CARE SEEKING EXPERIENCE OF HEMODIALYSIS PATIENTS IN RENAL MEDICAL DEPARTMENT OF THINGANGYUN GENERAL HOSPITAL

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M.B., B.S

Dip. Med. Sc. (Hospital Administration)

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Thesis submitted to
the Postgraduate Academic Board of Studies
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Chief Examiner

Examiner (1) **Examiner (2)**

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ABSTRACT

In the 21st century the pattern of disease burden has markedly shifted towards chronic diseases. Among them, Chronic Kidney Disease is important and contributes to the End-Stage Renal Disease and Cardiovascular disease. A cross-sectional hospital-based study using descriptive method was conducted to describe care seeking experience of hemodialysis patients in renal medical department of Thingangyun General Hospital during August to November, 2019. Data collection was done through face-to-face interviews of 128 caregivers of hemodialysis patients by using structured questionnaire. In this study, ages of hemodialysis patients were between 18 to 86 years, mean age (SD) was 50 (13.5) years. The most common age group of 40-59 years (51.6%), and more than half of the participants were female (55.5%). Most of the study participants were married (70%). About half of the respondents had middle school level of education (46.1%) and only 25% were graduates. Majority of the respondents (71.8%) were dependent at the time of study. Of the respondents, 85% earned below minimum wage of 4,800 Kyats per day. Most of the breadwinners of family were spouse (28.9%), son/daughter (30.5%). There were experiencing with majority of respondents (92.2%) financial problems. Most of the respondents had comorbid diseases such as hypertension (85.93%), diabetes mellitus (26.56%) and cardiovascular diseases **(**16.4%). All patients were prescribed to do hemodialysis at least twice per week, however 8.6% could do once per week. The cost one hemodialysis treatment was different from that of private and charity hospitals. They responded their experience on overall quality of dialysis care as excellent (6.2%), good (88.3%) and fair (5.5%). In conclusion, in spite of being the hemodialysis treatment pleased with the care, they had financial hardship. Therefore, policy makers should allocate more resources to hemodialysis center in turn to reduce the socioeconomic burden of hemodialysis patients.

Key words: Care Seeking Experience, Hemodialysis Patients, Socioeconomic Burden, Quality of Care

CONTENTS

LIST OF ABBREVIATION

AIDS	Acquired Immune Deficiency Syndrome
CHOICE	Choice for Healthy Outcomes in Caring for End Stage Renal Disease
CKD	Chronic Kidney Disease
ESRD	End Stage Renal Disease
GFR	Glomerular Filtration Rate
HD	Hemodialysis
HIV	Human Immunodeficiency Virus
MGH	Mandalay General Hospital
NOGTH	North Okkala General and Teaching Hospital
OPD	Out-patient department
PEC	Patient Experience of Care
PCP	Primary Care Physician
RRT	Renal Replacement Therapy
TGH	Thingangyun General Hospital
UPH-IRB	Institutional Review Board of University of Public Health
WHO	World Health Organization
YGH	Yangon General Hospital
YSH	Yangon Specialty Hospital

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CHAPTER (1)
INTRODUCTION

1.1 Background Information

The mode of disease burden in the 21st century has markedly shifted towards chronic diseases. Among them, chronic kidney disease (CKD) is significant and contributes to the cardiovascular disease (CVD) and end-stage renal disease (ESRD) (Nugent, Fathima and Feigl, 2011). CKD is a worldwide health problem. CKD causes damage to the kidneys and gets worse over time and may lead to kidney failure. Treatment options are dialysis or a renal transplant. Unfortunately, many patients with chronic kidney disease, Stage 4 or Stage 5 will progress to ESRD and dialysis or renal transplant is essential (American Kidney Fund, 2019).

Renal replacement therapy (RRT) include peritoneal dialysis, in-center (clinic) hemodialysis, home dialysis, and renal transplantation. Modern dialysis is an expensive and inadequate treatment, and most uremic toxins are removed by the dialyzers. The increasing trends in ESKD prevalence and projections demand more dialysis and kidney transplantation services so that the disease's growing burden of the world will be met. Patients with ESKD are living longer. But, in reality only in a few countries provide demand for transplantation, so the numbers of patients requiring dialysis and transplantation will continue to rise (Robinson et al., 2016).

Kidney disease has been regarded as the most neglected chronic disease. The consequences of kidney diseases have implications for public health policy in all countries. Increasing economic and health disparities, demographic transition, unsafe working conditions and natural disasters and pollution may disturb attempts to reduce the morbidity and mortality from kidney disease. A multisector approach is needed to handle the global burden of kidney disease (Luyckx and Stanifer, 2018).

Patient experience of care (PEC) is defined as patients' perceptions of interactions they have met with the health care system, including care from providers and facilities. In the United States, there has been a shift towards standardized surveillance of PEC amongst dialysis patients in order to: (1) set an expectation for the importance of PEC (2) standardize the components of patients' experience to minimize

potential “blind spots” (3) provide a direct “voice” to the patient when describing perceptions of their care (4) facilitate comparisons of quality across facilities and (5) broaden accountability for PEC to the entire multidisciplinary dialysis care team. “Patient experience of care” (PEC) is essential for the quality of treatment of in-center hemodialysis patients (Rhee et al., 2017).

The management of renal failure is very high cost-demanding in comparison with other medical conditions and constitutes a heavy burden on communities worldwide. Renal replacement therapy (RRT) consumes many resources, the equipment and consumables are expensive and skilled personnel are required. Burning health issues like high maternal and infant mortality, HIV/AIDS and undernutrition, hemodialysis becomes a serious economic burden on the healthcare sector (Halle et al., 2017). Hemodialysis treatment is a procedure that needs specific resources especially financing. It has a great burden on patients, caregivers, and healthcare system. Chronic conditions cause major economic hardship to patients. Economic hardship is exacerbated by insufficiency of government support and health services (Walker et al., 2017).

Globally 10% of the population are in danger of chronic kidney disease (CKD), as a result it becomes one of the most prevalent chronic diseases. Several studies have highlighted that CKD have a prominent impact on patients (Alshammari et al., 2019). Diseases of the kidney and urinary tract increase the global burden of diseases, according to the World Health Report 2002 and Global Burden of Disease (GBD) project. The GBD 2015 estimated in 2015, 1.2 million people died from kidney failure, an increase of 32% since 2005. In 2010, an estimated 2.3–7.1 million people with end-stage kidney disease died without receiving to chronic dialysis. There were approximately 58 million deaths worldwide, 35 million developed according to the World Health Organization. With early diagnosis and treatment, it's possible to reduce the progression of kidney disease (National Kidney Foundation, 2015).

Chronic kidney disease becomes greatly prevalent in developing countries. Rapid increase in risk of diabetes, hypertension, and obesity will result in greater burden of chronic kidney disease in the future. It may have substantial socioeconomic and public health consequences in resource-poor countries (Zhang et al., 2010). Asia is the most heterogeneous continent in the world. Patients with end-stage renal disease is increasing rapidly in Asia (Prasad, 2015). The overall prevalence of CKD among Indian adults was 10.2% (Hasan et al., 2018).

Globally, millions of people die from chronic kidney disease (CKD) each year because they do not have access to affordable treatment. Worldwide over 2 million people are receiving treatment with dialysis or a kidney transplant to stay alive. Yet this number may only represent 10% of people actually requiring treatment to live. Of the 2 million people receiving treatment for kidney failure, only 20% are from developing countries. In middle-income countries, treatment with dialysis or kidney transplantation creates a great financial burden for those who need it. Many people cannot afford treatment at all, and over 1 million results annually from untreated kidney failure (National Kidney Foundation, 2015).

Even in well-developed health systems, quality remains a serious concern, with differences in standards of health-care delivery within and between health-care systems. Particularly in developing countries which need to optimize resource use, the process of improvement and scaling up needs good strategies so that the best possible results can be achieved (Bengoa, 2006). Dimension Quality of care consists of technical competency, access to services, continuity of care, safety, interpersonal relationship, amenities, efficiency and effectiveness of care.

1.2 Problem Statement

In Myanmar, problems in diagnosis and management of Chronic Kidney Disease are numerous. Because of there is no proper registry for CKD cases in Myanmar, it is not easy to assess the true extent of the complications. The estimated cases of End Stage Renal Disease (ESRD) in Myanmar is about 200/million population. Renal replacement therapy (RRT) is possible only for 10-15% of these cases. Health care system in Myanmar, is a combination of public and private system both in financing and provision. Hemodialysis (HD) in Myanmar started in 1970, private HD began in 1986. There are more than 300 HD machines throughout the country, treating over 1800 patients. The problems of HD include funding (self-payment mostly), availability of resources and quality assurance of centers and staff. More than 400 cases kidney transplant had been performed successfully since 1995. Plans to expand the transplant program are reviewed, lack of options and choices of RRT (hemodialysis predominant), and absence of public awareness (Khin-Maung-Maung-Than, 2018).

Hemodialysis started in Myanmar Military Defense Service General Hospital since 1970 and Yangon General Hospital (YGH) since 1996. In 2008, there are 13 dialysis centers in public hospitals and 16 in private hospitals throughout Myanmar. In

Yangon, public hospitals which have hemodialysis units are Yangon Specialty Hospital (YSH), Thingangyun General Hospital (TGH), North Okkala General Teaching Hospital (NOGTH) and private Hospitals they are Victoria Hospital, Pan Hlaing Siloam Hospital, KBC Hospital, Pin Lon Hospital, Bahosi Hospital, SSC Shwe Gone Daing Hospital, Asia Royal Hospital, Thiri Sandar Hospital etc. Other Public Hospitals are Mandalay General Hospital (MGH), 1000 bedded Hospital, Nay Pyi Taw, Pyin Oo Lwin General Hospital, Meikhtilar General Hospital and Pakhawkku General Hospital.

Thingangyun General Hospital, 500 bedded teaching hospital of University of Medicine (2), is located at suburb of Yangon, on Kyaikasan Pagoda Road, Thingangyun Township. It is one of the tertiary hospitals which has hemodialysis unit where the hemodialysis machines are supplied from both the government and donors. The hemodialysis unit was established as a portion of Renal Medical Ward in 1999 using hemodialysis machine supported by Snake Bike Control project. Thingangyun General Hospital, it started with only one dialysis machine and increases gradually up to 24 machines. For routine hemodialysis 19 machines can be used and five machines for emergency conditions. TGH could support only one time per week for each patient. Hemodialysis can be performed from Monday to Friday for routine hemodialysis and 24-hour service for emergency condition. Since 2013 there was a course of dialysis training for staffs who wanted to learn from district hospitals and hospitals which do not have hemodialysis center before. 52 persons (17doctors and 35 staff) who completed hemodialysis training course (15^{th} time) at TGH. The patients who received HD care at TGH were 347 in 2013, 551 in 2014, 884 in 2015, 1251 in 2016, 1286 in 2017 and 1215 in 2018.

1.3 Justification

Chronic kidney disease need long term treatment. Hemodialysis usually takes place at least two times a week, each session lasting between three and six hours. In TGH (Public hospital) they can be taken dialysis only one time per week with cost sharing prices and possible drugs support. The experiences on receiving care of dialysis patients treated weekly for some hours. Each time is likely to have an important impact on patients with chronic illness. Improving patient satisfaction with dialysis treatment has an effect to increase quality of life and patient-level outcomes.

Utilization of hemodialysis increases with the increased of chronic kidney diseases, so services for hemodialysis and quality of care is important. By exploring

the chronic kidney patients care seeking experience for their treatment, health care provider and health administrator can know about how to correct the difficulties of hemodialysis patients. Greater knowledge of how patients experience all impact of long-term dialysis is needed for health care administrators in designing future plans for promoting physical facility, coordination, financial support, social support, mental support and management of health problems among hemodialysis patients.

CHAPTER (2)
LITERATURE REVIEW

2.1 Hemodialysis

Hemodialysis is the mainstay therapy which is offered for ESRD patients who cannot undergo renal transplantation. The main purpose of hemodialysis is the provision of sufficient and safe patient treatment, which contributes to the better physical condition of the patient and it prevents further problems and complications. HD should take place at least three times per week in nearly all patients with end-stage chronic renal failure. Reduction of dialysis frequency to twice per week because of insufficient dialysis facilities is unacceptable (U.K Renal Association, 2007). It is usually done three times a week, each session lasting between 3 and 6 hours depending on the type of the patient and their compliance. For patients in developing countries it is not easy to increase their session time and/or frequency. They find difficulty even to do thrice per week especially those patients who live far from dialysis centers. Patient education and financial support is crucial to bring about understanding and acceptance of prolonged or more frequent dialysis sessions. Dialysis done twice weekly can also provide benefit for dialysis patients. In an Indian study it was found that twice per week hemodialysis can provide good quality of life for the patients especially living far away from dialysis centers (Chauhan and Mendonca, 2015).

Hemodialysis is the life supporting procedure for individuals with ESRD. Long term dialysis therapy, is time-extensive, costly, and requires regular follow-up to medication regimens including fluid and dietary restrictions. It also frequently results in loss of privacy and self-help; dependence on caregivers; disruption of social life; and reduction or loss of financial income (Sathvik, Parthasarathi, 2008). The patient's provision of knowledge of ESRD about the use of the hemodialysis machine, how to improve health, and how to balance his or her life is necessary for the patient on hemodialysis. Nurses have the responsibility to improve their own knowledge, as well as that of their patients, by providing adequate time, material and regular health education programs. Both quantity and quality of nursing involvements should be measured in improving patients' knowledge (Bayhakki and Riau, 2012).

Since 1960s, hemodialysis has been applied practically for renal failure. Hemodialysis treatments were sorted to be more effective and decrease side effects. In recent years, simpler dialysis machines enable home dialysis gradually attractive. Hemodialysis is still a complex process that requires an efficient and coordinated team. That team consists of nephrologist, dialysis nurse, dialysis technician, dietitian, and social worker. Patient and patient's family members are the most important persons for a successful treatment plan (Rockville, Madison, 2006) .

In New Delhi Indraprastha Apollo Hospital, 1000 bedded hospital, established in 1996.New Delhi is the foremost centers for renal transplant in India. The operation theatre is also equipped with lamina flow ventilation, infection control guidelines and all other up-top date surgical, anesthetic and safety equipment. There are 90 hemodialysis, CAPDs, 3-5 CRRT procedures,5-8 kidney biopsies, and 10-12 vascular access placements are done every week (For Medical Travellers,Vaidam.com, 1996).

During dialysis, HD patient's blood is washed by the use of a fluid called dialysate, or "bath." Wastes and fluid from patient's blood flow into the bath and are drained away. The dialysis machine contains two systems- extracorporeal circuit and the dialysate delivery system (Madison, 2005).

Chronic Kidney Disease (CKD) is the structural or functional abnormalities of kidney or decreased GFR < 60 ml/min/1.73 m2 for 3 months (Hasan et al., 2018). Comparing with Asia and Africa, America and European countries have greater prevalence of CKD. But, Iran is an exception in Asia with high level of CKD due to its socioeconomic background. All people with a GFR less than 60 ml/min/1.73 m^2 for 3 month consecutively are defined as suffering from chronic kidney disease. Protein in the urine is important marker for worsening of kidney function and cardiovascular disease (Hill et al., 2016).

End-stage kidney disease is the whole or nearly complete failure of the kidneys to perform normal functions. End-stage kidney disease can be fatal if you do not have dialysis or a kidney transplant. Our rationale is to assess precisely the bad socioeconomic effects of ESRD and hemodialysis on the patient and to support and save their lives from the severe problems of ESRD (Sayed et al., 2014).

2.2 Socio-economic burden of hemodialysis

Regarding socio-economic burden of hemodialysis patients, in addition to direct costs (due to treatment), loss of productivity for patient and family (indirect costs) have the important impact on illness. This type of cost is the value of production lost as a result of illness or treatment course. In the case of in-center hemodialysis attempt to include these cost such as on loss of time and employment is essential. Morbidity also causes important production losses. The components taken into account in order to guess morbidity costs were premature retirement, absence from work and reduced productivity during work (Kaitelidou et al., 2004).

Policy makers are facing challenges to give quality dialysis because financial impact of ESRD is rising annually. Decisions of dialysis depends on losses due to increase unemployment, the need of more government support and disadvantages due to socioeconomic context. In 2000, direct cost of hemodialysis providing therapy for 0.5% of population, in Greece 2% of national health expenditure .It was estimated that ESRD imposes significant cost on society in terms of production losses due to the treatment requirements and mortality (Kaitelidou et al., 2004).

Among people living in remote areas of Australia, the incidence and prevalence rates of this diseases are highest, which can reflect in other developed countries, USA and Canada(Gorham et al., 2019).

Globally, Chronic Kidney Disease (CKD) which ranked 27th leading cause of death and became ranked 18th in 2010**.** CKD patients are easily prone to develop end-stage renal disease (ESRD). CKD needs priority because it has an association with of uncontrolled diabetes and hypertension that are supposed as worldwide epidemic nowadays (Hasan et al., 2018).

Diabetes is the foremost cause of ESRD worldwide whereas hypertension becomes second leading cause. Hypertension control is important for decreasing mortality and morbidity (Deidra C. Crews Aminu K. Bello Gamal Saadi, 2019). Hypertension, diabetes mellitus and cardiovascular disease (CVD) have been mainly focused by health programs for prevention of chronic diseases. CKD prevalence is progress to end-stage renal disease and the financial result of renal replacement therapy become a great problem. The burden of CKD is growing promptly worldwide (Agarwal and Srivastava, 2009).Government has to begins more dialysis centers at the public level for better quality of life at the public sector. Recently international non-governmental organizations and non- governmental organizations are expecting to

provide more cost-effective management. Free distributing of drugs mainly for hypertension as well as diabetes will also help the patients to reduce the overall burden of renal failure (Suja et al., 2012)**.**

In developing countries, costs for dialysis and renal transplantation are still very high. Dialysis services should be altered from curative to preventive medicine (Soliman, Fathy and Roshd, 2012). Hemodialysis patients experience terrific psychosocial burden, fluid and diet restrictions. Additionally, contribute to this burden are physical and cognitive impairment, failure of adherence to the treatment regimen**,** dependency upon treatment and health professionals and the fear of death. Social support is understandably one of the most effective ways of long-term treatment success and patients' adjustment to illness (Theodoritsi et al., 2016)**.**

2.3 Quality of care

Today, hemodialysis is the most common alternative treatment in patients with renal failure in the world. Although the support is provided to these patients, they still show dissatisfaction with the quality of care and find it insufficient. Really, the quality of care is a multidimensional issue. Structure indicators are the availability of services or resources, psychological or nutritional programs for these patients, the nurse-to-patient ratio, etc. (Hashemi, Irajpour and Abazari, 2018).

Nephrologists and other physician are mainly responsible for CKD care. Depending on the structure of the health care system, the roles of a nephrologist vary (Deidra C. Crews Aminu K. Bello Gamal Saadi, 2019).There were some problems in Asian countries such as the scarcity of renal physicians, inadequate health education for patients, and shortage of biomedical engineers to provide up keeping of equipment’s (Masuda,2017).

Planning for modification of physical stressors, increasing the support of patients, improving the quality of care services provided by the treatment team, upgrading of the facilities and equipment and the implementation of an interdisciplinary approach are all believed to enhance the care services among in-patients receiving hemodialysis treatment (Hashemi, Irajpour and Abazari, 2018).

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2.4 Conceptual Framework

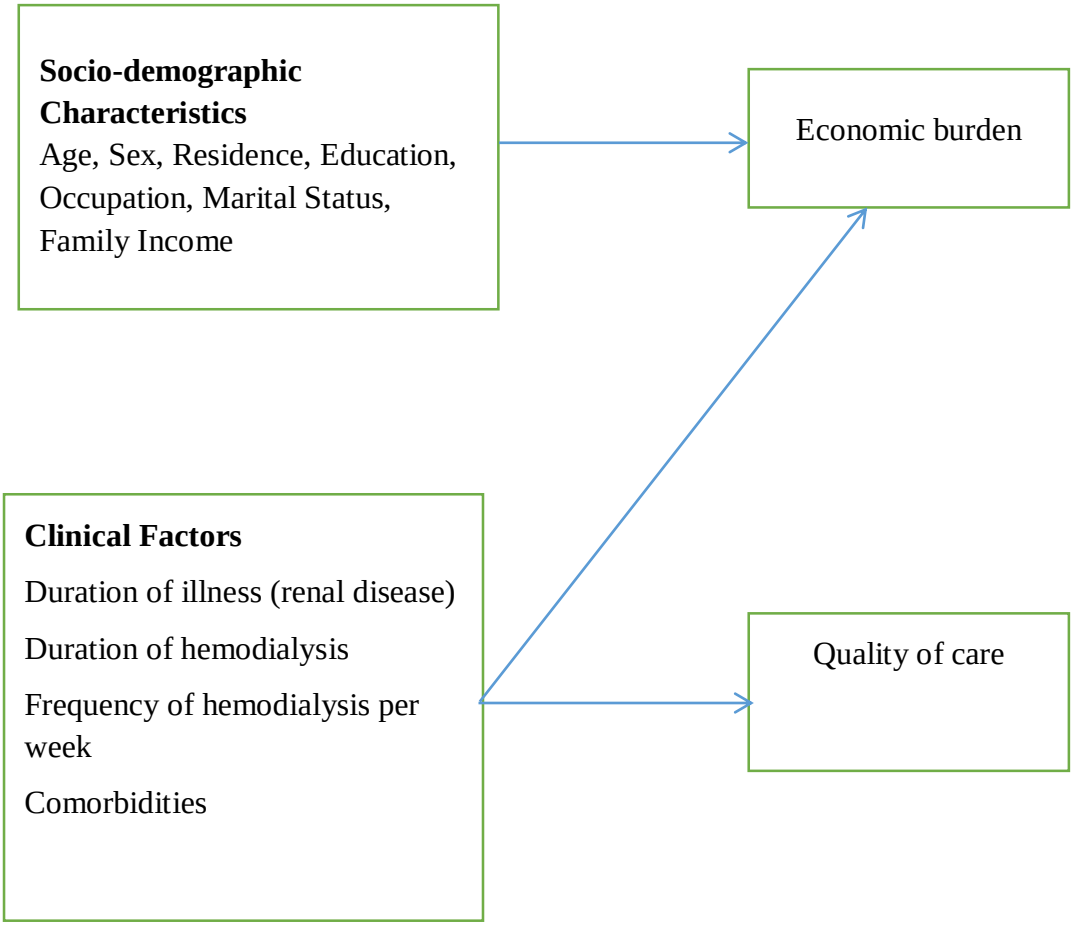

Figure (2.1) Conceptual framework of care seeking experience of hemodialysis patients

CHAPTER (3)
OBJECTIVES

3.1 General Objective

To describe the care seeking experience of hemodialysis patients in Thingangyun General Hospital

3.2 Specific Objectives

1. To explore the experience of patients on quality of care of hemodialysis in Thingangyun General Hospital
2. To describe the economic burden of hemodialysis patients in Thingangyun General Hospital

CHAPTER (4)

RESEARCH METHODOLOGY

4.1 Study design

The study was a cross sectional descriptive study.

4.2 Study period

The study was conducted from August to November, 2019.

4.3 Study area

The study was conducted in the Renal Medical Department of Thingangyun General Hospital.

4.4 Study population

Study population was care givers of hemodialysis patients from Renal Medical Department at Thingangyun General Hospital.

4.5 Sample size determination

Sample size was calculated by the following formula.

$$n = \frac{Np(1-p)z^2_{1-\frac{\propto}{2}}}{d^2(N-1)+p(1-p)z^2_{1-\frac{\propto}{2}}}$$ (Wayne, 1995)

N (number of patients treated with hemodialysis in Renal Medical Department of TGH) = 190

z = 1.96 (reliability coefficient corresponding to 95% confidence level)

p (proportion of patients who rated the overall care of hemodialysis as excellent) = 0.465 (Palmer et al., 2014)

d = marginal error = 0.05

n = required sample size = 128

Therefore, minimum required sample size was 128 care givers.

4.6 Sampling procedure

There were 190 patients taking HD at the time of data collection. Required number of care givers were selected randomly by using the patients' register book. If a selected care giver refused to take part in the study, care giver of another patient was selected.

4.7 Data collection methods and tools

Face to face interview with caregivers of hemodialysis patients were conducted by using structured questionnaire. If caregivers could not answer some questions that were directly related to the patient, these were answered by the patients.

Questionnaire consists of three parts, patient's sociodemographic characteristics of patients, experiences of patients relating to hemodialysis and different aspects of care. Patients' experiences relating to the different aspects of dialysis care questionnaires were adapted from "The Choices for Healthy Outcomes in Caring for End-Stage Renal Disease (CHOICE)" questionnaire, which evaluates satisfaction with dialysis treatment. The questionnaire consists of 13 questions about patients' experiences relating to the different aspects of dialysis care on a 4-point Likert scale (poor, fair, good, excellent). The next three questions are describing the rate the overall quality of care, evaluating the progress of care and giving recommendation others need dialysis (definitely not, probably not, not sure, probably yes and definitely yes).

4.8 Data management and analysis

Completeness of the questionnaire was checked after completing face-to-face interview every day. Data entry and data analysis was done by SPSS version16, the data cleaning process for errors, missing and outliers was done carefully.

In exploratory data analysis, the data cleaning done by looking for previously unrecognized illogical errors and any inconsistencies. After preliminary data analysis for further data cleaning and exploratory data analysis for data distributions, descriptive statistics was done. The summary measures (means, standard deviations, maximum, minimum) for continuous variables and frequency and percent for categorical variables was calculated.

4.9 **Ethical consideration**

The study was conducted according to the guidelines issued by University of Public Health and ethical clearance was obtained from the Institutional Review Board of University of Public Health, UPH-IRB (2019/MHA/10). The study was conducted by approval of Senior Medical Superintendent and Professor/Head of Renal Medical Department of TGH.

Before interview, an introduction to the study, its purpose as well as an explanation about the selection of the research subjects and the procedures were thoroughly explained to the participants. Written informed consent was obtained from the respondents only after knowing about the study in a clear and manifest way. The opportunity for the participants to ask questions regarding the research were provided. The place for data collection was chosen appropriately in a privacy setting. No name was mentioned and coding system was used in data collection. The privacy and confidentiality of the collected information from the research participants were strictly safe-guarded.

CHAPTER (5)

FINDINGS

In renal medical department of TGH, there were inpatients ward and OPD time which is two days per week (Wednesday and Thursday). Outpatients were about 40 per day. Average monthly inpatients admission were about 60 per month. There were one professor, two senior consultants, one specialist assistant surgeon, one rotating specialist assistant surgeon, two assistant surgeons. In this department, nephrologists managed inpatient, OPD time and hemodialysis unit. In emergency condition of renal failure, hemodialysis was urgently done through neck line by nephrologist. Routine hemodialysis was done on Monday to Friday by trained hemodialysis nurses supervised by nephrologist. There were 40 patients in a day, in morning session (07:00 -11:00) and afternoon session (12:00 -16:00). In hemodialysis unit, five senior nurses and one trained nurse were assigned. For the entire renal medical department, there were one sister, seven senior nurses and four trained nurses.

5.1 Socio-demographic characteristics of hemodialysis patients

Table 5.1 Background characteristics of hemodialysis patients

Background characteristics	**number (n=128)**	**%**
Age (years)		
<29	9	7.0
30-39	21	16.4
40-49	30	23.5
50-59	36	28.1
60-69	21	16.4
≥70	11	8.6
Sex		
Male	57	44.5
Female	71	55.5

Table 5.1 Background characteristics of hemodialysis patients (Continued)

Background characteristics	number (n=128)	%
Marital status		
Single	26	20.3
Married	90	70.3
Divorced/Separated	6	4.7
Widowed	6	4.7
Residence		
Urban	120	93.8
Rural	8	6.2
Educational level		
Illiterate	1	0.8
Only read and write	1	0.8
Primary school	19	14.8
Middle school	59	46.1
High school	6	4.7
University student	10	7.8
Graduate	32	25.0
Occupation		
Dependent	100	78.1
Retired	11	8.6
Employee	8	6.3
Own business	9	7.0
Respondent income (in Kyats)		
Below minimum wage	109	85.2
Minimum wage and above	19	14.8
(Minimum wage =4,800 Kyats per day) *		

*4800 Kyats per day (MoLIP,2016)

Table 5.1 Background characteristics of hemodialysis patients (Continued)

Background characteristics	Number (n=128)	%
Major breadwinner in respondent's household		
Patient	16	12.5
Spouse	37	28.9
Son/Daughter	39	30.5
Parents	19	14.8
Siblings	13	10.2
Sister in law/brother in law	3	2.3
Niece/Nephew	1	0.8

In this study, ages of the participants were between 18 to 86 years and mean age (SD) was 50 (13.5) years. About 50% of the participants were between 40 and 59 years of age. More than half of the participants were female. Most of the study participants were married. Respondents mostly resided in urban area (93.8%). About half of the respondents had middle school level of education (46.1%) and only 25% were graduates. Majority of the respondents (71.8%) were dependent at the time of study. (Table 5.1)

Of the respondents, 85% earned below minimum wage 4,800 kyats per day. Family monthly income was between 45,000 Kyats to 1,400,000 Kyats and median income (IQR) was 415,000 (300,000 to 600,000) Kyats. Most of the breadwinners of family were spouse (28.9%) and son/daughter (30.5%) Only 12.5% of the patients were the breadwinners of their family. (Table 5.1)

5.2 Hemodialysis Experiences of Patients

Table 5.2 Duration and waiting time for hemodialysis

	Number (n=128)	**%**
Total duration of hemodialysis (years)		
<2	42	32.8
2-5	67	53.2
>5	19	14.8
Duration of hemodialysis in TGH (years)		
<2	85	66.4
2-5	37	28.9
>5	6	4.7
Waiting time for hemodialysis at TGH (months)		
<6	37	28.9
6-12	70	54.7
>12	21	16.4

In this study, 32.8% of participants had total dialysis duration of less than 2 years, 52.3% had between 2 to 5 years and 14.8% had more than 5 years. In this study, 66.4% of participants had dialysis duration in TGH of less than 2 years, 28.9% had between 2 to 5 years and 4.7% had more than 5 years. Half of the participants in TGH had waiting time between 6 to 12 months.

Table 5.3 Physical accessibility to TGH for hemodialysis among the patients

Accessibility	Number (n=128)	%
Access to TGH		
Easy	123	96.1
With some difficulty	5	3.9
Mode of transportation		
By taxi	83	64.8
By bus	27	21.2
By walking, trishaw	14	10.9
By express bus	3	2.3
By ambulance of NGO	83	0.8
Time taken (hour)		
<1	100	78.2
1-2	20	15.6
2-3	5	3.9
>3	3	2.3

Most of the participants come to TGH by taxi car 64.8%, some are by bus, trishaw, express bus and ambulance of NGO. Time taken to reach to TGH for hemodialysis from patient's residence were less than 1hour (78.2%), 1-2 hour (15.6%), 2-3hours (3.9%) and more than 3hours (2.3%).

Table 5.4 Number of hemodialysis prescribed by doctors

Number of hemodialysis prescribed by doctors (times/week)	number (n= 128)	%
2	122	95.3
3	6	4.7

Table 5.5 Total number of hemodialysis per week at TGH and other place of care

Actual number of hemodialysis prescribed by doctors (times/week)	number (n= 128)	%
1	11	8.6
2	111	86.7
3	6	4.7

Majority of the patients have to undergo two times of hemodialysis per week prescribed by doctors (122, 95.3%) and (6, 4.7 %) have to undergo three times of hemodialysis per week prescribed by doctors. However, only 111 (86.7%) patients could do twice per week as prescribed by doctors and (11, 8.6%) could do once per week due to financial problems.

Table 5.6 Hemodialysis done at another sites other than TGH

Other Sites	number (n= 121)	%
Private hospital	96	79.3
Charity hospital	25	20.7

The patients received hemodialysis treatment one time in TGH and one time in private hospitals or charity hospitals. Only 20% of them had undergone HD in charity hospitals.

Table 5.7 Cost of one hemodialysis treatment

	Minimum (Kyats)	Maximum (Kyats)	Median (IQR) (Kyats)
Cost of one hemodialysis in TGH (n=128)	13,400	63,500	37,500 (34,500 to 40,500)
Cost of one hemodialysis in other hospitals (n=121)	14,800	106,500	69,000 (58,000 to 81,000)

The cost of hemodialysis in TGH and other sites (private and charity hospital) was not the same. Cost of one hemodialysis in TGH was ranging from 13,400 Kyats to 63,500 Kyats, and median (IQR) of 37,500 (34,500 to 40,500) Kyats. Cost for receiving one time of hemodialysis in other private or charity hospitals was ranging from 14,800 Kyats to 106,500 Kyats and median (IQR) of 69,000 (58,000 to 81,000) Kyats.

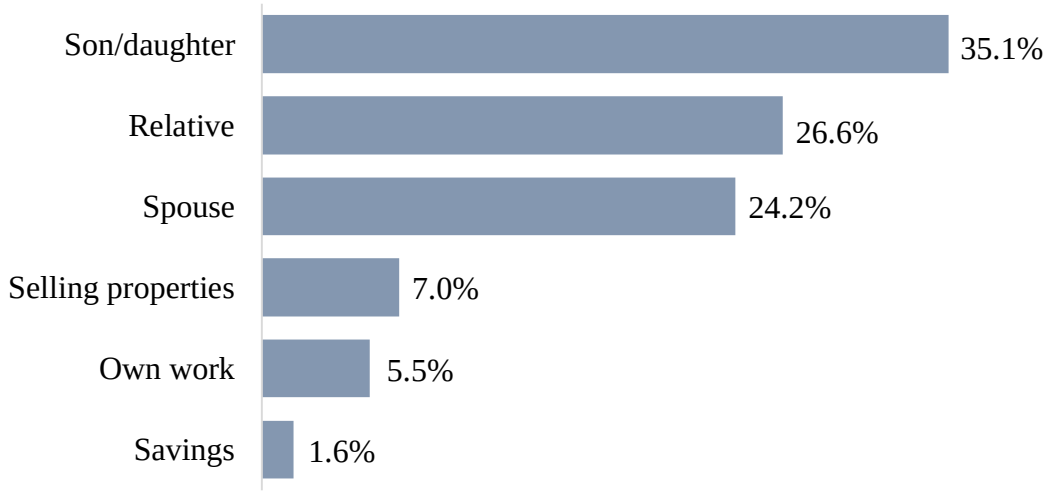

Figure (5.1) Sources of financial support for the health care of hemodialysis patients

Financial support for vast majority of HD patients were from their offspring or relatives or spouse. However, some had to sell their properties for treatment cost.

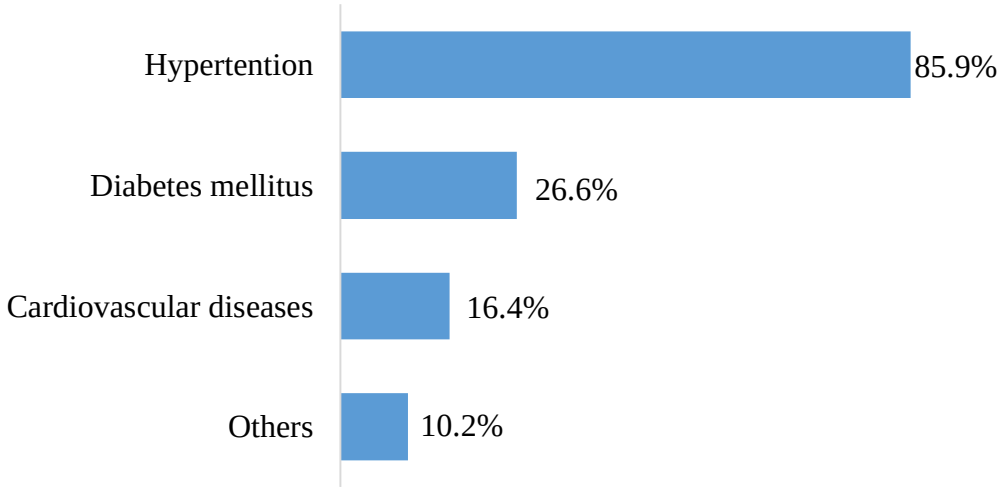

Figure (5.2) Comorbidity of hemodialysis patients (Multiple responses)

Majority of respondents had comorbid diseases. Hypertension occurred in (85.9%) and diabetes mellitus (26.6%), cardiovascular diseases **(**16.4%) and others (10.2%) were systemic Lupus Erythematosus, Pre-eclampsia, congenital renal disease.

Table 5. 8 Financial hardships for hemodialysis treatment

Financial hardship	**number (n= 128)**	**%**
Present	118	92.2
Absent	10	7.8

The overwhelming majority of respondents had experienced financial problems for hemodialysis treatment. All patients took regular follow-up hemodialysis treatment once per week in TGH.

Open ended questions for any social problems for care for the patients are summarized as follows: due to development of chronic renal disease, hemodialysis patients were facing with many problems and burdens in this study. They lost their jobs and consequently their income becomes low. The patient become a burden to one's family and relatives. The patient gradually lost social relationship with one's surroundings. Because of unemployment, there was reduction in productivity of labor as an indirect cost to this disease. On the other hand, expenditures during the course of treatment were very high and financial hardship leads to social, economic and emotional impacts. Finally, patients may lose all social dealings and even one's life.

5.3 Patients' experiences relating to the different aspects of dialysis care

Table 5.9 Patients' experiences relating to the different aspects of dialysis care

	number(n=128) (%)			
Patients' experiences	**poor**	**fair**	**good**	**excellent**
Staff available in emergency	0 (0)	15 (11.7)	109 (85.2)	4 (3.1)
Information provided from dialysis staff	0 (0)	2(1.6)	69 (53.9)	57 (44.5)
Information about fluid removal by staff	0 (0)	3(2.3)	95 (74.2)	30 (23.4)
Attention of staff to cleanliness of the dialysis vascular access site'	0 (0)	0 (0)	104 (81.2)	24 (18.8)
Caring and helpfulness of nurses'	0 (0)	0 (0)	98 (76.6)	30 (23.4)
Response of staff to your pain or discomfort	0 (0)	1 (0.8)	102 (79.7)	25 (19.5)
Care of new medical problem by staff	1(0.8)	2(2.3)	117(91.4)	8(6.2)
Explanation about HD by nephrologist	0 (0)	1(0.8)	68(53.1)	59(46.1)
Accuracy of information from nephrologist (prognosis or getting a kidney transplant)	2(1.6)	14(10.9)	103(80.5)	9(7.0)
Accuracy of instructions from nephrologist	0(0)	1(0.8)	112(87.5)	15(11.7)
Nephrologist in mood to talk	0(0)	0(0)	109(85.2)	19(14.8)
Caring and concern from nephrologist	6 (4.7)	5 (3.9)	110 (85.9)	7 (5.5)
Frequency of visit to nephrologist	7 (5.5)	110 (85.9)	9 (7.0)	2 (1.6)

Almost all participants had answered "excellent" and "good" for the questions "amount of dialysis information from staff", "information about fluid removal from staff" and "response of staff to your pain or discomfort". All participants were satisfied

with “attention of staff to cleanliness of the dialysis vascular access site” and “caring and helpfulness of nurses”.

Majority of patients want to see nephrologist and they had got accurate information from nephrologist and accurate instructions from nephrologist.

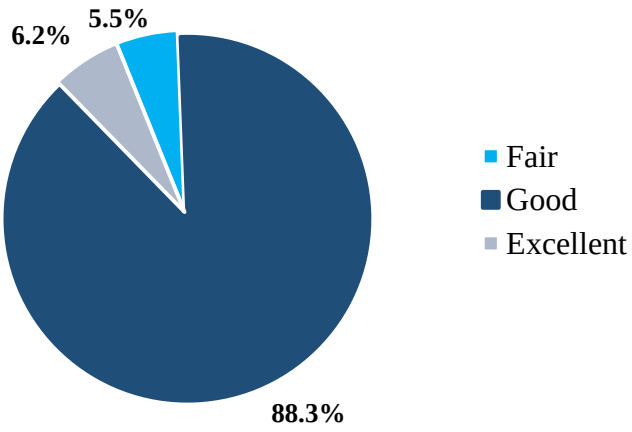

Figure 5.3 Patients’ experiences on overall quality of dialysis care (n=128)

Among the respondents, 88.3% of them rate on the overall quality of dialysis care as “good”, 6.2% rate as “excellent” and 5.5% rate as “fair”. No one rate as “poor.”

Table 5.10 Participants’ desire to recommend TGH for dialysis care

Participants’ desire to recommend TGH for dialysis care	number(n=128)	%
Probably yes	119	93.0
Definitely yes	9	7.0

Concerning participants’ desire to recommend TGH for dialysis care, “probably yes” was 93% and “definitely yes” was 7%.

In the renal department of TGH, HD patients’ suggestion for further improvement of HD care in TGH were to increase number of HD machines, regular free of charge drugs (Erythropoietin drug), some government pensioner want to do 2 times/week in TGH, to reallocate hemodialysis unit in ground floor (present HD unit in second floor), need more staff in HD unit, need regular electricity, to have private room for B, C infection positive and renal transplant donors.

CHAPTER (6)
DISCUSSION

In this study, ages of hemodialysis patients were between 18 to 86 years, mean age(SD) was 50 (13.5) years. Majority of the respondents (71.8%) were dependent at the time of study. About half of the breadwinners of family were son/daughter and spouse. Majority of respondents (92.2%) experienced financial hardship for hemodialysis treatment. Some patients had comorbid diseases like hypertension (85.93%), diabetes mellitus (26.56%) and cardiovascular diseases (16.4%). All patients were prescribed to do HD at least twice per week, however 8.6% could do once per week. Cost for one hemodialysis at TGH was different from that in private and charity hospitals. They responded their experience on overall quality of dialysis care as excellent (6.2%), good (88.3%) and fair (5.5%).

In hemodialysis unit of TGH, nephrologists prescribed hemodialysis for end stage renal disease patients 3 times per week or 2 times per week according to the disease severity. However, TGH could support only one time per week for each patient. Therefore, they had to take HD treatment one time in public hospital and one time in private hospital or charity hospitals per week. Charity hospital was also overloaded with hemodialysis patients. Therefore, waiting time in charity hospitals was also prolonged and patients could have access there in alternate months. For the remaining, they had to be dialyzed in private hospital where it was costlier**.** At first most patients could afford the treatment. However, hemodialysis is a long term treatment causing financial burden to family, social problem, depression. Majority of the HD patients were dependent at the time of study. Therefore, affordability declined over time and they were unable to do 2 times of dialysis per week as prescribed by doctors. In this study 11 patients (8.6%) could not go to other places for HD and therefore they received HD only 1 time per week. Among the rest, some missed their dialysis in some weeks for reasons such as financial problem or emergency condition admitted to another hospital. Patients usually received financial support from their offspring or relatives or spouse. Apart from that, they had to sell their properties to continue treatment. For patients living in rural area, they had to migrate to Yangon where there is facility for dialysis. Therefore, in addition to the costs for HD, they had burden for accommodation cost and

care givers who had to left his job in native land to take care of the patient. In this study, 92% of hemodialysis patients had financial hardship for dialysis treatment. In the study of Theodoritsi et al. (2016) , successful end stage renal disease management is associated with sharing problems together with relatives ,colleges, religious advisiors, health care providers and society cooperative spirit. Therefore, social support is understandably one of the most effective ways of long-term treatment success and patients' adjustment to illness**.**

As dialysis is costly intervention, poor patient could not have enough money to pay the charges in private hospitals. The average cost per session was found to be ninety thousand Kyats and had to pay for ordinary people. The expense of comorbid conditions may further worsen the situation. The major contributing factor of renal failure were diabetes and hypertension (Suja et al., 2012). Although hemodialysis is demanding and life -long treatment, it intentionally prolong the life of end stage renal patients but slight and severe unfavorable results may be present. Hemodialysis patients need therapeutic care as well as individual lifetime care regularly (Zhang et al., 2016). In the study in Japan, when chronic dialysis treatment was started, the occupation of patient could be missed and ominously troubled by the beginning of chronic dialysis (Nakayama et al., 2015).

As the bed allotment for HD in TGH is limited (19 for routine cases), waiting time for the patient is prolonged. Half of the hemodialysis patients in TGH had waiting time between 6 to 12 months, 28.9 % less than 6 months and 16.4 % more than 12 months in this study. In other countries like India and Pakistan, there were without charges for physicians' discussion and supported for transplant charges in their hospitals. For that reason , patients on initial treatment and ongoing transplantation were overcrowded in hospitals and prolong waiting lists (Sakhuja, Vinayand Sud, 2003)**.**

Most patients with hemodialysis has other comorbidities. In this study, majority of respondents had comorbid diseases. Hypertension occurred in (85.93%) and diabetes mellitus (26.56%) and cardiovascular diseases were found in 16.4%. As in renal disease journal, majority of end stage renal patients had hypertension (Deidra C. Crews Aminu K. Bello Gamal Saadi, 2019). According to BMC Nephrology Research Journal 2015, most of the CDK patients had hypertension, some had ischemic heart disease and diabetes (Fraser et al., 2015). In the Indian study, diabetes and hypertension, the two major risk factors for CKD. These diseases and cardiovascular disease (CVD) have been mainly focused by health programs for prevention of chronic diseases .The burden of CKD is growing promptly worldwide (Agarwal and Srivastava, 2009). Regarding

the Egyptian study, in patients experienced with dialysis ,diabetes was important reason of ESRD, hypertension was second and obstructive infective kidney diseases was third (Soliman, Fathy and Roshd, 2012).

In this study, all patients were satisfied sympathetic and kindness of nurses, care of team to hygiene of the dialysis vascular entry site, reaction of staff to ache or discomfort. Almost all participants had answered correctness of knowledge from renal physicians such as prediction and possibility of receiving a renal transplant and correctness of instructions from nephrologist. The participants had answered "44.5% rate as excellent" and "53.9% rate as good" for the information about choosing HD by nephrologist and explanation about HD information provided from dialysis staff. In this study the participants rate on the overall quality of care for HD patients in TGH, "excellent" was 6.2%, "good ,88.3%" and "fair, 5.5%." In this study, "how much about their care could be better for patients, one third of the participants responded that satisfactory of their care in renal medical department. Hemodialysis participants' desire to recommend TGH for dialysis care "probably yes" was 93% and "definitely yes" was 7%.

In International survey, the items rated as excellent by respondents were, 'amount of information from dialysis staff' (34%), correctness of information from renal physician including prognosis and likelihood of getting a kidney transplant (37%) and accuracy of instructions from nephrologist (39%). Respondents rated most frequently as excellent were 'care of staff to hygiene of the dialysis vascular entry site' (54%), 'gentle and support of nurses' (53%), 'reaction of staff to ache or discomfort' (51%) and least response rate is 'the quantity of report when choosing dialysis modality (23%). Less than half of respondents rated their overall quality of care as excellent was 46.5% and about three-quarters rated their care as excellent or very good (78.5%). The proportion rating their overall care as fair in Poland (13.7%), in Argentina (30.3%), Italy (61.2%), Hungary (63.5%) and Portugal (83.8%). In one international survey, concerning recommendation about the services, one third of participants responded that they satisfied the services and they replied nothing of the service could be better. In an international survey consisting of four countries; Argentina, Hungary, Poland and Portugal, when asking about their recommendation on their care service to others who may need dialysis care, 64.4% of respondents replied that they would definitely recommend their dialysis center. In that study, they answered that information given by dialysis staff was enough but those from social workers and renal physicians were not enough (Palmer et al., 2014).

CHAPTER (7)
CONCLUSION

The management of renal failure by hemodialysis is costly and becomes a serious economic burden. So, this study was done in Thingangyun General Hospital to assess utilization of hemodialysis center with cost-sharing system. It was a cross-sectional descriptive study to describe socio-economic burden and to explore care-seeking experience of hemodialysis patients. Data collection method was face to face interview to caregivers of hemodialysis using structured questionnaire. Generally, income of most respondents was below minimum wages 4,800 Kyats per day and majority of patients had financial hardship.

Over 80% of the respondents undertook hemodialysis for twice per week as prescribed by doctors in public and private hospitals. The average cost for one time of hemodialysis in private hospital was doubled the average cost in TGH. The hemodialysis patients received good and excellent response from the staff care and nephrologist. Although they were satisfied with the above aspects of care, they had financial hardship and to give more resources to hemodialysis center and to reduce the socioeconomic burden of patients who took hemodialysis.

CHAPTER (8)
RECOMMENDATIONS

1. The hemodialysis center of this hospital should be expanded for more availability and accessibility of its services to patients. Such expansion should also be applied to the other HD center in Myanmar.

2. Alternative financing mechanism should be found out to reduce the financial burden of hemodialysis patients in Myanmar.

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ANNEXES

Annex (1) Variable, operational definitions and scale of measurements

No.	Variables	Operational Definitions	Scale of measurement
1	Age	Age of patients in completed years	Ratio
2	Sex	Gender of patient	Nominal
3	Address	Permanent / temporary(urban/rural)	Nominal
4	Occupation	Current working status	Nominal
5	Education	Formal education level of patients	Ordinal
6	Duration of illness	From the time of diagnosis ESRD to until now	Ratio
7	Duration of HD	From Time of initiation of HD to until now	Ratio
8	Duration of HD in TGH	From Time of initiation of HD in TGH to until now	Ratio
9	Waiting time for TGH	Time from doctor's prescription to first episode of HD in TGH	Ratio
10	Cost of hemodialysis	Dialysis cost, investigation cost, physician/nurse, medicine and transportation cost	Ratio
11	Care seeking experience of patients	Rate as (1)poor (2)fair (3) good (4) excellent	Ordinal
12	Overall quality of their care	Rate as (1)poor (2)fair (3) good (4) excellent	Ordinal

သုတေသနလုပ်ငန်းတွင် ပါဝင်ဆောင်ရွက်ရန် သဘောတူညီချက်တောင်းခံခြင်း

သုတေသနနည်းပညာနှင့် ကျင့်ဝတ်ကော်မတီ

ပြည်သူ့ကျန်းမာရေးတက္ကသိုလ် (ရန်ကုန်)

သုတေသန သဘောတူညီချက်ပုံစံ

အဓိကသုတေသီအမည်	-	ဒေါက်တာလွင်လွင်ဦး
ဌာန	-	ပြည်သူ့ကျန်းမာရေးတက္ကသိုလ်၊ ရန်ကုန်
သုတေသနခေါင်းစဉ်	-	သဃ်နိုးကျွန်းပြည်သူ့ဆေးရုံကြီးရှိ ကျောက်ကပ်ဆေးကုဌာနတွင် ကျောက်ကပ်သွေးသန့်စင် သောလူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသောအတွေ့အကြုံများ

အပိုင်း (က) သုတေသနနှင့်သက်ဆိုင်သောအချက်များ

၁။ မိတ်ဆက်နိဒါန်း

ကျွန်မသည် ဒေါက်တာလွင်လွင်ဦး၊ ဆေးရုံအုပ်ချုပ်မှုဆိုင်ရာမဟာဘွဲ့သင်တန်းသား၊ ပြည်သူ့ကျန်းမာ ရေးတက္ကသိုလ်၊ ရန်ကုန်မှဖြစ်ပါသည်။ ကျွန်မအနေဖြင့် သဃ်နိုးကျွန်း ပြည်သူ့ဆေးရုံကြီး ကျောက်ကပ်သွေး သန့်စင်ခြင်းပြုလုပ်သောလူနာများ၏ ကျန်းမာရေး စောင့်ရှောက်မှုကို ရှာဖွေသောအတွေ့အကြုံများအား သုတေသနဆောင်ရွက်လိုပါသည်။ သုတေသနအကြောင်းကိုရှင်းပြပြီး သင့်အားပါဝင်ရန် ဖိတ်ခေါ်လိုပါသည်။ သင့်အနေဖြင့် မရှင်းသည်များရှိပါက မေးမြန်းနိုင်ပါသည်။

၂။ ရည်ရွယ်ချက်

ဤသုတေသန၏ရည်ရွယ်ချက်မှာသဃ်နိုးကျွန်းပြည်သူ့ဆေးရုံကြီးတွင် ကျောက်ကပ် သွေးသန့်စင် ခြင်းပြုလုပ်သောလူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသော အတွေ့အကြုံများ မည်သို့ရှိမည်ကို လေ့လာလိုပါသည်။

၃။ သုတေသနဆောင်ရွက်ပုံအမျိုးအစား

ဤသုတေသနသည် သင့်အားသုတေသီက မေးသောမေးခွန်းများကို ဖြေဆိုရမည် ဖြစ်ပြီး မိနစ် (၃၀) ခန့်ကြာမြင့်မည်ဖြစ်ပါသည်။

၄။ ပါဝင်မည့်သူများရွေးချယ်ခြင်း

သင့်အားဤသုတေသနတွင်ပါဝင်ရန် ဖိတ်ခေါ်ခြင်းမှာ ကျောက်ကပ်သွေးသန့်စင်ခြင်းပြုလုပ်သော လူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသောအတွေ့အကြုံများနှင့်သက်ဆိုင်သော အချက်အလက်များသည် ပြုပြင်ရေးလုပ်ဆောင်မှုများအပေါ် အထောက်အကူပြုနိုင်မည်ဟု ယူဆ၍ဖြစ်ပါသည်။

၅။ မိမိဆန္ဒအလျောက်ပါဝင်ခြင်း

ဤသုတေသနတွင် သင်ပါဝင်ကူညီခြင်းသည် သင်၏သဘောဆန္ဒအလျောက်သာ ဖြစ်ပါသည်။ ပါဝင်ခြင်း၊ မပါဝင်ခြင်းမှာ သင်၏ဆန္ဒအတိုင်း ရွေးချယ်မှုသာဖြစ်ပါသည်။

၆။ လုပ်ဆောင်ပုံ

ဤသုတေသနတွင် ပါဝင်ဖို့သင်သဘောတူမည်ဆိုလျှင် သင့်ကို သုတေသီက မေးသော မေးခွန်းများကို ဖြေဆိုရမည်ဖြစ်ပြီး မိနစ် (၃၀) ခန့်ကြာမြင့်မည်ဖြစ်ပါသည်။ သင်သည်သီးသန့်နေရာတစ်ခုမှာ ဖြေဆိုရမည် ဖြစ်ပြီးသင့်၏လူမှုရေးအချက်အလက်များ၊ ကျောက်ကပ်သွေးသန့်စင်ခြင်းပြုလုပ်သောလူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသော အတွေ့အကြုံများနှင့် ကျောက်ကပ်သွေးသန့်စင်ခြင်း ဆိုင်ရာလူနာများ၏ ကဏ္ဍအမျိုးမျိုးနှင့်သက်ဆိုင်သောအတွေ့အကြုံများဆိုင်ရာအချက်များ မည်သို့ရှိမည်ကို လေ့လာလိုပါသည်။

မေးခွန်းများဖြေဆိုရာတွင် စိတ်အနှောက်အယှက်ဖြစ်၍ မဖြေဆိုလိုသော မေးခွန်းများရှိပါက သင့်ဆန္ဒအလျောက် မဖြေဆိုပဲငြင်းဆိုနိုင်ပါသည်။

၇။ အကျိုးကျေးဇူးများ

ဤသုတေသနတွင် ပါဝင်သောကြောင့် သင့်အတွက် တိုက်ရိုက်အကျိုးကျေးဇူး ရှိမည်မဟုတ်ပါ။ သို့သော်သင်ပါဝင်မှုသည် ကျောက်ကပ်သွေးသန့်စင်ခြင်းပြုလုပ်သော

လူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသောအတွေ့အကြုံများဆိုင်ရာအချက်တို့သည် ပြုပြင်ရေးလုပ်ဆောင်မှုများအပေါ်တွင် အထောက်အကူဖြစ်စေပါသည်။

၈။ အချက်အလက်များသိမ်းဆည်းထားရှိခြင်း

ဤသုတေသနမှ ကောက်ယူရရှိသည့် အချက်အလက်များကို လုံခြုံစွာထားရှိမည် ဖြစ်ပါသည်။ သင့်ထံမှသိရှိရသည့် အချက်အလက်များကို သုတေသနအဖွဲ့မှတပါး အခြားမည်သူမှ မသိစေရပါ။

၉။ သုတေသနရလဒ်များကိုဖြန့်ဝေခြင်း

ဤသုတေသန၏ တွေ့ရှိချက်များကို စိတ်ဝင်စားသူများမှ သိရှိနိုင်စေရန် ရလဒ်များကိုသာဖြန့်ဝေ မည်ဖြစ်ပါသည်။

၁၀။ ဆက်သွယ်ရမည့်ပုဂ္ဂိုလ်

အကြောင်းတစ်စုံတရာ မေးမြန်းလိုလျှင် ဒေါက်တာလွင်လွင်ဦး၊ ဖုန်းနံပါတ် ၀၉ - ၅၀၅၁၉၄၉ သို့ ဆက်သွယ်နိုင်ပါသည်။ ဤသုတေသနကို လူပုဂ္ဂိုလ်များအပေါ် သုတေသနပြုမူဆိုင်ရာ ကျင့်ဝတ်ကော်မတီမှ ခွင့်ပြုချက်ရရှိပြီးဖြစ်ပါသည်။

အပိုင်း (ခ) သုတေသနတွင် ပါဝင်ရန်သဘောတူညီမှုပုံစံ

ကျွန်ုပ်သည် ကျောက်ကပ်သွေးသန့်စင်ခြင်းပြုလုပ်သော လူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသော အတွေ့အကြုံဆိုင်ရာအချက်အား လေ့လာသော သုတေသနတွင်ပါဝင်ရန်ဖိတ်ခေါ်ခြင်းခံရပါသည်။ ဤသုတေသနတွင် ပါဝင်သောကြောင့် ကျွန်ုပ်အတွက် တိုက်ရိုက်အကျိုးကျေးဇူးမရရှိပါ။ ကျွန်ုပ်သည်သုတေသီကမေးသော မေးခွန်းများကို ဖြေဆိုရမည်ဖြစ်ပြီး မိနစ် (၃၀) ခန့်ကြာမည်ဖြစ်ကြောင်းနှင့် လူမှုရေးအချက်အလက်များ၊ ကျောက်ကပ်သွေးသန့်စင်ခြင်း ပြုလုပ်သောလူနာများ၏ ကျန်းမာရေးစောင့်ရှောက်မှုကို ရှာဖွေသော အတွေ့အကြုံများနှင့် ကျောက်ကပ်သွေးသန့်စင်ခြင်း ဆိုင်ရာလူနာများ၏ ကဏ္ဍာအမျိုးမျိုးနှင့် သက်ဆိုင်သောအတွေ့အကြုံများဆိုင်ရာ အချက်များအား မေးမြန်းမည်ဖြစ်ကြောင်း သိရှိရပါသည်။ ဤသုတေသနတွင် ကျွန်ုပ်သည် အထက်ဖော်ပြချက်များကို ဖတ်ရှုပြီးဖြစ်ပါသည်။ မရှင်းလင်းသည့် မေးခွန်းများကိုလည်း မေးမြန်းနိုင်၍ ၎င်းတို့ကို ကျွန်ုပ်သည် ကျေနပ်စွာဖြေဆိုပေးပါမည်။ ကျွန်ုပ်ဆန္ဒအလျောက် ဤသုတေသနတွင် ပါဝင်ရန်သဘောတူပါသည်။

သုတေသနတွင်ပါဝင်သူအမည် .....

သုတေသနတွင်ပါဝင်သူလက်မှတ် .....

ရက်စွဲ .....

ANNEX (2)

Informed consent form

Institutional Review Board

University of Public Health, Yangon

Name of Investigator – Dr Lwin Lwin Oo

Title of research - "Care seeking experience of hemodialysis patients in renal medical department of Thingangyun General Hospital"

Part (A) Informed consent form for face-to-face interviewed questionnaires

1. Introduction

I am Dr Lwin Lwin Oo, Master of Hospital Administration candidate at University of Public Health, Yangon. I am doing research on "Care Seeking Experience of Hemodialysis Patients in Renal Medical Department of Thingangyun General Hospital"

2. Purpose of the research

This study is to assess "Care Seeking Experience of Hemodialysis Patients in Renal Medical Department of Thingangyun General Hospital"

3. Type of Research Intervention

This research will involve your participation in face-to-face interviewed questionnaire about thirty minutes.

4. Participant Selection

You are being invited to take part in this research because we feel that you will interest in "Care Seeking Experience of Hemodialysis Patients in Renal Medical Department of Thingangyun General Hospital"

5. Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether participate or not.

6. Procedure

I would like to invite you to take part in this research project. If you accept, you have to answer in face-to-face interviewed questionnaire about thirty minutes. It will be taken at a place which is comfortable for you. The questionnaire will include information about your socio-demographic factors, hemodialysis experiences of patients and patients' experiences relating to the different aspects of dialysis care. You

do not have to answer any question or take part in the discussion if you feel the issue(s) are too personal or if talking about them makes you uncomfortable.

7. Benefits

Participation in this study will not benefit the participant directly but your participation is likely to help us find out more about how to correct the difficulties of hemodialysis patients.

8. Confidentiality

I will not be sharing information about your participation in this study to anyone outside. The information that I collect from this research project will be kept private.

9. Sharing the Results

The knowledge that I get from research will be only to the persons who have the responsibility for this study. I will then publish the results to be read only by the interested people.

10. Who to contact

If there are any queries before, during and after the study you can directly contact the investigator Dr Lwin Lwin Oo, Phone – 095051949 or via email drdawlwinlwinoo@ gmail.com. This proposal had been reviewed and approved by the Institutional Review Board, University of Public Health, Yangon which is a committee whose task is to make sure that research participants are protected from harm. If you wish to find out more about the committee, contact the secretary of the committee at University of Public Health, Yangon, No. 246, Myoma Kyaung Street, Latha Township, Yangon, 11311. Office phone +95 1395213, +95 1395214 ext:23/25.

Part (B) Consent form

I have been invited to participate in research about "Care Seeking Experience of Hemodialysis Patients in renal medical department of Thingangyun General Hospital".

I know that I will have to answer the face-to-face interviewed questionnaire about thirty minutes. I am aware that there may be no benefit to me personally. The questionnaires include socio-demographic factors, hemodialysis experiences of patients and patients' experiences relating to the different aspects of dialysis care. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked to my satisfaction. I consent voluntarily to be a participant in this study.

Name of participant ----------

Signature of participant ----------

Date ----------

Care Seeking Experiences of Hemodialysis Patients

At Thingangyun General Hospital

Date ……

Respondent ID …….

(က) လူနာ၏လူနေမှုဘဝဆိုင်ရာအချက်အလက်များ

နံပါတ်	မေးခွန်းများ	ကုဒ်
က-၁	အသက် (ပြည့်ပြီးအသက်) နှစ် ……..	၊_၊_၊
က-၂	ကျား/မ (၁) ကျား (၂) မ	၊_၊
က-၃	အိမ်ထောင်ရေး (၁) အပျို/လူပျို (၂) အိမ်ထောင်သည် (၃) အိမ်ထောင်ကွဲ (၄) မုဆိုးဖို/မုဆိုးမ	၊_၊
က-၄	နေရပ်လိပ်စာ မြို့နယ် ……..	----------
က-၅	မြို့ပြ / ကျေးလက် (၁) မြို့ပြ …….. (၂) ကျေးလက် ……..	၊_၊

က-၆	ပညာအရည်အချင်း (အောင်မြင်ပြီးသောအတန်း) (၁) စာမတတ် (၂) ရေးတတ်ဖက်တတ် (၃) မူလတန်း (၄) အလယ်တန်း (၅) အထက်တန်း (၆) တက္ကသိုလ်အဆင့် (၇) ဘွဲ့ရနှင့်အထက်	၊_၊
က-၇	အလုပ်အကိုင် (လူနာ၏) အဖြေသည် (၁) ဖြစ်ပါက မေးခွန်း (၈) သို့ကျော်ပါ။ (၁) မှီခို (၂) ပင်စင်စား (၃) ဝန်ထမ်း …….. (၄) ကိုယ်ပိုင်လုပ်ငန်း …….. (၅) အခြား (ဖော်ပြပါ) ……..	၊_၊
က-၈	လူနာ၏တစ်လပျမ်းမျှလစဉ်ဝင်ငွေ (ငွေကျပ်ဖြင့်) ……..	၊_၊_၊_၊_၊_၊
က-၉	မိသားစု၏ပျမ်းမျှလစဉ်ဝင်ငွေ (ငွေကျပ်ဖြင့်) ……..	၊_၊_၊_၊_၊_၊
က-၁၀	မိသားစုအတွက် အဓိကဝင်ငွေရှာသော ပုဂ္ဂိုလ် (၁) လူနာ (၂) အခြား (လူနာနှင့်တော်စပ်ပုံ) ……..	----------

(ခ) ကျောက်ကပ်သွေးသန့်စင်ခြင်းပြုလုပ်သောလူနာ၏ကျန်းမာရေးစောင့်ရှောက်မှု

ကိုရှာဖွေသောအတွေ့အကြုံများ

နံပါတ်	မေးခွန်းများ	ကုဒ်
ခ-၁	ကျောက်ကပ်ရောဂါခံစားနေရသောကာလ …….. လ	၂_၂_၂
ခ-၂	သဃ်နိုးကျွန်းဆေးရုံတွင်ကျောက်ကပ်သွေးသန့်စင်ခြင်း ကုသမှုခံယူနေသည်မှာ အချိန်မည်မျှ ရှိပါပြီလဲ။ …….. လ	၂_၂_၂
ခ-၃	သဃ်နိုးကျွန်းဆေးရုံတွင်ကျောက်ကပ်သွေးသန့်စင်ခြင်း စတင်ပြုလုပ်ရန်အချိန်မည်မျှစောင့် ဆိုင်းခဲ့ရပါသလဲ။ …….. လ	၂_၂_၂
ခ-၄	သဃ်နိုးကျွန်းဆေးရုံတွင်ကျောက်ကပ်သွေးသန့်စင်ရန် စောင့်နေချိန်အတွင်း အခြားမည်သည့် နေရာတွင် ကျောက်ကပ်သွေးသန့်စင်ခဲ့ပါသလဲ။ (၁) ပုဂ္ဂလိကဆေးရုံ (၂) ကုသိုလ်ဖြစ်ဆေးရုံ (၃) မလုပ်ပါ	၂_၂
ခ-၅	မိမိအိမ်မှ သဃ်နိုးကျွန်းဆေးရုံသို့လာရသည်မှာလွယ်ကူမှုရှိပါသလား။ (၁) ရှိပါသည်။ (၂) မရှိပါ။	၂_၂
ခ-၆	သဃ်နိုးကျွန်းဆေးရုံသို့ မည်သို့သွားရပါသလဲ။ (၁) ဆေးရုံသူနာတင်ယာဉ် (၂) ပရဟိတသူနာတင်ယာဉ် (၃) အဝေးပြေးလိုင်းကား (၄) ဘတ်စ်ကား (၅) ကားအငှားယာဉ် (၆) လှေ၊သဘော် (၇) အခြား – ရှိလျှင် ဖော်ပြရန် ……..	၂_၂
ခ-၇	ဆေးရုံသို့လာရန်ကြာမြင့်ချိန် (…….. နာရီဖြင့်)	၂_၂_၂
ခ-၈	ကျောက်ကပ်သွေးသန့်စင်ခြင်းကို (၁) ပတ်လျှင် ဘယ်နှစ်ကြိမ်လုပ်ရန်ညွှန်ကြားထားပါသလဲ။	၂_၂

ခ-၉	ကျောက်ကပ်သွေးသန့်စင်ခြင်းကို (၁) ပတ်လျှင် ဘယ်နှစ်ကြိမ်ပြုလုပ်နေပါသလဲ။ (၁) ကြိမ်ဆိုလျှင် နံပါတ် (၁၁) သို့ကျော်ရန်	၊_၊
ခ-၁၀	အကယ်၍ (၁) ကြိမ်ထက်ပိုလျှင် နောက်တစ်ကြိမ်ကိုမည်သည့်နေရာတွင် သွားရောက်ပြုလုပ်နေပါသလဲ။ (၁) ပုဂ္ဂလိကဆေးရုံ (၂) ကုသိုလ်ဖြစ်ဆေးရုံ (၃) အခြား	၊_၊
ခ-၁၁	သဃ်နိုးကျွန်းပြည်သူ့ဆေးရုံကြီးတွင် ကျောက်ကပ်သွေးသန့်စင်လျှင် (၁) ကြိမ်လျှင်မည်မျှကုန်ကျပါသလဲ။ ခ(၁၁-၁) ကျောက်ကပ်သွေးသန့်စင်ခ …….. ခ(၁၁-၂) ဓါတ်ခွဲစစ်ဆေးခ …….. ခ(၁၁-၃) သမားတော် / သူနာပြု …….. ခ(၁၁-၄) ဆေးဖိုး …….. ခ(၁၁-၅) သွားလာမှုကုန်ကျစရိတ် ……..	၊_၊_၊_၊_၊_၊
ခ-၁၂	ကျောက်ကပ်သွေးသန့်စင်ခြင်းကို သဃ်နိုးကျွန်းဆေးရုံအပြင် အခြားနေရာ၌ပြုလုပ်ရာတွင်မည်မျှကုန်ကျပါသလဲ။ ခ(၁၂-၁) ကျောက်ကပ်သွေးသန့်စင်ခ …….. ခ(၁၂-၂) ဓါတ်ခွဲစစ်ဆေးခ …….. ခ(၁၂-၃) သမားတော် / သူနာပြု …….. ခ(၁၂-၄) ဆေးဖိုး …….. ခ(၁၂-၅) သွားလာမှုကုန်ကျစရိတ် …….. ခ(၁၂-၆) မှတ်ပုံတင်ခ ……..	၊_၊_၊_၊_၊_၊

ခ-၁၃	ကျန်းမာရေးကုသမှု (ကျောက်ကပ်သန့်စင်ခြင်း) အတွက်ငွေကြေးထောက်ပံ့မှုကို မည်သည်မှ ရရှိပါသလဲ။ (တခုထက်ပို၍ ဖြေဆိုနိုင်ပါသည်။) (၁) ကိုယ်ပိုင်လုပ်ငန်း (၂) ဇနီး/ခင်ပွန်းသည် (၃) သား/သမီး (၄) ဆွေမျိုးများ (၅) ပင်စင်လစာ (၆) စုငွေ (အိမ်ဌားခ၊ ဘဏ်တိုး၊ အမြတ်) (၇) လူမှုကူညီရေးအဖွဲ့ (၈) အခြား (ဖော်ပြပါ) ……	I_I
ခ-၁၄	ဆေးကုသမှုခံယူရန် ငွေကြေးအခက်အခဲရှိပါသလား။ (၁) ရှိပါသည်။ (၂) မရှိပါ။	I_I
ခ-၁၅	အခြားလူမှုရေးအခက်အခဲရှိပါသလား။ ဥပမာ – ပြုစုစောင့်ရှောက်မှု ---------- အလုပ်အကိုင် ---------- လူမှုရေး ----------	
ခ-၁၆	မိသားစုမှာဘယ်လိုအခက်အခဲရှိပါသလဲ ……	
ခ-၁၇	လက်ရှိရောဂါအပြင် အခြားရောဂါဝေဒနာများရှိပါသလား။ (တခုထက်ပို၍ဖြေဆိုနိုင်ပါသည်။) (၁) ဆီးချို (၂) သွေးတိုး (၃) နှလုံးရောဂါ (၄) အခြား …… ရှိလျှင်ဖော်ပြပါ	

နံပါတ်	မေးခွန်းများ	ကုဒ်
ခ-၁၈	ဆေးရုံသို့ကုသမှုခံယူရန် ရက်ချိန်းမှန်မှန်လာပြပါသလား။ (အဖြေသည် (၁) ဖြစ်ပါက မေးခွန်း (၁၉) ကိုကျော်ပါ။) (၁) လာပါသည်။ (၂) မလာပါ။	၂_၂
ခ-၁၉	မပြဖြစ်ပါကဘာကြောင့်လဲပြောပြပါ။ ……	

(ဂ) ကျောက်ကပ်သွေးသန့်စင်ခြင်းဆိုင်ရာကဏ္ဍအမျိုးမျိုးနှင့်သက်ဆိုင်သောလူနာများ၏ အတွေ့အကြုံများ

နံပါတ်	မေးခွန်းများ	ကုဒ်
ဂ-၁	ကျောက်ကပ်ဆေးရန်မွေးထားသောသွေးကြောပိုးမဝင်ရန် သန့်ရှင်းရေးကို ကျန်းမာရေးဝန်ထမ်းများမှ အလေးထားဂရုစိုက်မှု။ (၁) လုံးဝဂရုမစိုက်ပါ (၂) ဂရုစိုက်မှုမရှိပါ (၃) ဂရုစိုက်မှုရှိပါသည် (၄) အထူးဂရုစိုက်ပါသည်	၂_၂
ဂ-၂	သူနာပြုများ၏ သူနာပြုစုကူညီလုပ်ဆောင်မှု။ (၁) လုံးဝကူညီမှုမရှိပါ (၂) ကူညီမှုမရှိပါ (၃) ကူညီမှုရှိပါသည် (၄) အလွန်ကူညီပါသည်	၂_၂

ဂ-၃	ကျောက်ကပ်ဆေးချိန်တွင် လူနာ၏နာကျင်မှု (သို့) ဝေဒနာခံစားမှုကို ဝန်ထမ်းများမှ အရေးတယူပြုစုကုသပေးမှု။ (၁) လုံးဝရှိပါ (၂) ဂရုစိုက်မှုမရှိပါ (၃) ဂရုစိုက်မှုရှိပါသည် (၄) အထူးဂရုစိုက်ပါသည်	၂_၂
ဂ-၄	တာဝန်ကျ ဆရာဝန်/သမားတော် များ၏ဂရုစိုက်မှု။ (၁) လုံးဝဂရုမစိုက်ပါ (၂) ဂရုစိုက်မှုမရှိပါ (၃) ဂရုစိုက်မှုရှိပါသည် (၄) အထူးဂရုစိုက်ပါသည်	၂_၂
ဂ-၅	အရေးပေါ် အခြေအနေတွင် ဝန်ထမ်းလုံလောက်စွာရရှိနိုင်မှု။ (၁) လုံးဝမရနိုင်ပါ (၂) မရနိုင်ပါ (၃) ရနိုင်ပါသည် (၄) လုံလောက်စွာရနိုင်ပါသည်	၂_၂
ဂ-၆	ကျောက်ကပ်ဆေးကြောသန့်စင်ရာတွင် ထုတ်ပစ်ရမည့်အရည်ပမာဏနှင့်ပတ်သက်၍ သူနာပြုများ ထံမှသိရသောအချက်အလက်များရရှိမှု။ (၁) လုံးဝမမှီပါ (၂) မရရှိပါ (၃) ရရှိပါသည် (၄) လုံလောက်မှုရှိပါသည်	၂_၂
ဂ-၇	ကျောက်ကပ်ဆေးရန် မရွေးချယ်မီသတင်းအချက်အလက်များ ပြည့်စုံစွာသိရှိရမှု။ (၁) လုံးဝမရရှိပါ (၂) မရရှိပါ (၃) ရရှိပါသည် (၄) ပြည့်စုံစွာရှိပါသည်	၂_၂

ဂ-၈	ကျောက်ကပ်ဆေးစဉ်လိုက်နာဆောင်ရွက်သင့်သော အချက်များသိရှိရမှု (၁) လုံးဝမမှီပါ (၂) မရှိပါ (၃) ရှိပါသည် (၄) ပြည့်စုံစွာရှိပါသည်	၂_၂
ဂ-၉	ကျောက်ကပ်ဆေးကုသမားတော်နှင့်ပြသသောအကြိမ်အရေအတွက် (၁) လုံးဝမပြပါ (၂) တစ်ခါတရံ (တစ်လတခါ) (၃) မကြာခဏ (နှစ်ပါတ်တခါ) (၄) လာတိုင်းပြ (တစ်ပါတ်တခါ)	၂_၂
ဂ-၁ဂ	ကျန်းမာရေးပြဿနာတစ်ခုခုပေါ်ပေါက်လာပါက ဝန်ထမ်းများက ဂရုစိုက်မှု (၁) လုံးဝဂရုမစိုက်ပါ (၂) ဂရုစိုက်မှုမရှိပါ (၃) ဂရုစိုက်မှုရှိပါသည် (၄) အထူးဂရုစိုက်ပါသည်	၂_၂
ဂ-၁၁	ရောဂါအလားအလာ (သို့) ကျောက်ကပ်အစားထိုးကုသရန် အချက်အလက်များကို ကျောက်ကပ်ဆေးကုသမှုဆိုင်ရာသမားတော်ကြီးထံမှရရှိနိုင်မှု (၁) လုံးဝမသိပါ (၂) မသိပါ (၃) သိရှိပါသည် (၄) အပြည့်အစုံသိရှိပါသည်	၂_၂
ဂ-၁၂	ကျောက်ကပ်ဆေးကုသမှု ဆိုင်ရာသမားတော်ကြီးထံမှ တိကျသောညွှန်ကြားချက်များကို ရရှိနိုင်မှု (၁) လုံးဝမရရှိပါ (၂) မရရှိပါ (၃) ရရှိပါသည် (၄) ပြည့်စုံစွာရရှိပါသည်	၂_၂

ဂ-၁၃	ကျောက်ကပ်ဆေးကုသမှုဆိုင်ရာ သမားတော်၏ရှင်းလင်းပြောဆိုမှု (၁) လုံးဝမရှိပါ (၂) မရှိပါ (၃) ရှိပါသည် (၄) ပြည့်စုံစွာရရှိပါသည်	၂_၂
ဂ-၁၄	ကျန်းမာရေးစောင့်ရှောက်မှု အရည်အသွေးကိုသတ်မှတ်ပေးပါ။ (၁) ညံ့ (၂) အသင့်အတင့် (၃) ကောင်း (၄) အလွန်ကောင်း	၂_၂
ဂ-၁၅	ကျောက်ကပ်ဆေးသည့် Ward ရဲ့ကုသမှုကို အကောင်းဆုံးဖြစ်အောင် ဘယ်လိုပြုပြင်ဖို့လိုပါသလဲ။ …… ……	၂_၂
ဂ-၁၆	ကျောက်ကပ်သွေးသန့်စင်ရန်လိုသည့်လူနာကို သဃ်နှံးကျွန်းဆေးရုံကြီးသို့ ညွှန်းပို့မည်လား။ (၁) လုံးဝမပို့ပါ (၂) မပို့ပါ (၃) မသေချာပါ (၄) ပို့မည် (၅) ကျိန်းသေပို့မည်	၂_၂

Care Seeking Experiences of Hemodialysis Patients

at Thingangyun General Hospital

Date ----------

Respondent ID ----------

(A)	**Socio-demographic characteristics of the patient**	
No	Questions	Code
A1.	Age (in completed year)----------	|_|_|
A2.	Gender (1) Male (2) Female	|_|
A3.	Marital Status (1) Single (2) Married (3) Divorced/ Separated (4) Widow	|_|
A4.	Residence Township _ _ _ _ _	_____
A5.	Urban/Rural (1) Urban (2) Rural	|_|
A6.	Educational level (completed school) (1) Illiterate (2) Only read & write (3) Primary school (4) Middle school (5) High school (6) University (7) Graduate	|_|
A7.	Occupation of the patients **If(1), skip to Q (8)** (1) Dependent (2) Retired (3) Employee (4) Own Business (5) Others(specify)_ _ _ _ _	|_|
A8.	Average monthly respondent's income (in kyats) _ _ _ _ _ _ _ _ _	|_|_|_|_|_|_|_|

A9.	Average monthly family's income(in kyats)_ _ _ _	|_|_|_|_|_|_|
A10.	Who is the major breadwinner in your household? _ _ _ _ (1)patient (2)others (specify)	_____

(B) Hemodialysis experiences of patients

No	Questions	Code
B1.	Duration of illness----------months	|_|_|
B2.	Duration of Hemodialysis done in TGH (…….months)	|_|_|
B3.	Duration of waiting time before starting of hemodialysis in TGH(----months)	|_|_|
B4.	While waiting for TGH Hemodialysis, where did the patient get treatment? (1) Private hospital (2) Charity hospital (3) Not done	|_|
B5.	Can the patient easily access to go to Hemodialysis health center TGH? (1) Yes (2) No	|_|
B6.	How did the patient come to Hemodialysis health center TGH? (1) by ambulance of hospital (2) by ambulance of NGO (3) by express bus (4) by bus (5) by taxi (6) by ship, boat (7) others…if specify ----------	|_|
B7.	How long did you take to come to Hemodialysis health center TGH? -------hours	|_|_|

B8.	How many times of dialysis is the patient prescribed per week? ____	|_|
B9.	How many times does the patient take hemodialysis in a week? (If one time SKIP to B11).	|_|
B10.	If more than one time, where did you take another hemodialysis in a week? (1)Private hospoital (2) Charity hospital (3)Others------	|_|
B11.	How much do you usually cost for receiving one time of hemodialysis at TGH? B11.1 Cost of dialysis_____ B11.2 Investigation cost_____ B11.3 Physician/nurse_____ B11.4 Medicine_____ B11.5 Transportation_____	|_|_|_|_|_|
B12.	How much do you usually cost for receiving one time of hemodialysis at other place? B12.1 Cost of dialysis_____ B12.2 Investigation cost_____ B12.3 Physician/nurse_____ B12.4 Medicine_____ B12.5 Transportation_____ B12.6 Registration fee_____ _____	|_|_|_|_|_|_|

B13.	What are sources of financial support for health care of the patient? (1) Own work (2) Spouse (3) Son/ Daughter (4) Relatives (5) Pension (6) Savings (house rent, bank account, interest) (7) Community or social network (8) Others(specify)_ _ _ _ _	|_|
B14.	Is there any financial hardship for receiving treatment? (1) Yes (2) No	|_||
B 15.	Any social problem? Eg. care for the patient---------- Work---------- Social----------	
B16.	Problems in the family----------	
B17.	Does the patient have other comorbidity? (more than one response possible) (1) Diabetes (2) Hypertension (3) CVD (4) Others, please mention ……	|_|
B18.	Does the patient take follow-up treatment regularly? If Yes SKIP Q(B19) (1) Yes (2) No	|_|
B19.	If not please mention the reasons, ----------	

(C) Patients' experiences relating to the different aspects of dialysis care

No.	Questions	1	2	3	4
C1	Attention of staff to cleanliness of the dialysis vascular access site'				
C2	Caring and helpfulness of nurses'				
C3	Response of staff to your pain or discomfort				
C4	Caring and concern from nephrologist				
C5	Staff available in emergency				
C6	Information about fluid removal by staff				
C7	The amount of information when choosing HD				
C8	Information about HD provided from dialysis staff				
C9	Frequency of visit of nephrologist				
C10	Care of new medical problem by staff				
C11	Accuracy of information from nephrologist (prognosis or getting a kidney transplant)				
C12	Accuracy of instructions from nephrologist				
C13	Nephrologist in mood to talk				
C14	Please rate the overall quality of their care				

1. Poor 2. Fair 3. Good 4. Excellent

No	Questions	Code
C15.	How much about their care could be better ----------	|_|
C16.	Whether you would recommend TGH to others who may need dialysis care (1) definitely not (2) probably not (3) not sure (4) probably yes (5) definitely yes	|_|

Gantt Chart

Month	August				September				October				November				December			
Week	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Protocol preparation																				
Protocol defend																				
Pilot study – Preparation for data collection																				
Data collection																				
Data entry and analysis																				
Preparation for Grand Presentation																				
Thesis preparation																				
Submission Of Thesis (Draft)																				
Thesis defend																				
Correction and Submission of thesis																				

Curriculum Vitae

Name	Dr Lwin Lwin Oo
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Academic qualification	1. Dip. Med.Sc (Hospital Administration), (2016), University of Public Health, Yangon 2. M.B, B.S (1998), University of Medicine 1, Yangon
Employment history	1.Deputy Medical superintendent, Thingangyun General Hospital (14.12.2016 up to now) 2. Assistant Medical superintendent, Thingangyun General Hospital (1.9.16 -13.12.2016) 3. Dip in Hospital Administration Course at UPH (1.1.2016 to 31.8.16) 4. Assistant surgeon, Mayangone Township Health Center (1.4.2014 to 31.12.2015) 5. Health System Strengthening Officer, Yangon Region (1.2.2013 to 31.3.2014) 6. Assistant surgeon, Mayangone Township Health Center (5.2.2009 to 31.1.2013) 7.Team leader, MCH, Hsipaw Township , Shan (North) (19.5.2005 to 31.1.2009) 8.Assistant surgeon, Kyaik Latt Hospital , Ayeyarwaddy (19.11.2001 to 9.5.2005) 9. Assistant surgeon, North Okkalapa General Hospital (25.4.2000 to 12.11.2001)
Publication	-