Date: _____