ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

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DEPARTMENT OF NURSING

HEALTH SEEKING BEHAVIOR AND ASSOCIATED FACTORS AMONG ADULT CLIENTS WITH HEART FAILURE AT TIKUR ANBESSA SPECIALIZED HOSPITAL, ADDIS ABABA, ETHIOPIA, 2021.

BY: HELEN AFEWORK (BSc. N)

A REASEARCH THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES, SCHOOL OF NURSING & MIDWIFERY FOR THE PARTIAL FULFILLMENT OF THE DEGREE OF MASTER OF SCIENCE IN CARDIOVASCULAR NURSING

JUNE 2021

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APPROVAL SHEET

ADDS ABABA UNIVERSITY

COLLEGE HEALTH SCIENCE SCHOOL OF ALLIED SCIENCES

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I, the undersigned MSc student, declare that I have submitted my original work on a title health seeking behavior and associated factors among adult clients with heart failure at Tikur Anbessa specialized hospital for the examination.

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This thesis by the title health seeking behavior and associated factors among adult clients with heart failure at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia,2021 is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of Masters in Cardiovascular Nursing.

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STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

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ACRONYMS AND ABBREVIATIONS

AAU	Addis Ababa University
AOR	Adjusted Odds Ratio
CVDs	Cardiovascular Disorder
HF	Heart failure
HIV/AIDS	Human Immune Deficiency Virus/ Acquire Immune Deficiency Syndrome
MOH	Ministry of Health
NCDs	Non-communicable diseases
NIH	National Institutes of Health
NYHA	New York Heart Association
OPD	Outpatient Department
TASH	Tikur Anbessa Specialized Hospital
WHO	World Health Organization

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ABSTRACT

Background: Heart failure is a condition in which the heart cannot pump enough blood to meet the body's needs and it is serious condition that requires medical care. Health seeking behavior is believed to affect the life of people with heart failure. Healthy diet, regular physical activity, and not using tobacco products are the keys to prevention and control of heart failure.

Objective: This study was aimed to assess health seeking behavior and associated factors among adult clients with heart failure in Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia, 2021.

Methods: Health facility based cross sectional study was conducted with consecutive sampling technique. After data collection with structured questionnaire, analysis was done using SPSS version 22 for descriptive and analytical findings. Statistically significant association between the dependent and independent variables were determined using P value of 0.05 with its respective range of confidence intervals.

Result: A total of 422 patients enrolled in the study with a response rate of 98.8 %. The mean age of the study participants was 37.1 (± SD: 12.3) years. Among the study participants 316 (75.8 %) categorized as having good health seeking behavior based on the assessment questions. Participants who were aged ≤ 24 were 0.2 times less likely to seek health care than those who were ≥55 years old (AOR: 0.2 (95% CI; 0.05, 0.42) P Value < 0.001), not educated study participants were 0.2 less likely to have good health seeking behavior compared to those participants with degree and above educational status (AOR: 0.2 [95% CI: 0.04, 0.70] P-value 0.01). as not knowledgeable were 0.4 less likely to have good health seeking behavior compared to the study participants categorized as knowledgeable (AOR: 0.4 [95% CI;0.23, 0.7] P Value < 0.001).

Conclusion and Recommendation: Health seeking behavior among patients with HF in TASH is good. Age, educational status, and knowledge had significant association with health seeking behavior. The hospital administration should establish health education platforms. Follow-up clinics should give more emphasis for clients aged ≤24 years and those who are not educated. The ministry of health and its partners should disseminate information through different channels about heart failure.

Key words: Heart failure, Health seeking behavior.

1. INTRODUCTION

1.1. Background

The Heart Federation showed that in 2015 people with CVDs had shown behavioral risk factors which include unhealthy diet, physical inactivity, tobacco use, and harmful alcohol consumption. These risk factors influenced increase in blood glucose, blood pressure, blood lipids (1,2).

The global burden of disease 2015 report ranked NCDs only second to HIV/AIDS as the commonest cause of morbidity and mortality in Sub Saharan Africa. It is projected that NCDs were leading causes of mortality in the region. There is lack of population-based incidence and prevalence studies in Sub Saharan Africa. The reported hospital prevalence studies indicate that Heart Failure is responsible for 9.4–42.5% of all medical admissions and 25.6–30.0% of admissions into the cardiac units(3).

Heart failure is a condition in which the heart cannot pump enough blood to meet the body's needs. In some cases, the heart cannot fill with enough blood. In other cases, the heart cannot pump blood to the rest of the body with enough force (*National Institutes of Health*). Some people have both problems. The term "heart failure" does not mean that your heart has stopped or is about to stop working. However, heart failure is a serious condition that requires medical care. Doctors usually classify patients' heart failure according to the severity of their symptoms. The most used classification is the New York Heart Association (NYHA) Functional Classification. It places patients in one of four categories based on how much they are limited during physical activity as Class I-II- III- IV.

Health-seeking behavior is an individual’s needs to the promotion of maximum well-being, recovery, and rehabilitation; this could happen with or without health concerns and within range of potential to real health concerns. Health seeking behavior is believed to affect the life of people with heart failure. There is a consensus in both developed and developing countries that providing education and knowledge at the individual level are not sufficient to promote change in behavior. Understanding local perceptions of health needs, the process of health decision-making, and concerns and considerations of locals, are key components in understanding health seeking behavior in any health condition(4).

Health seeking behavior characterizes individuals alarming feeling for controlling and giving attention about their surrounding and its effects on health which may differ across a person and culture. Study with Health seeking behavior of chronic heart failure clients in Ethiopia is not common, but clients with heart failure suffer from different problem due to poor health seeking and poor self-care behavior. This behavior includes like that of missing medication, self-care beliefs, including inability to modifying their diet, more salt-intake, inadequate maintenance of a healthy weight, smoking, and lack of getting regular exercise. Most people have poor knowledge and belief about the seriousness of poor health- seeking behavior for heart failure and the consequence associated with it. Bearing in mind this situation and the lack of study on this area in Ethiopia, it is necessary to assess the overall health seeking behavior and its associated factors among patient chronic heart failure (9).

1.2. Statement of the Problem

Cardiovascular disorders (CVDs) are the major problems among non-communicable diseases (NCD) killing people in the world. World Health Organizations (WHO, 2017), report indicates that CVDs were the leading cause of deaths globally, and it killed 17.9 million people in 2016, which represented 31% of all global deaths (5).

One in five individuals are expected to develop heart failure at some point in their life, in developing countries, and even more people were affected. Infections remain a common cause of heart failure in many parts of the world and can strike at any age. Heart failure is not a disease of the elderly in sub-Saharan Africa, where half of patients hospitalized with the disease are 55years of age or younger. Rheumatic fever due to preventable bacterial infections is a prominent cause of heart failure in Africa, Asia, Australasia, and Latin America (4).

Recently survival rates for patients with heart failure shows improvement with the introduction of modern evidence-based therapies and patient management systems. Nevertheless, about 2–17% of individuals admitted to a hospital with heart failure died while they are in hospital beds. Survival rates are better for those treated in outpatient clinics, who typically have less severe symptoms than those treated in a hospital. However, even the latest therapies may only relieve symptoms many patients, without slowing the progression of their disease or prolonging life (3).

Healthcare-seeking behavior is a complex outcome due to different factors including specific disease or health condition and needs contextual exploration for each health condition. Survival rate of clients with heart failure depends on time whether the patient seeks health care or not on timely basis. Study conducted on factors influencing care seeking delay or avoidance of health care for heart failure found that patient-related factors such as knowledge have been highlighted as key contributors to care-seeking delay (6).

Even if early health care utilization and adherence to effective treatment were perceived to reduce morbidity, disability, and mortality there are numerous factors which affects utilization of health care. (6, 7).

The study with Health seeking behavior of chronic heart failure clients in Ethiopia is not common, but clients with heart failure suffer from different problem due to poor health seeking and poor

self-care behavior. Most people have poor knowledge and belief about the seriousness of heart failure and the consequence associated with it. Take into consideration this situation and the lack of study on the area, it is necessary to assess the overall health seeking behavior and its associated factors among patient with chronic heart failure.

2. LITERATURE REVIEW

2.1. Health Seeking Behavior

Studies on health seeking behavior with focus on similar and unique factors demonstrate the complexity of influences on an individual's behavior. The focus is exclusively on the individual as a purposive and decisive agent. But, there are growing concerns on that factors promoting 'good' health seeking behaviors are argued that the behavior is not rooted solely in the individual, they also have a more dynamic, collective, interactive element (7).

Study findings from Northern Tanzania among patients with cardio vascular disease indicated that majority of participants (186 [77.2%]) reported that they had sought care elsewhere for the same illness episode and after enrollment to the study A total of 208 (86.3%) participants completed a 30 days telephone follow-up, which shows good help or health seeking behavior of the patients(8).

According to the study conducted in Jimma University Hospital among clients with heart failure more than half 195 (58.2%) of the study participants were categorized under poor health seeking behavior and the remaining 140(41.8%) had good health seeking behavior(9). The general prevalence of health care seeking behavior was 58.4% in a study conducted at community level with aim of measuring general populations health seeking behavior in south west Ethiopia(10).

Another study conducted in Southern Ethiopia shows low prevalence of health seeking behavior among study participants from the general population. According to the study prevalence of health seeking behavior was found 14.6% and 85.4% or (362) of study participants had low level of health seeking behavior (11).

2.2. Factors associated with Health Seeking Behavior

The systematic review conducted on 58 studies Heart failure help-seeking was embedded in daily experiences of heart failure, the significant barriers to help-seeking were avoidance-based coping, fear of hospitals and misplaced reluctance to be burdensome. Health-seeking was facilitated by good involvement and frank communication between patients, caregivers and health professionals and the presence of a sense of elevated personal risk (12), Three major themes were identified that impacted decisions to seek or avoid professional care: (I) preference for continuity; (II) previous hospital experience and; (III) patient-provider relationships.

Knowledge

Study conducted in Arab Emirates women indicated that there are only 19.4% study participants who are aware of Heart Disease and Preference for consulting a regular doctor was shown by 50.4% participants(13). Systematic review of heart failure related literacy of patients found that an average of 39% of Heart Failure patients have low health literacy and adequate health literacy is consistently correlated with higher HF knowledge which in turn affects their health seeking behavior(14).

Avoidance of care-seeking was described, despite quantitative data reflecting high levels of self-efficacy, heart failure knowledge (12.3±1.9 out of 15), and above-average health literacy levels (75% adequate – 15% higher than average in heart failure). The qualitative and quantitative data together demonstrate that participants delayed seeking care for heart failure symptoms despite having sound knowledge and self-efficacy to seek professional care when necessary (6).

Age

Elderly people whose age group were between 60-65 were 1.51 times more likely visited health facility during illness than those elders whose age were above 70 year, study conducted in southern Ethiopia shows. (15).

Sex

According to a study conducted in Canada to examine Gender differences in health-seeking behaviors involving over 7000 patients, it is found that significant gender differences exist in health-seeking behaviors between men and women. More women reported visiting their health facilities or physicians for both physical and mental health concerns compared to men considering that having chronic disease like heart failure were the reasons for seeking care(16).

Unlike the above study this avenue of health seeking was more frequently described by male participants in Sierra Leone, West Africa (17).

Educational Status

Study findings from Southern Ethiopia shows statistically significant association between level of education and health seeking behavior. Study participants having no formal education had low heath seeking behavior compared to those having higher education (AOR = 4.5, CI: 1.16,17.8)(11).

Income

Study conducted in Jimma among heart failure clients attending the university hospital indicated that respondents having monthly income of less than 500 ETB were less likely to adhere to good health seeking behavior compared with respondents with greater or equal to 500 ETB (18). Study conducted in Lagos, Nigeria, indicates that health seeking practice and income were found statistically significantly associated. Compared to patients with appropriate health care-seeking behavior, those with inappropriate health care-seeking behavior were more likely to have a monthly income less than N25, 000 ($150) (18).

Distance to Health Facility

Study participants who were travelling short distance (less than or equals to half an hour) to get health service were more likely visited health facility than those who were travelling beyond half an hour, according to the study from southern Ethiopia (15). Study conducted in Jimma University also showed that study subjects who have health facility at a distance of 3 to 5 KM were less likely to have good health seeking behavior compared to respondents at 1 KM (9).

Residence

Study findings indicated that people living in urban areas were more likely to seek health care than people living in rural areas(17). Study findings from South West Ethiopia indicates that about eighty one percent urban households and 48.1% rural households were seeking health care for perceived illness (10).

2.3. Significance of the Study

The study of health seeking behavior and associated factors among clients with heart failure will help to identify and address factors that affect their day-to-day activities to live long with the disease. In addition, it can be an input for other studies in heart failure. The study will try to provide additional input for the factors which were addressed or not in other studies for people with heart failure too.

2.4. Conceptual Framework

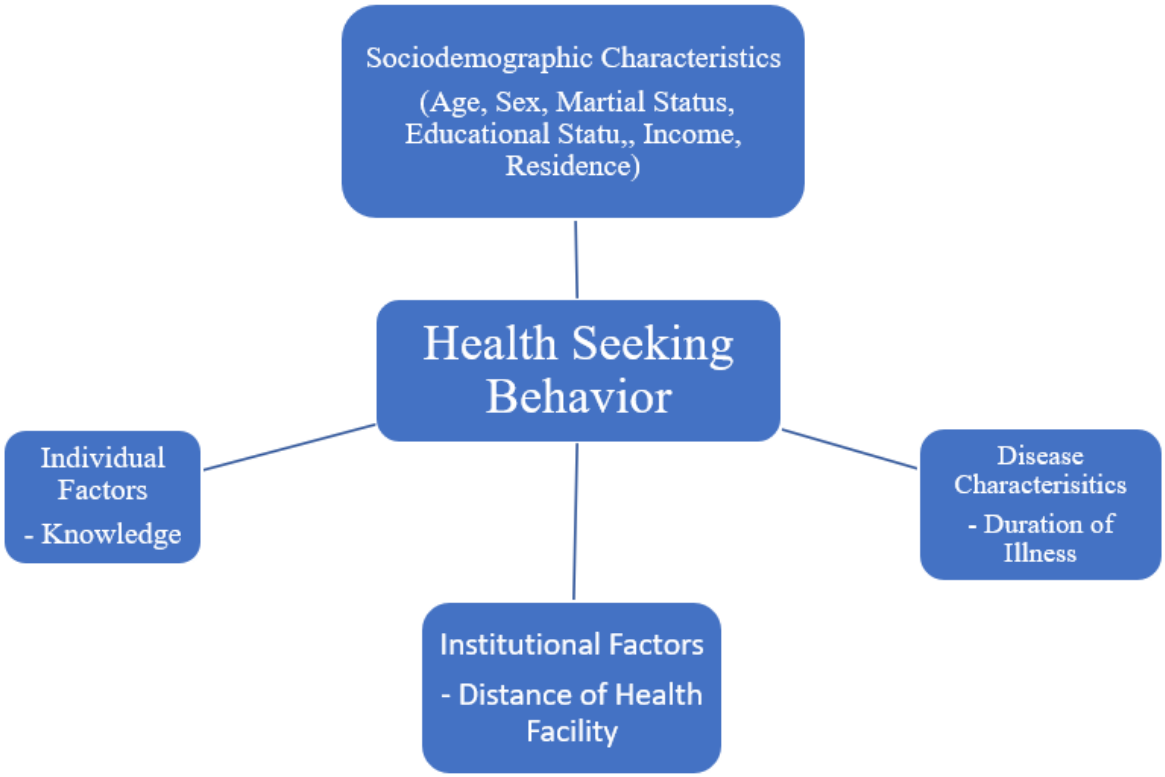

Figure 1: Conceptual Framework for Health Seeking Behavior of adult heart Failure clients in TASH developed using available Literatures (20).

3. OBJECTIVES

3.1. General Objective:

- To assess health seeking behavior and associated factors among adult clients with heart failure at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia, 2020/21

3.2. Specific Objectives:

- To determine health seeking behavior of adult clients with heart failure at Tikur Anbessa Specialized Hospital, Addis Ababa.
- To identify factors associated with health seeking behavior of adult clients with heart failure at Tikur Anbessa Specialized Hospital, Addis Ababa.

4. METHODS

4.1. Description of study area and study period

The study was conducted at Addis Ababa Tikur Anbessa Specialized Hospital from January 16, 2020- Feb 16, 2020, G.C.

Addis Ababa is Capital City of Ethiopia, having 12 sub cities, and head quarter for many international organizations including African Union and United Nations Economic Commission for Africa. It has 3,433,999 people living in the city according to Federal Demographic Republic of Ethiopia Central Statistical Agency 2017 Population Projection of Ethiopia, the city lies at an altitude of 7,546 feet (2,300 meters) and it is home of many governments and private schools, universities, hospitals, and other facilities. The city is referred as Political Capital of Africa.

Tikur Anbessa Specialized Hospital is a teaching hospital organized by AAU and ministry of education. The Hospital serves as tertiary level referral center and have various specialties and subspecialty units, from those one of the specialty unit is cardiac care unit.

4.2. Study Design

A hospital based cross-sectional study was conducted.

4.3. Source Population

All Adults with heart failure attending cardiac unit of Tikur Anbessa Specialized Hospital were the source population.

4.4. Study Population

Randomly selected adults with heart failure attending cardiac unit of Tikur Anbessa Specialized Hospital.

4.5. Eligibility criteria

4.5.1. Inclusion Criteria

Adults with heart failure in Tikur Anbessa Specialized Hospital cardiac follow up unit.

4.5.2. Exclusion criteria

Those clients who were seriously ill or unable to respond during the study period were excluded.

4.6. Sampling Methods

4.6.1. Sample Size Determination

Sample size was determined using single population proportion formula.

❖ The following assumptions were used,

- ✓ The proportion 58.2 %. (p)
- ✓ 95 % confidence level. (z)
- ✓ 5% margin of error. (d)

❖ Using open Epi sample size calculation software

Sample size n = [DEFF*Np(1-p)]/ [$(d^2/Z^2_{1-\alpha/2}$*(N-1) +p*(1-p)]

The calculated Sample size was 384. Adding 10% non-response rate, which was 38, the final sample size became 422.

4.6.2. Sampling procedure

The study uses consecutive sampling techniques. The total numbers of clients who are eligible for this test were estimated. Then, sampling fraction were allocated based on proportionate allocation to their size from TASH, then used sampling frame 422 eligible study participants were selected by using consecutive until the sample size maintain.

4.7. Operational Definitions

- **Poor health seeking behavior:** Clients who scored less than < 50% of the assessment Questions (10,21).
- **Good health seeking behavior:** Clients who scored ≥ 50% and above of the assessment Questions (10,21).
- **Knowledgeable:** Those who scored ≥ 60 % of the knowledge assessment questions (22).

- **Not knowledgeable:** Those who scored < 60 % value of the knowledge assessment questions (22).

4.8. Dependent and independent variables

4.8.1. Dependent variable

- Health seeking behavior.

4.8.2. Independent variables

- Age
- Sex
- Marital status
- Religion
- Knowledge
- Educational status
- Income
- Distance to health facility
- Residence
- Duration of heart disease

4.9. Data collection procedure

The data was collected using a structured interviewer-administered questionnaire. The questionnaire included sociodemographic characteristics, knowledge regarding heart failure and other risk factors for health seeking behavior.

4.10. Data Quality Control

The questionnaire, which was developing in English, and translated to Amharic language and back translated to English by another individual who has the same language ability to ensure its consistency and were pretested after which relevant changes and modifications were made with the input from the pretest. Data collectors were trained on the whole data collection process. Data were edited and cleared before analysis.

4.11. Data management and Data analysis

After data collection, each questionnaire was checked visually for completeness and end coding at the right margin of the questionnaire follow by almost all variables in the questionnaire. The corresponding code number was written carefully at each margin.

The principal investigator entered the data using SPSS 22 and was done with SPSS version 22 statistical software packages for data cleaning and analysis. Computer frequencies and use summary statistics to describe the study population in relation to relevant variables and outlines. Any errors identified at that time was corrected after revision of the original data using the code numbers and statistical commands. Frequencies and measures of variation are used and describe the study population in relation to socio-demographic and other relevant variables. The degree of association between independent and dependent variables was assess using crude odds ratio with 95% confidence interval. Binary logistic regression analysis was performed calculating odds ratio was measured strength of association, 95% CI, and p-values for statistical significance with the determinant factors were assessed.

4.12. Ethical consideration

Prior to data collection, written ethical clearance was obtained from ethical review board of Addis Ababa University to TASH. Then the issue was communicated to departments concerning the objectives, rationale, and expected outcomes of the study for their utmost cooperation. Participants were recruited to the study after a verbal explanation of the objectives of the research and were provided a written information sheet. All potential participants who agree to participate were provided a written consent to continue with the interviews. Confidentiality was maintained for information collected from each study participant by omitting their names and personal identification or privacy. Information obtained from them was not disclosed to a third party.

4.13. Dissemination plan

The findings of this study will be disseminated to Addis Ababa University, MOH, and other interested groups working in NCDs. The finding will also be published in a peer reviewed scientific journal.

5. RESULTS

5.1. Socio-demographic characteristics of the study participants

A total of 422 participants were enrolled in the study with a response rate of 98.8%. The mean age of the study participants was 37.1 (SD: ±12.3) years. Regarding sex composition of the respondents, 247 (59.22%) were females and 40% (169) were single, 153 (36.7%) were married, and the remaining 42 (10.1%) and 53 (12.7%) were divorced and widowed, respectively. There was diverse educational status among the study participants. A quarter of the respondents were employed. Above 90% of the respondents were urban residents (Table 1).

Table 1: Socio demographic Characteristics of Adults with Heart Failure in Addis Ababa, 2021 (N=417)

Characteristics	Category	N (%)
Age Group	≤ 24 Years	90 (21.6)
	25 – 34 Years	107 (25.7)
	35 -44 Years	105 (25.2)
	45- 54 Years	78 (18.7)
	≥ 55 Years	37 (8.9)
Sex	Male	170 (40.8)
	Female	247 (59.2)
Marital Status	Single	169 (40.5)
	Married	153 (36.7)
	Divorced	42 (10.1)
	Widowed	53 (12.7)
Religion	Orthodox	183 (43.9)
	Muslim	117 (28.1)
	Protestant	88 (21.1)
	Catholic	27 (6.5)
	Other	2 (0.5)
Educational Status	Not Educated	35 (8.4)
	Able to Read and Write	71 (17)
	Primary or Secondary	175 (12)
	College Diploma	88 (21)
	Degree and above	48 (11.5)
Employment Status	Employed	325 (77.9)
	Not Employed	92 (22.1)
Monthly Income	< 500 Birr	99 (23.7)
	500 - 999 Birr	111 (26.6)
	1000 - 2999 Birr	143 (34.3)
	≥ 3000 Birr	64 (15.3)
Family Size	≤ 2	101 (24.2)
	3 to 5	263 (63.1)
	≥ 6	53 (12.1)
Distance from Health Facility	< 1 Km	65 (15.6)
	1 to 3 Kms	244(58.5)
	>3 Kms	108 (25.9)
Type of Residence	Urban	395 (94.7)
	Rural	22 (5.3)

5.2. Knowledge of Respondents to Heart Failure

Among the respondents, 168 (40.3 %) were knowledgeable about heart failure. The remaining 249 (59.7 %) of study participants were not knowledgeable or scored less than or equal to the average value of knowledge assessment questions about heart failure. According to the study, the most known sign and symptom of heart failure was Persistent cough followed by shortness of breath and weakness which were mentioned by more than 90% of the respondents.

Study participants mentioned minimum one and maximum four common sign and symptoms of heart failure. The least mentioned sign and symptom was swelling or edema, only 107 (25.7%) of the respondents mentioned it. Nearly 2/3 of the respondents, 290 (69.5%) were aware that heart failure has different stages. From the study participants, 239 (57.3%) agreed that healthy looking person can have heart failure. There was a question which asks whether heart failure is a rare disease or not and 144 (34.5%) of the respondents agreed that it is rare. Only few, 22(5.3%) of the respondents agreed that heart failure treatment is safe for patients. In relation to care given to heart failure patients, 248 (59.5%) of the respondents mentioned avoiding salt in foods [Table 2].

Table 2: Heart Failure related Knowledge of the Study participants in TASH, March 2021, Addis Ababa.

Characteristics	**Category**	**N (%)**
Sign and Symptoms of Heart Failure	Shortness of Breath	383 (91.8)
	Swelling (Edema)	107 (25.7)
	Persistent Cough	382 (92.6)
	Weakness or Fatigue	378 (90.6)
Heart Failure Has stages	Yes	290 (69.5)
	No	127 (30.5)
healthy-looking person can have heart failure	Yes	239 (57.3)
	No	178 (42.7)
Heart Failure is Rare Disease	Yes	144 (34.5)
	No	273 (65.5)
Heart failure Treatment is not Safe	Yes	22 (5.3)
	No	395 (94.7)
Types of Care Undertaken for Heart Failure Patients	Taking Rest	133 (31.9)
	Using Additional Pillow	180 (43.2)
	Limit Exercise	109 (26.1)
	Avoid Salt in foods	248 (59.5)
	Weight Monitoring	12 2.9)

5.3. Clinical Conditions and Related Attributes

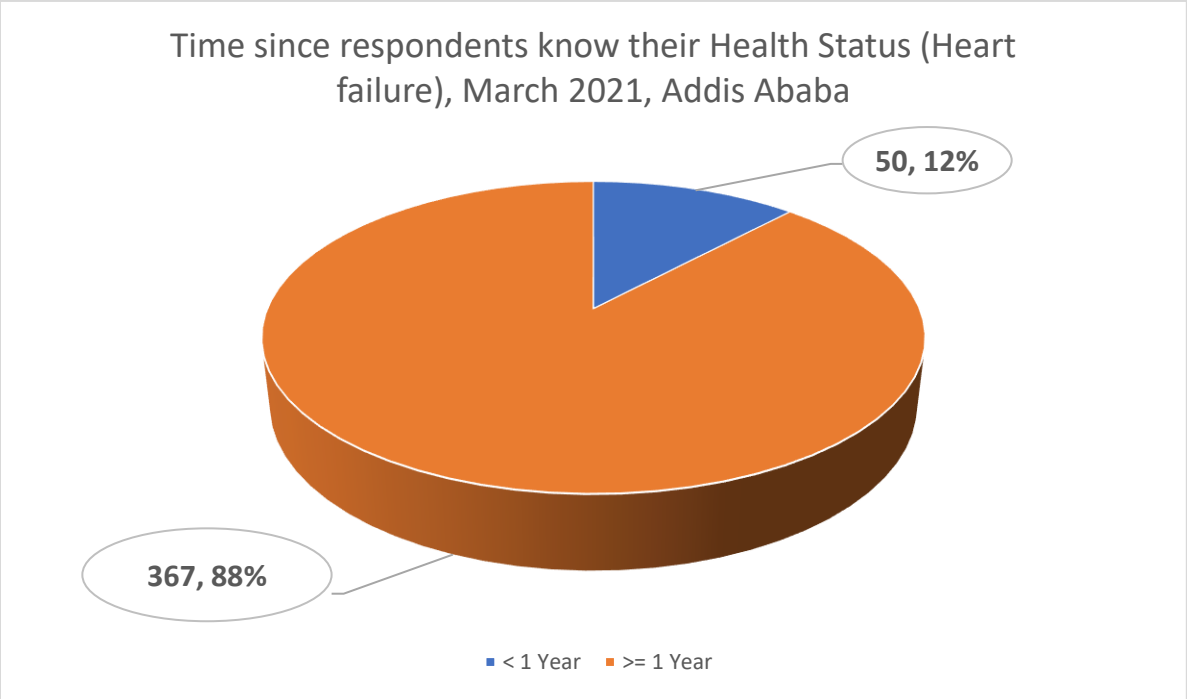

Figure 2: Time Since Study Participants Know their Health Status in Tikur Anbessa Hospital, March 2021, Addis Ababa

Out of the study participants 367 (88%) knows they contracted heart failure more than a year and the remaining knew with in less than a year time from the period of data collection.

There were different medications used to treat heart failure in TASH. According to the response collected ACE inhibitors, Diuretics and Beta Blockers were used by more than 60 % of the study participants in combination or separately. Among the study participants, 292 (70 %) reported additional comorbidity. All the study participants responded that they had very good relationship with health care providers. Most of the participants did not smoke or drink alcohol [Table 3].

Table 3: Clinical Symptoms and related attributes of Heart Failure known by Study Participants in TASH, March 2021, Addis Ababa.

Characteristics	**Category**	**N (%)**
Medications used for Heart Failure	ACE inhibitors	228 (25.2)
	Beta Blockers	204 (22.6)
	Digitalized	126 (13.9)
	Diuretics	208 (23.0)
	Calcium Channel Blockers	57 (6.3)
	Other Medications	81 (9.0)
Comorbidity	Yes	292 (70)
	No	125 (30)
Relationship with Health Care Providers	Yes	417 (100)
Are you Smoking	Yes	43 (10.3)
	No	374 (89.7)
Drink Alcohol	Yes	65 (15.6)
	No	352 (84.4)

5.4. Health Care seeking behavior of respondents.

Among the study participants, 316 (75.8 %) were categorized as having good health seeking behavior based on the summarized score of health seeking behavior assessment questions. The remaining 101 (24.2%) respondents scored less than the mean score of health seeking assessment questions and labelled as having poor health seeking behavior.

According to the study findings only 160 (38.4%) of the respondents tried to treat their illness by different mechanisms. The study finding clearly indicated that there is delay between onset of illness and finding care and treatment. From the study participants 113 (27.1%) were presented to care and treatment facilities after delay of more than seven days, 97 (23.3%) presented themselves within three to seven days.

When the respondents present themselves to health facilities, 251 (60.2%) were showing sever symptoms or were very ill and the remaining 166 (39.8%) had mild symptoms. Almost all participants, 416 (99.8%) had a regular follow-up in the hospital. From their respective follow ups, 69 (16.5%) of the respondents missed or ignored their recent follow ups due to different reasons.

Table 4: Health Care Seeking Behavior Related Assessment at TASH, March 2021, Addis Ababa.

Characteristics	**Category**	**N (%)**
Attempted to treat your illness	Yes	160 (38.4)
	No	257 (61.6)
Days Passed Between Onset of illness and Treatment	Same day	34 (8.2)
	Next day	106 (25.4)
	Two Days Later	67 (16.1)
	Three to 7 Days	97 (23.3)
	More than 7 Days	113 (27.1)
Do you have regular Follow-up	Yes	416 (99.8)
	No	1 (0.2)
Missed or Ignored Clinical Visits	Yes	69 (16.5)
	No	348 (83.5)
Stage of illness when visited Health Facility	Mild	166 (39.8)
	Sever	251 (60.2)
Traditional Healers Treat Heart Failure	Yes	1 (0.2)
	No	416 (99.8)

5.5. Factors Associated with Health Care Seeking Behavior of Patients with Heart Failure

The study findings from the present study tries to explore the relationship between health care seeking behavior with sociodemographic characteristics of study participants. Age Sex, Marital status, educational status, monthly income, family size, distance between home and health facility and Knowledge of the respondents were assessed for any significant association. When computing different independent variables in binary logistic regression the variables which show statistically significant association with health seeking behavior were age of the respondents, educational status, and knowledge.

Both who were aged ≤24 years and those who were not educated were 80% less likely to have good health seeking behavior than those who were ≥55 years old (AOR: 0.2 (95% CI; 0.05, 0.42) P Value < 0.001) and those who had degree and above educational status (AOR: 0.2 [95% CI: 0.04, 0.70] P-value 0.01). Those who were not knowledgeable were 60% less likely to have good health seeking behavior compared to the study participants categorized as knowledgeable (AOR: 0.4 [95% CI;0.23, 0.7] P Value < 0.001) [Table 5].

The Study participants whose age is less than or equal to 24 years were 0.2 less likely (AOR: 0.2 (95% CI; 0.05, 0.42) P Value < 0.001) to have good health seeking behavior compared to study participants with age of 55 and above. Similarly, not educated study participants were 0.2 less likely to have good health seeking behavior compared to those participants with degree and above educational status (AOR: 0.2 [95% CI: 0.04, 0.70] P-value 0.01).

Knowledge of the study participants regarding heart failure has also shown statistically significant association in the present study. Those individuals who were categorized as not knowledgeable were 0.4 less likely to have good health seeking behavior compared to the study participants categorized as knowledgeable (AOR: 0.4 [95% CI;0.23, 0.7] P Value < 0.001). [Table 5].

Table 5: Factors associated with Health Seeking Behavior among Patients with Heart Failure, TASH, March 2021, Addis Ababa.

Characteristics	Categories	Health Seeking Behavior		COR (95% CI)	AOR (95% CI)	P Value
		Good n=316	Poor n=101			
Age Group	≤ 24 Years	48	42	0.18 (0.06, 0.5)	0.2 (0.05, 0.42) **	< 0.001
	25 – 34 Years	83	24	0.5(0.2, 1.5)	0.5 (0.20, 1.31)	0.15
	35 -44 Years	86	19	0.71(0.24, 2.1)	0.7 (0.23, 2.00)	0.50
	45- 54 Years	67	11	0.95(0.3, 3.0)	0.9 (0.30, 3.00)	0.79
	≥ 55 Years	32	5	1	1	1
Sex	Male	131	39	1.13 (0.7, 1.8)	1.1 (0.70, 1.90)	0.63
	Female	185	62	1	1	1
Marital Status	Single	112	57	0.40 (0.2, 0.9)	1.3 (0.42, 4.14)	0.63
	Married	124	29	0.90 (0.4, 2.0)	1.1 (0.44, 2.90)	0.79
	Divorced	36	6	1.2 (0.4, 3.8)	1.4 (0.43, 4.80)	0.55
	Widowed	44	9	1	1	1
Educational Status	Not Educated	25	10	0.23 (0.07, 0.8)	0.2 (0.04, 0.70) **	0.01
	Able to Read and Write	55	16	0.30 (0.1, 1.0)	0.3 (0.09, 1.02)	0.06
	Primary or Secondary	128	47	0.25 (0.1, 0.7)	0.4 (0.12, 1.17)	0.09
	College Diploma	64	24	0.24 (0.1, 0.8)	0.3 (0.10, 1.03)	0.06
	Degree and above	44	4	1	1	1
Monthly Income	< 500 Birr	74	25	0.5 (0.2, 1.1)	1.5 (0.40, 5.40)	0.58
	500 - 999 Birr	84	27	0.5 (0.2, 1.1)	1.4 (0.41, 5.00)	0.56
	1000 - 2999 Birr	103	40	0.4 (0.2, 0.9)	0.9 (0.30, 2.62)	0.81
	>= 3000 Birr	55	9	1	1	1
Family Size	< = 2	79	22	0.8 (0.4, 1.9)	0.9 (0.40, 2.30)	0.89
	3 to 5	194	69	0.7 (0.3, 1.4)	0.6 (0.30, 1.33)	0.22
	>= 6	43	10	1	1	1
Distance from Health Facility	< 1 Km	47	18	0.8 (0.4, 1.7)	0.8 (0.40, 1.80)	0.63
	1 to 3 Kms	187	57	1 (0.6, 1.8)	1.2 (0.70, 2.20)	0.48
	>3 Kms	82	26	1	1	1
Knowledge	Not Knowledgeable	141	27	0.5 (0.3, 0.7)	0.4 (0.23, 0.70) **	< 0.001
	Knowledgeable	175	74	1	1	1

**Statistically Significant Association or p-value < 0.05

6. DISCUSSION

A cross-sectional study was conducted to assess health seeking behavior and associated factors among adult clients with heart failure at TASH. The findings of this study clearly showed that among the study participants, 316 (75.8 %) were categorized as having good health seeking behavior based on the summarized score of health seeking behavior assessment questions. The remaining 101 (24.2%) respondents scored less than the mean score of health seeking assessment questions and labelled as having poor health seeking behavior.

Compared to findings from a Cross sectional study conducted in Jimma University hospital among chronic adult heart failure clients, the present finding showed 17.6% higher number of clients who were categorized as having good health seeking behavior (18). The possible reasons for discrepancy of findings may be that of geographic location difference, disparities between information access due to urbanization as the study participants in Addis Ababa were expected to be more exposed to different types of information's regarding heart failure. Educational status difference of participants may also create the difference, more than two third of the study participants were illiterate in the study conducted in Jimma and only less than 10% were illiterate in our study. Another cross-sectional study conducted in northern Tanzania among patients with cardiovascular disease shows that more than 80% of the study participants were having good health seeking behavior. In addition, there is some what difference between study participants characteristics. The present study used all heart failure clients but, the study conducted in Jimma used patients who were chronically ill.

The present study revealed that knowledge level of the study participants regarding heart failure was poor. Only 168 (40.3 %) of the study participants scored of ($\geq$ 50%) value of the knowledge assessment questions. The remaining 249 (59.7 %) of study participants labelled as poor and scored (< 50%) value of knowledge assessment questions. This finding is comparable with the finding in Northwest Ethiopia and Iran, cross sectional study conducted among patients with heart failure, in which 291(72.2%) and 112 (27.8%) had poor and good knowledge of heart failure, respectively. The study conducted in Iran also showed that 60% of the clients with heart failure were having poor knowledge about the disease. These studies were comparable may be due to the study settings similarity, in which all the studies were conducted in teaching hospitals, and similarity of study design (23,24).

According to our study findings the most frequently mentioned sign and symptoms of heart failure were persistent cough and shortness of breath in the present study. The study conducted in Jimma University Hospital also showed that shortness of breath is one of the topmost frequently mentioned symptom of heart failure. This similarity may happen due to the disease characteristics similarity (18).

Regarding different factors associated with health seeking behavior age of the participants shows a statistically significant association in the present study. Study participants whose age is less than or equal to 24 years were 80% more likely to have poor health seeking behavior compared to study participants with age is 55 and above (AOR: 0.2 (95% CI; 0.05, 0.42) P Value < 0.001). Unlike the present study findings, the study conducted in Jimma University Hospital did not show any statistical association between age and health seeking behavior. The discrepancy can be justified due to high number of old age people in the study conducted in Jimma compared to the present study conducted in TASH. Less than 10% of the study participants were above the age of 50 in the present study but, 44% were above the age of 50 in the study conducted in Jimma (18).

In the present study educational status has also shown statistically significant association with health seeking behavior of the study participants. Study participants who were not educated were 80% more likely to have poor health seeking behavior compared to those participants with degree and above educational status (AOR: 0.2 [95% CI: 0.04, 0.70] P-value 0.01). The study finding is consistent with the result in Southern Ethiopia in which study participants having no formal education had low heath seeking behavior compared to those having higher education. The reason behind having comparable findings is that education has good potential to motivate people to have a positive behavior change in their day-to-day life. Being literate will help patients to understand how the disease and its consequence were complex in their activities than that of the illiterate once (11). Met analysis of 23 different studies related with health seeking behavior also indicated that educational status is one of the key factors which contributes to treatment delay, one of the key questions used to access health seeking behavior in the present study, among individuals with heart failure (25).

The findings of this study indicate that knowledge of the study participants regarding heart failure were associated with their health seeking behavior. Individuals who were categorized as not

knowledgeable were 60% more likely to have poor health seeking behavior compared to the study participants categorized as knowledgeable (AOR: 0.4 [95% CI;0.23, 0.7] P Value < 0.001). The result is consistent with the study conducted in Jimma University Hospital which showed, those who were knowledgeable about heart failure were 2 times more likely to have good health seeking behavior when compare with individuals reported as not knowledgeable [AOR:0.5 (95%CI 0.36,0.94) P-value 0.026]. Findings from the metanalysis of 23 studies also argued that lack of knowledge were one of the key predictors for having delayed care which is an indicator for poor health seeking behavior (18,25). It is argued that having satisfactory knowledge regarding the sign and symptoms, prevention and control mechanisms, and treatment methods of heart failure has a reinforcing potential for patients with heart failure to seek treatment on time and in appropriate care providing health facilities.

7. LIMITATIONS OF THE STUDY

- This study tries to access the health seeking behavior of clients in the cardiac unit which makes it difficult to generalize the finding to other group of population.
- The likelihood of giving socially acceptable answers by the respondents was possible.

8. CONCLUSION AND RECOMMENDATION

8.1. Conclusion

The findings of this study revealed that the overall Health seeking behavior among adult patients with Heart Failure in TASH is encouraging. Because three fourth (75.8%) of the study participants were categorized as having good health seeking behavior. But responses vary from question to question, and very low scores were seen for specific assessment questions like treatment delay, only less than 30% of the respondents seek treatment on the same or next day of their illnesses.

The Binary logistic regression analysis showed that age and educational status of the respondents had statistically significant association with health seeking behavior. Study participants knowledge about heart failure had also showed statistically significant association with their health seeking behavior.

8.2. Recommendation

The following recommendations are forwarded to:

Hospital management and care givers (Nurse, GP, and senior physicians)

- Establish client health education plat form in the follow-up session and included in the daily outpatient program.
- Care givers especially nurses in the cardiac unit needs to give health education in daily base follow-up clinic for clients.
- Care givers should give more emphasis for clients who are aged ≤24 years and those who are not educated during their follow up visits by providing intensive information regarding heart failure.

Programmers (MOH, Development partners)

- Need to disseminate an information through multimedia platform like social media, mass media (TV & Radio) about heart failure and the advantages of early health care seeking.

9. REFERENCES

1. Aragaw S, Tesfahune E, Derseh B, Mamo B. Determinants of Selected Cardiovascular Diseases among Adult Patients at Cardiac Clinic of Debre Berhan Referral Hospital, Ethiopia: Unmatched Case-Control Study. Cardiovasc Ther. 2020 May 27;2020:1–8.

2. Ogah OS, Adebiyi A, Sliwa K. Heart Failure in Sub-Saharan Africa. Top Heart Fail Manag [Internet]. 2019 May 20 [cited 2020 Oct 22]; Available from: https://www.intechopen.com/books/topics-in-heart-failure-management/heart-failure-in-sub-saharan-africa

3. Ponikowski P, Anker SD, AlHabib KF, Cowie MR, Force TL, Hu S, et al. Heart failure: preventing disease and death worldwide: Addressing heart failure. ESC Heart Fail. 2014 Sep;1(1):4–25.

4. Poortaghi S, Raiesifar A, Bozorgzad P, EJ Golzari S, Parvizy S, Rafii F. Evolutionary concept analysis of health seeking behavior in nursing: A systematic review. BMC Health Serv Res. 2015 Jun 1;15.

5. WHO W. Cardiovascular Disease - Fact Sheet [Internet]. WHO; 2017 [cited 2020 Oct 24]. Available from: www.who.int

6. Ivynian SE, Ferguson C, Newton PJ, DiGiacomo M. Factors influencing care-seeking delay or avoidance of heart failure management: A mixed-methods study. Int J Nurs Stud. 2020 Aug 1; 108:103603.

7. Sara MacKian. A review of health seeking behaviour: problems and prospects. University of Manchester; Available from https://assets.publishing.service.gov.uk/media/57a08d1de5274a27b200163d/05-03_health_seeking_behaviour.pdf, 2003,

8. Hertz JT, Sakita FM, Kweka GL, Loring Z, Thielman NM, Temu G, et al. Healthcare-seeking behaviour, barriers to care and predictors of symptom improvement among patients with cardiovascular disease in northern Tanzania. Int Health [Internet]. [cited 2020 Oct 31];

Available from: https://academic.oup.com/inthealth/advance-article/doi/10.1093/inthealth/ihz095/5675486

9. Fetensa G. Health Seeking Behavior and Associated Factors among Chronic Heart Failure Adult Clients, Jimma University Specialized Hospital, South West Ethiopia. 2018 Sep 18;

10. Begashaw B, Tessema F, Gesesew HA. Health Care Seeking Behavior in Southwest Ethiopia. PLOS ONE. 2016 Sep 14;11(9):e0161014.

11. Asfaw L, Ayanto S, Habtu Y. Health-seeking behavior and associated factors among community in Southern Ethiopia: Community based cross-sectional study guided by Health belief model. 2018.

12. Clark AM, Savard LA, Spaling MA, Heath S, Duncan AS, Spiers JA. Understanding help-seeking decisions in people with heart failure: A qualitative systematic review. Int J Nurs Stud. 2012 Dec 1;49(12):1582–97.

13. Khan S, Ali SA. Exploratory study into awareness of heart disease and health care seeking behavior among Emirati women (UAE) - Cross sectional descriptive study. BMC Womens Health. 2017 Sep 26;17(1):88.

14. Cajita MI, Cajita TR, Han HR. Health literacy and heart failure a systematic review. J Cardiovasc Nurs. 2016;31(2):121–30.

15. Falaha T, Worku A, Meskele M, Facha W. Health Care Seeking Behaviour of Elderly People in Rural Part of Wolaita Zone, Southern Ethiopia. Health Sci J [Internet]. 2016 Jun 7 [cited 2020 Oct 24];10(4). Available from: https://www.hsj.gr/abstract/health-care-seeking-behaviour-of-elderly-people-in-rural-part-of-wolaita-zone-southern-ethiopia-9882.html

16. Thompson AE, Anisimowicz Y, Miedema B, Hogg W, Wodchis WP, Aubrey-Bassler K. The influence of gender and other patient characteristics on health care-seeking behaviour: a QUALICOPC study. BMC Fam Pract [Internet]. 2016 Mar 31 [cited 2020 Oct 31];17. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4815064/

17. Idriss A, Diaconu K, Zou G, Senesi RG, Wurie H, Witter S. Rural–urban health-seeking behaviours for non-communicable diseases in Sierra Leone. BMJ Glob Health. 2020 Feb 1;5(2):e002024.

18. Fetensa G. Health Seeking Behavior and Associated Factors among Chronic Heart Failure Adult Clients, Jimma University Specialized Hospital, South West Ethiopia. 2018 Sep 18;

19. Bello B, Amira C, Raji Y, Udoh O. Health care-seeking behavior among patients with chronic kidney disease: A cross-sectional study of patients presenting at a single teaching hospital in Lagos. J Clin Sci. 2015;12(2):103.

20. Begashaw B, Tesfaye T. Healthcare Utilization among Urban and Rural Households in Esera District: Comparative Cross-sectional Study. Am J Public Health Res. 2016 Feb 29;4(2):56–61.

21. Pieteraerens W. Previous healthcare experiences are important in explaining the care-seeking behaviour in heart failure patients. Evid Based Nurs [Internet]. 2020 Aug 12 [cited 2021 Jul 3]; Available from: https://ebn.bmj.com/content/early/2020/08/12/ebnurs-2020-103306

22. Hailu Gebru T, Hagos Mekonen H, Gemechu Kiros K. Knowledge about self-care and associated factors among heart-failure patients in Ayder Referral Hospital, Ethiopia, 2018: A cross-sectional study. Proc Singap Healthc. 2020 Oct 5;2010105820962141.

23. Yazew KG, Beshah DT, Salih MH, Zeleke TA. Factors Associated with Depression among Heart Failure Patients at Cardiac Follow-Up Clinics in Northwest Ethiopia, 2017: A Cross-Sectional Study. Psychiatry J. 2019 Jul 21;2019:e6892623.

24. Nomali M, Alipasandi K, Mohammadrezaei R. Knowledge regarding Heart Failure: A Reflection on Current Disease Knowledge State among Iranian Patients with Heart Failure. :4.

25. Banharak S, Prasankok C, Lach HW. Factors Related to a Delay in Seeking Treatment for Acute Myocardial Infarction in Older Adults: An Integrative Review. Pac Rim Int J Nurs Res. 2020 Sep 16;24(4):553–68.

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10. APPENDIX

Annex I: Participant information sheet

Title of the Research: Assessment of health seeking behavior and associated factors among adult clients with heart failure at Tikur Anbessa specialized hospital, Addis Ababa,2020/21

Name of Investigator: Helen Afework, B.Sc.

Name of the Organization: Addis Ababa University, College of Health Science, School of Nursing and Midwifery, Department of cardiovascular nursing

Name of the Sponsor: Addis Ababa University

Purpose of the Research Project: Assessment of health seeking behavior and associated factors among adult clients with heart failure at Tikur Anbessa specialized hospital, Addis Ababa,2020/21

Procedure: The procedure of data collection is easy and straightforward; data concerning your socio demographic characteristics Institutional factors knowledge towards patient care after cardiac catheterization will be collected using standardized self-administered questionnaire.

Risk and /or Discomfort: The name or any other identifying information will not be recorded on the questionnaire and all information taken will be kept strictly confidential and in a safe place. The information retrieved will only be used for the study purpose.

Benefits: The research has no direct benefit for those who will participate in this study. The information obtained from this study may be useful to the body of nursing to increase understanding in post cardiac catheterization nursing care.

Confidentiality: To reassure confidentiality the data on the chart will be collected without the name of the participant and the information collected will be kept confidential and will be stored in a file cabinet. In addition, it will not be revealed to anyone except the investigator and it will be kept in a key and locked system with computer password.40

Person to contact: This research project will be reviewed and approved by the institutional review board of school of nursing and midwifery, college of health sciences, Addis Ababa University. If you have any question you can contact any of the following individuals

(Investigator and Advisors) and you may ask at any the time you want.

Mr. Berhanu Wordofa, MSc, Assistant Professor: Addis Ababa University, College of Health Sciences, School of Nursing and Midwifer)

Sr. Nete Towfik BSc, MSc, lecturer: Addis Ababa University, College of Health Sciences, School of Nursing and Midwifer)

Helen Afework, B.Sc.: Addis Ababa University, College of Health Sciences, School of

Nursing and Midwifery

Cell phone: +251931668201, E-mail: heluka25@gmail.com

Annex II consent Form

Hello, my name is _____ I am helping Helen Afework as a data collector for her carrier in MSc program in Addis Ababa University College of Health Sciences, School of Nursing and Midwifery, Department of Nursing.

The purpose of this research to assess the health seeking behavior and associated factors among adult clients with heart failure at Tikur Anbessa specialized hospital, Addis Ababa.

If you are willing to participate in this project, you need to understand and give verbal consent form. Then you were asked the question by the data collector. We will not ask you a personal question. This is not any risk/anticipated harm which will happen to you.

By your participation, you may not get the direct benefit/incentive, but you can improve yours and others health by these research findings. Privacy and confidentiality were ensured as no form of identifier were in the questionnaire. The information you provide for the interview were used for the purpose of the study and scientific purposes and results may be published.

The result of the study was reviewed by Addis Ababa University College of Health Sciences, School of Nursing and Midwifery, Department of Nursing.

Thank you for your cooperation.

Respondent agrees to be interviewed. ☐

Respondent does not agree to be interviewed. ☐

*Date of interview*_____ *Month* _____*Year*

Name of data collector _____*Signature*

Annex III. Questionnaire

SECTION A

SOCIO-DEMOGRAPHIC DATA

NO	Question	Choices
101	Age in a year?	
102	Sex	1. Male 2. Female
103	Marital Status?	1. Single 3. Divorced 2. Married 4. Widowed
104	Religion?	1. Orthodox 3. Protestant 2. Muslim 4. Catholic 5. Others
105	Educational status?	1. Not-educated(illiterate) 2. Able to write and read. 3. Primary or secondary 4. College diploma 5. Degree and above
106	What is your Occupational status?	1. Employed 2. Not employed
107.	What is your average monthly income?	1. < 500 2. 500-999 3. 1000-2999 4. ≥ 3000
108	Residence	1. Urban 2. Rural
109	Family size	1. ≤ 2 2. 3-5 3. ≥ 6
110	Distance from health facility?	1. ≤ 1 km 2. 1KM up to 3 KMS 3. > 3 KMS

112	Sign and symptoms	1. Shortness of breathing 2. Swelling or edema 3. Persistent cough 4. Weakness or fatigue
113	Is the heart failure has stages?	1.Yes 2. No
114	Is healthy looking?	
115	What are Impetrate care undertaken?	
116	Relationship with care professionals	
117	Time taken to reach place of treatment in minutes.	

SECTION B: KNOWLEDGE ABOUT HEART FAILURE

NO.	Question	Choices
201.	Sign and symptoms	1. Shortness of breathing 2. Swelling or edema 3. Persistent cough 4. Weakness or fatigue
202.	Is the heart failure has stages?	1.Yes 2. No
203.	Do you believe healthy looking person can have heart failure?	1.Yes 2. No
204.	Do you believe heart failure rare disease?	1.Yes 2. No
205.	Is heart failure treatment safe?	1.Yes 2. No
206.	Types of care undertaken for heart failure	1. Taking rest 2. Using additional pillow 3. Limit exercise 4. Avoid salt in food 5. Weight monitoring
207.	Medication used for heart failure	1. ACE inhibitor 2. Beta-blocker 3. Digitalized 4. Diuretics 5. Calcium channel blockers 6. Other medications

SECTION C

HEART FAILURE AWARNESS

NO.	Question	Choices
301.	Do you have any co-morbidity?	1. Yes 2. No
302.	Do you have a good relationship with health care providers?	1. Yes 2. No
303.	Do you smoke cigarette?	1. Yes 2. No
304.	Do you drink alcohol?	1. Yes 2. No

SECTION: D

HEALTH SEEKING BEHAVIOUR STATUS

	Question	Response
401	Do you have attempted to treat your illness?	1. Yes 2. No
402	How many days after the onset of disease symptoms did you get care?	1. The same day 2. The next day 3. Two days later 4. 3-7 days 5. More than seven days
403	. At what stage of your disease have you gone to a provider?	1. Symptoms were mild. 2. In sever stage of disease
405	Have you ever had experience of care reception from the health care Institutions	1. Yes 2. No
406.	Do you have a regular follow up in the health facility?	1. Yes 2. No
407.	Have you ever missed or ignored your follow up?	1. Yes 2. No
409.	Do you believe traditional healers treat cardiac failure	1. Yes 2. No