ASSESSMENT ON ACCEPTABILITY OF METHADONE SERVICES IN URBAN DISTRICT OF ZANZIBAR

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SOCIAL WORK OF THE OPEN UNIVERSITY OF TANZANIA

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CERTIFICATION

The undersigned certifies that has read and hereby recommend for the acceptance by the Dissertation entitled the "*Assessment on Acceptability of Methadone Services at Urban District Zanzibar*," in fulfilment of the requirement for the award of Master in Social Work of the Open University of Tanzania.

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Date

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DECLARATION

I, **Khamis Bhai Ibrahim**, hereby declare that the contents of this dissertation are a result of my own findings and they have never been presented for a Master degree in any other University

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Signature

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Date

DEDICATION

This work is dedicated to the beloved family members who have been instrumental in my entire study.

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ABSTRACT

This study assessed the acceptability of methadone services at mental clinic in urban district in Zanzibar. To that end, the study explored knowledge of community on MAT services, analyzed sources of information about MAT services and examined community perception on MAT services. The research design was descriptive both qualitative and quantitative research approaches. Sample and sampling procedure was simple random and stratified where 15 parents, 25 PWID and 10 beneficiaries were included. Data collection method included interviews, administered self-questionnaire, and observation method was used. The findings have shown that majority of respondents had moderate knowledge about MAT services the major source of information about MAT services was the community members; majority of respondents had positive perceptions towards MAT services in urban district in Zanzibar. The study recommended that Ministry of Health, THPS, MAT clinic staff and other NGOs must design appropriate strategies and make adequate on the dissemination of knowledge on MAT service to the community and all-regions in Zanzibar.

TABLE OF CONTENTS

TABLE

LIT OF FIGURES

LIST OF ACRONYMS

ACT	Acceptance and Commitment Therapy
AD	Alcohol Anominous
AIDS	Acquired Immune Deficient Syndrome
CAMH	Centre for Addiction and Mental Health
CDC	Centre for Disease Control
CDHSH	Commonwealth Department of Human Services and Health
CESAR	Centre for Substance Abuse Research
CSAT	Centre for Substance Abuse Programme
DARP	Drug Abuse Reporting Program
DOT	Direct Observation Treatments
FGOTP	Federal Guideline Opiod Treatment Programme
GPs	General Practitioners
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immune Virus
IBBSS	Integrated Biological and Behaviour Surveillance Survey
IDU	Injectable Drug Users
IMFMAT	Institute of Medicine Federal Regulation of Methadone Treatment
MAT	Medical Assistance Treatment
MCD	Methadone Clinic Dot com
MMT	Methadone Maintenance Treatment
MMTP	Methadone Maintenance Treatment Program

MoH	Ministry of Health
NGO	Non-Government Organization
NIH	National Institutes of Health
OTP	Opiod Treatment Program
OUT	Open University of Tanzania
PWID	People Who Inject Drug
SAMHSA's	Substance Abuse and Mental Health Services Administration's
SMZ	Serikali ya Mapiduzi Zanizibar
SPSS	Statistical Package of Social Sciences
TB	Tuber Clocis
TEDS	Treatment Episod Datus
THPS	Tanzania Health Promotion Services
TOPS	Treatment Outcome Perspective Study
TOPS	Treatment Outcome Questionnaires
TPQ	Treatment Perception Questioner
URICA	University of Rhode Island Change Assessment
WHO	World Health Organization
ZACP	Zanzibar AIDS Control Programme
ZAYEDESA	Zanzibar Youth Education Development Environment Support Association
ZYF	Zanzibar Youth Forum

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

In 2015 a Medical Assistance Treatment (MAT) service among People Who Inject Drug (PWID) was opened at Mental Hospital in Zanzibar. Medical Assisted Treatment (MAT), an including opioid treatment program, which combines behavioral therapy and medications to treat substance use disorders. The aim of MAT services has been to reduce harmful effects of methadone to the individual and the community at large. Methadone is associated with treating heroine, alcohol and other drug abuse. Methadone service aim to enable PWID to change their behavior, stop the use of heroin, reduce pain and reduce chance of infection including HIV /AIDS, Hepatitis B and Hepatitis C, TB, dependence and to live safely in the community.

According to World Health Organization (WHO, 2017), around 16 million people globally inject drugs and 3 million of them are living with HIV. On average, one out of every ten new HIV infections is caused by injecting drug use and in parts of Eastern Europe and Central Asia over 80% of all HIV infections is related to drug use. Methadone is believed to support harm reduction as evidence based approach to HIV prevention, treatment and care for people who inject drugs and has defined a comprehensive package, which includes needle and syringe programmes and opioid substitution therapy.

Methadone Maintenance Treatment consists of a one month stabilization and 5-month

gradual methadone dose reduction period, combined with weekly individual ACT sessions. Urine samples are collected twice weekly to assess the use of illicit drugs. The participant successfully completed the program and had favourable drug use outcomes during the course of treatment, and at the one-month and one-year follow-ups. Innovative behaviour therapies, such as ACT, that focus on acceptance of the inevitable distress associated with opiate withdrawal may improve methadone detoxification outcomes (Stotts et al, 2010).

Globally, there are around 16 million illicit opioid users 0.4% of the total population in the 15 to 64 age group. Those 11 million people abuse heroin, according to the 2007 World drug report need treatment. Opioids are naturally occurring opiates and synthetic and semi-synthetic drugs that act on opioid receptors in the brain and can cause dependence due to their euphoric effects. Heroin is an opioid. Other examples are morphine, methadone and buprenorphine, widely used as pain-killers (WHO, 2017). Continue to explain that there is no miracle solution to the addictive grip of opioid drugs such as heroin. Similarly, Patralekha new guidelines confirm that, even after 40 years, substitution therapies such as methadone are still the most promising method of reducing drug dependence, but getting access to treatment is a global problem.

Methadone maintenance treatment was first introduced as a means of treating heroin withdrawal symptoms in opioid dependent persons almost forty years ago. Today, in many parts of the world, MMT is widely recognized as a key component of a comprehensive treatment and prevention strategy to address opioid dependence at the

time of this review. Methadone is the only opioid authorized for long term outpatient pharmacological treatment of opioid dependence in Canada (Brands, 2013).

Dollies (2016) argues that chemical structure of methadone was first produced in the 1930's as a team of German scientists was searching for a pain killing drug. In 1937, two scientists (Max Bockmhl and Gustav Ehrhart) uncovered a synthetic substance that they called Hoechst 10820 or polyamide. Years later during World War II another team of German scientists expanded on earlier research and began synthesizing the substance as a result of short supplies of morphine and other analgesics. By the end of the war, the United States had obtained the rights to the drug from war requisitions and later coined the name methadone. In 1947 methadone was introduced into the United States to be used as a pain reliever for a variety of conditions. In the 1960s, little scientific advancement was made with regard to methadone. But with a resurgence of heroin addiction, researchers began to search for a substance that could reduce or eliminate drug craving and withdrawal signs and symptoms.

Heroin is an illegal, highly addictive drug processed from morphine, a naturally occurring substance extracted from the seed pod of certain varieties of poppy plants. It is typically sold as a white or brownish powder that is “cut” with sugars, starch, powdered milk, or quinine. Pure heroin is a white powder with a bitter taste that predominantly originates in South America and, to a lesser extent, from Southeast Asia, and dominates the United States. Markets in the East of the Mississippi River Highly pure heroin can be snorted or smoked and may be more appealing to new

users because it eliminates the stigma associated with injection or drug use. The medical and social consequences of drug use such as hepatitis, HIV/AIDS, foetal effects, crime, violence, and disruptions in family, workplace, and educational environments have a devastating impact on society and cost billions of dollars each year in Africa (Volkow, 2014).

Dollies (2016) argues that the idea behind this research has been that methadone could be used to manage or maintain heroin addiction. In 1964, the effectiveness and usefulness of using methadone maintenance was realized. In the spring of 1971, Methadone Treatment for opiate dependence began to expand. That year the Federal Government developed regulations governing the use of methadone in the treatment of heroin addiction whereby final regulations were published in December 1972. In 2001 regulations over methadone were modified to allow physicians and other health care professionals to provide methadone more effectively and consistently.

MMT is a successful treatment as it is associated with decreases in client's illicit drug use and health risk behaviours as well as significant improvement in social functioning. Yet, MM remains controversial. Many professionals believe that substituting one addiction for another is not ethically or therapeutically acceptable. In addition, long-term MM treatment incurs significant financial burden, restrictions in daily activities, and unpleasant stigma. The majority of MM clients state a preference for abstinence and a number of them request detoxification or attempt to detoxify themselves (Magura, et. al, 2009).

Methadone clinic for treatment does receive any medication. This is because strict government regulations have placed limitations on the way that methadone is administered from a methadone clinic. The methadone clinic assesses drug use, history, overall health and other factors one's first visit and then set a follow-up visit (usually the very next day) for the addicted person to come and begin treatment. Methadone treatment is a life-changing step in the right direction. Though it is a difficult decision to make, once drug users decide to seek the help of a methadone treatment program, that life will be changed for the better. Further studies estimated that as many as 66% of all people who take part in a methadone maintenance treatment plan post heroin addiction stop using intravenous drugs all together. This means that just by choosing methadone maintenance treatment client already have a better chance at recovery than if were to choose counselling and therapy alone (Krudsen, 2011).

In 1993, the most recent year for which national estimates of methadone patients were available, an estimated 117,000 patients received methadone treatment. This figure is calculated from client counts reported to NDATUS in 1991, adjusted for the 82 % response rate to the survey. A 1990 survey estimated the national total at 112,943 patients receiving methadone, of which approximately 92% of patients were considered to be in maintenance and 8%in detoxification (Batten, 1993).

Masao (2015) argues that, in the last four years, over 2,000 heroin users have begun the methadone program, 6% of these patients were able to maintain the strict daily regimen. One reason the clinic opened additional branches was to test initiatives to

attract women. It relaxed the condition to accept only people who inject heroin it found that women who sniff heroin still have an elevated risk of contracting HIV. As a result of these changes over 30% of its patients are women at Dar es Salaam.

1.2 Statement of the Problem

People with Injectable Drugs (PWID) face many challenges worldwide Zanzibar being one among those countries. That challenges include increasing of relapsing of clients to the services, missing dose among them, mixed dose (over dose), misbehaviour and soba houses dropout. Moreover these peoples have faces many complication and infection such as complex physiological changing , social, and behavioural disorders that often coexist with psychiatric illness, as well as, co-morbid medical infectious diseases such as HIV, hepatitis virus, Tuberculosis and social problem like dependence, family separation, premature death, criminality and dependence.

A study by Dahoma (2006) concluded that, the prevalence of HIV among PWID was (26.2%) compared to 4.1% among non-injecting heroin users. Needle sharing was reported in 91 of the 198 IDUs. The prevalence of HIV among those IDUs who shared needles was 28.4%. Not only that the main purpose to initiate these MAT services to reduce chance of infection of HIV/AID to the PWID Zanzibar. So, that the aim of this study was to assess the acceptability of Methadone cervices at urban district Zanzibar. In view of that, this study therefore assessed the acceptability of methadone in Urban District in Zanzibar.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of this study was to assess the acceptability of MAT services in urban district Zanzibar.

1.3.2 Specific Objectives

The specific objectives of the study were:

i) To explore the level of community awareness on MAT services

ii) To examine the perceptions of the community towards MAT services.

1.4 Research Questions

i) To what extent is the community aware of MAT services?

ii) What are the perceptions of the community towards MAT services?

1.5 Significance of the Study

Mental Hospital at MAT clinic attendance of clients is abysmally weak, as there is an increased of relapsing of clients, inadequate health work, missing dose among clients, mixed dose, misbehaviour and poor management to remain and harmoniously in Mental hospital. These factors become driven forces for most of Health care and clients which then immigrate to developed good services for better opportunities. Therefore the result of this study helped researchers to increase their knowledge on acceptability of MAT services at Mental hospital Zanzibar.

The study also provided detailed information pertaining to MAT services. Also, findings enabled the MoH, MAT staff, Hospital management to plan on strategies for

provision of adequate and effective MAT services on behaviour change, to improve the medical care for all clients diagnosed, to prevent the client from transmission of infection, live safe as well as improve their social and economic statuses in the community.

1.6 Limitations of the Study

A number of factors have in one way or another limited this study. These included limited funds, time, equipment and humans resources constraints, transport in urban areas, cultural and linguistic, irregularities arising from cheating or poor recording. Others included readiness and willingness of some of the respondents, poor cooperation from management officials especially to the employers' organization. Also, permission to enter into the workplaces to collect data was very difficult due to the security of the work place.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter present theoretical part as well as literature reviews so that a clear picture of the study gape is revealed.

2.2 Theoretical Framework

Theory is a set of reasoned ideas intended to explain fact or event. Not necessarily based on reasoning. Theory is a coherent group of general proportions or concepts used as principles of explanation for a class of phenomena it is more or less verified or established explanation accounting of knowing facts or phenomena and their interrelations. This study used General Strain Theory in order to give a clear picture the problem investigated in relation to behaviour change among IDUS.

The General strain theory, developed by Agnew (2006), stresses that people who experience strains and stressors will engage in criminal behaviour, for example, doing drugs. This is to help the individual reduce or escape their strains because they do not have appropriate coping mechanisms that are legal. There are many different types of strains in the general strain theory, including objective and subjective strains, experienced, and anticipated strains (Agnew, 2006). Objective strains are events and conditions that are generally disliked by most people. Subjective strains are events or conditions that are disliked by one person. Experienced strains are events and conditions that are personally experienced by the individual, whereas vicarious strains are events and conditions that happen to a close family member or

friend. Anticipated strains are strains that the individual is currently dealing with and the expectation that it will continue into the future along with new strains. These types of strains do not always lead to criminal activity, such as drug use.

There are four common characteristics of strains that lead to criminal activity. First, the strain must be seen as severe. Secondly, the strain must be seen as unfair. Thirdly, the strain is associated with low social control. Low social control consists of lack of direct control, or sanctions for criminal behavior. There is also low emotional bonding to others, and low investments in conventional institutions, such as school, work, and church. Finally, low social control relating to crime involves an individual believing that it is okay to engage in criminal actions, such as drug use. The final characteristic of strains that can lead to criminal behaviors is that the strain promotes criminal coping.

Agnew believes that some individuals' turn to criminal activity when they have strains because they do not have coping skills that are legal, the costs of criminal coping are low, and they may be more disposed to crime as a result of strain. Agnew (2006), states that abuse as a child, chronic unemployment, criminal victimization, and discrimination are all specific events that can lead to criminal behaviors, such as drug use. When looking at the general strain theory and drug use among women and man, there are stressors and strains that arise from the lack of necessary resources to deal with their daily struggles, such as income, unemployment, food, housing, clothing and therapy, continue to said especially for women in poverty, there are

social statuses and resulting inequalities that they have to deal with on a daily basis, in which they do so by using drugs (Dollies, 2009).

Objective and experienced stressors include, for some clients drug users, a history of abuse, lack of positive coping skills, mental illnesses, lack knowledge, environmental stress and ignorance to treatment. Many of these women will anticipate strains in their future such as daily stressors, possibly abuse, and fear of losing their children. Therapeutic communities and methadone treatment are grounded by the general strain theory, meaning that the structure of the program is based upon this theory. This type of treatment can address the strains that clients have that led them to using drugs. Therapeutic communities address coping strategies, vocational training, parenting education, and other common strains found in women and man who use drugs. Therapeutic communities provide a safe, community atmosphere that can help women talk about their issues while allowing them to understand why they turned to drug use.

The life course perspective is a model that examines delinquency and crime that exists from childhood through adulthood. With this perspective, it is important to understand "how lives and societal or historical change both influence each other and how early events and influences in an individual's life may influence behaviour and other outcomes throughout the life-course" (Dahoma, 2006). This perspective focuses on both macro-level events that affect a person, along with micro-level events. Macro-level events would include wars, Jim Crow laws, economic recession,

and terrorism. Micro-34 level events would include choice of friends, education level attained, having children, and conflicts within the family.

This perspective looks at the life-course of individuals to see the patterns of change that have or have not occurred from childhood into adulthood. Liu (2013) argued that the family processes of social control are a major factor that can lead to delinquency, such as low parental supervision, harsh discipline, and weak parental attachment. Not only are family processes important to understand, but also school processes. This is where children are peer attachments, where they can be either positive or negative, possibly leading to delinquency. If any type of abuse is occurring at home or at school, serious results may happen to the child, possibly leading to a life of delinquency and other issues. Depending on the interactions of school and family processes, kids can develop low self-control and social bonds.

Two main concepts of the life-course theory are trajectories and transitions. Trajectories can be thought of as pathways of development throughout an individual's life. These are long-term patterns of behaviour, such as marriage, parenthood, and criminal behaviours. Transitions are short-term events that are incorporated into trajectories, such as getting married. Methadone treatment is a life-changing step in the right direction. Though a difficult decision to make, once drug users decide to seek the help of a methadone treatment program (Gowing, et. al., 2013).

The life course perspective can be used to better understand the factors associated with why women begin to use drugs, many of which go to jail or prison for drug

related charges. First, these women could have had negative life experiences as children on both the micro and macro levels. At the macro-level, drug using women may have been from an economically disadvantaged family due to racial or ethnic prejudices, or the war on drugs.

The war on drugs negatively affected women drug users through higher rates of incarceration, even though the number of drug users has not increased. Copeland (1993) also believes that the most common pathway for women to become involved in drugs is based upon survival of abuse and poverty. At the micro-level, drug using women could have experienced problems such as abuse, problems in the family dynamics, and job loss. These experiences could have led to beginning to use drugs. As these women continued to age, they may have continued to have negative life experiences, which reinforced them to continue using drugs due to a lack of alternative, legal coping skills.

The first time a peoples used drugs could be considered a transition because it is a short term event. However, if a woman perceived this transition to be helpful to their situation, it may turn into a trajectory or long term behavior because transitions can greatly affect trajectories. Transitions and trajectories can alter a woman's long term behavior. If a woman is in a healthy, long term relationship, but an incident occurs in which her marriage is no longer stable, then her long term behavior may change. NIDA (2014) outlines the Principles of drug addiction Treatment, which provides a basic idea of how addiction is treated in general. Methadone is the preferred course of treatment at a clinic, and often part of other protocols. Recommended basic

treatment options include. Both macro and micro-level transitions may change a woman's trajectory. So that methadone assist PWID to relive pain, changing behavior, to reduce chance of infection also help to stop uses of substance uses, it assist to reduce criminal behavior.

2.3 Review of Literature from Earlier Studies

Literature review help researcher to understand what others have found about the problem under study. It involves systematically, identification location and analysis of documents contains information related to research problem being investigated. This chapter was represent different research finding on conceptual as well as empirical information about acceptance of methadone at urban district Zanzibar from different sources in Tanzania and out of Tanzania, the same research was done as follows.

WHO (2017) find out that around 13 million people in the world inject drugs and 1.7 million of them are living with HIV. Injecting drug abuse accounts for approximately 10% of HIV infections globally and 30% of those outside of Africa. Regional HIV prevalence rates are high in people who inject drugs in all parts of the world (up to 15.5% in East and Southern Africa).People who use drugs are also disproportionately affected by hepatitis C. The estimated global prevalence of hepatitis C in people who inject drugs is 67%. Further, worldwide there are approximately 2.2 million HIV–hepatitis C virus co-infections of which more than half are in people who inject drugs.

Akilola, et al (2015) conducted a study a cross-sectional survey that incorporated both structured quantitative and phenomenological data collection was conducted. In the survey, a hundred pharmacists licensed to practice in the UK were randomly selected from different community pharmacies in the London borough of new ham. Qualitative data were thematically analyzed using the hybrid approach while SPSS 15 was used to analyze quantitative data the result showed that response rate of 82% was achieved. Majority of the respondents (67.1%) supported high level of physical health care intervention such as methadone.

Gossop, et al (1998) did research and said that this paper presents six-month treatment outcomes for patients who received community based methadone treatment in either a specialist drug clinic or a general practice setting. A prospective, multisite follow-up study of treatment outcome was conducted with 452 opiate addicts who had been given methadone treatment in primary health care and specialist clinic settings. Outcome data are presented for substance use behaviours, health, and crime. Results showed improvements at follow-up were found among both the GP and the clinic-treated groups in drug-related problems, health, and social functioning. Problems at intake were broadly comparable among the clinic-based and the GP patients. Similar levels and types of improvement were found for both groups at six-month follow up. Results demonstrate the feasibility of treating opiate addicts using methadone in primary health care settings, and show that treatment outcomes for such patients can be as satisfactory as for patients in specialist drug clinics UK. The GPs in our study are unrepresentative in their willingness to be actively involved

with problem drug users. Moreover, several services treated relatively large numbers of drug users.

Sullivan, et. al (2005) found that in Europe, Asia and the United States have, with few exceptions, found strong associations between participation in methadone treatment and reductions in the frequency of opioid use, fewer injections and injection-related HIV risk behaviours, and lower rates of HIV prevalence and incidence. Few randomized controlled trials have been conducted due to ethical concerns regarding the random assignment of individuals to no treatment or other potentially less effective treatment modalities. Despite this fact, the consistency of findings from the observational and case controlled studies cited here provide a preponderance of evidence suggesting that sustained treatment of opioid-dependent injection drug users with methadone is associated strongly with protection from HIV infection.

Rosenblum (2003) showed that there was greater evidence for an association between substance use and chronic pain among inpatients than among Methadone Maintenance Treatment Program (MMTP) patients. Among inpatients, there were significant bivariate relationships between chronic pain and pain as a reason for first using drugs, multiple drug use, and drug craving. In the multivariate analysis, only drug craving remained significantly associated with chronic pain. Not surprisingly, in patients with pain were significantly more likely than those without pain to attribute the use of alcohol and other illicit drugs, such as cocaine and marijuana, to a need for pain control. These results suggest that chronic pain contributes to illicit drug use

behaviour among persons who were recently using alcohol and/or cocaine. In-patients with chronic pain visited physicians and received legitimate pain medications no more frequently than those without pain, raising the possibility that under treatment or inability to access appropriate medical care may be a factor in the decision to use illicit drugs for pain.

A systematic review of 23 studies of 7,900 patients in diverse countries and settings reported significant decreases in the following HIV risk behaviors among patients receiving methadone maintenance treatment (1) the proportion of opioid-dependent injection drugs, (2) the reported frequency of injection, (3) levels of sharing of injection equipment, (4) illicit opioid use, (5) reduction in the proportion of opioid-dependent injection drug users reporting multiple sex partners or exchanges of sex for drugs or money, and (6) reductions in cases of HIV infection among opioid-dependent injection drug users. However, it should be noted that methadone treatment had little or no effect on the use of condoms. The authors concluded that the provision of agonist treatment for opioid dependence should be supported in countries with emerging HIV and injection drug use problems as well as in countries with established populations of injection drug users (Gowing, et al, 2004).

These results support an earlier meta-analysis of 11 studies that found a consistent, statistically significant relationship between methadone maintenance treatment and the reduction of HIV risk behaviors. This meta-analysis found that methadone maintenance treatment had a small-to-moderate effect in reducing HIV risk behaviors (Marsch, 1998).

Delucchi, et. al (2000) in a study that evaluated HIV risk behavior in patients receiving ongoing methadone maintenance compared with patients receiving 6 months of methadone maintenance followed by detoxification demonstrated that those patients who received ongoing methadone maintenance treatment reported lower HIV drug (but not sex) risk behaviors after 6 and 12 months of treatment.

Volkow (2014) examined a sample of 526 patients admitted to 17 methadone maintenance treatment programs that participated in the Treatment Outcome Perspective Study (TOPS). This analysis compared the length of methadone maintenance treatment with heroin use. The average short-term treatment duration was 31 days; long-term, 233 days; and continuous, 725 days. The rate of heroin use was 100 percent before treatment, 39 percent after short-term treatment, 40 percent after long-term treatment, and 17 percent after continuous treatment. This study suggests that longer exposure to methadone maintenance treatment decreases the likelihood of heroin use**.** A study of 933 heroin addicts participating in methadone maintenance treatment programs compared behaviour during periods on and off methadone maintenance. The study demonstrated that during periods on methadone maintenance, illicit narcotic use decreased significantly and reduction in illicit narcotic use was the most prominent effect among nine indicators of treatment success (Powers and Anglin, 1993).

Methadone and buprenorphine have been demonstrated to be effective in the treatment of opioid use disorder (OUD), especially when combined with psychosocial treatment. Despite buprenorphine's association with fewer withdrawal

symptoms and lessened risk of abuse, compared with methadone, its adoption remains limited. Given the vital role that counsellors may play in its successful implementation, their knowledge and perceptions of opioid agonist therapy may be facilitators or barriers to its acceptance. Methods informed by diffusion theory, the current study examined perceptions of buprenorphine's and methadone's acceptability among 725 counsellors employed in a nationally representative sample of substance use disorder treatment centres.

Lilly, et. al (2009) in a study on the delivery of counselling within the context of on-going staff-client relationships. Using mainly client data we focus on the processes influencing the delivery of counselling and support services in methadone treatment. They reported on findings from a 2-year ethnographic study of methadone treatment delivery in London. The study found that the 'sociality' of treatment is embedded within the negotiation and building of social roles and relationships more generally. These findings underscore the necessity to understand the delivery of methadone treatment services, and especially counselling and support, as a social interactional process and not merely as a medical encounter with a treatment outcome. Such a focus allows us to conclude by highlighting the practical implications of understanding 'sociality' in methadone treatment for both practice and for research.

McKeganey (2006) researched on Methadone used for recovery from heroin addiction, has a success rate of more than 3.4%. The study observed a group of 695 heroin addicts who started taking treatment in 2001 at 33 different addiction centres across Scotland. A large percentage of this group was given methadone-based care

while the rest were put on rehabilitation. Their progress was recorded over interviews 33 months after they started the treatment to see if they had become drug-free over a 90-day period. The group given only-methadone had a very poor 3.4 % recovery rate from drug addiction whereas the group placed in residential rehabilitation (with no methadone throughout the treatment) showed a 29% success rate.

WHO (2013) divided a group of heroin addicts in two Canadian cities who had repeatedly not been helped by conventional treatment, into two therapy groups. One was provided heroin plus intensive social and medical support while the other received an equally enhanced methadone program as part of the clinical trial. The new analysis showed that even though heroin treatment can be as much as ten times more expensive than methadone, lifetime social costs related to chronic addiction were cut by an average of $40.0. Canadian for each of these previously untreatable heroin patients. The studies also suggested that addicted people given heroin under medical supervision would live a year longer on average than those in methadone treatment.

The inclusion of MMT as part of opioid dependence treatment system in China remained controversial for a long period of time. Methadone had been available only for the purpose of acute detoxification in China between 1993 and the early 2000s. Recognizing the success of MMT worldwide and the alarming rates of HIV cases among Chinese injection drug users, there has been a rapid expansion of MMT services in the country. Currently, there are more than 600 MMT clinics and more than 175,000 patients have received MMT in China. The number of registered illicit

drug users, mainly heroin users, has increased from 70,000 in 1990 to 1,336,000 in 2009. Thus, MMT programs have been widely accepted in China by authorities as an effective therapeutic approach to treat opioid dependence and a prevention strategy to reduce the transmission of various infection diseases (Liu, 2013).

NIDA (1982) showed that effect of Methadone Maintenance Treatment Duration on Drug Use and Crime. The DARP study also shows that the longer patients stay in treatment, the more likely they are to remain crime free by 27% of methadone maintenance treatment patients had not used any illicit drugs and had no arrests or incarcerations during the year after methadone maintenance treatment. In contrast, 14% of those not treated reported no illicit drug use or arrests. Overall, of 68% of methadone maintenance treatment patients experienced significant improvements regarding illicit drug use and crime continue to said improvements drugs and crime one year after the drug abuse reporting program study DARP. Liu (2013) demonstrates that methadone maintenance treatment is effective in reducing two problems associated with heroin addiction: illicit drug use and crime.

Therefore, a study by Yang, et. al (2008) concluded that Methadone maintenance treatment (MMT) was first piloted in April 2004 in Yunnan, China, to reduce HIV transmission. This study aimed to examine public support for MMT and was based on cross-sectional data collected in March-April 2006 on a random sample of 411 police staff, medical/health professionals, community members, and drug users. Multivariate logistic regressions were used to analyse the data. The support was the strongest amongst the police and medical professionals but the lowest in drug users.

A considerable proportion of the respondents viewed MMT as contradictory to China's drug control policies and this factor was negatively associated with support for MMT. Dissemination of more accurate knowledge and the resolution of these conflicts are urgently needed to increase the public support for MMT.

Liu (2013) showed that participants' responses to the "positive" attitudes towards MMT are summarized in majority of MMT patients reported "positive" attitudes towards MMT, including believing that entering the MMT programme could help them with "living a normal life" (80.2%), "craving attenuation" (87.4%), "reducing illegal drug consumption (91.9%), and "preventing HCV and HIV/AIDS" (62.2%). In contrast, a lower percentage of participants at the Compulsory Detoxification Centre believed that MMT could help them with "living a normal life" (57.9%), "craving attenuation" (69.9%), "reducing consumption of illegal drugs (62.5%), "preventing HCV/HIV/AIDS" 45.9%.

The survey contained specific questions relating to attitudes and beliefs regarding MMT in China. Results from participants at the Centre and the MMT clinic expressed different opinions, regarding positive and negative attitudes and beliefs towards MMT. In addition, participants from both sites hold certain negative attitudes and beliefs about methadone despite their acknowledgement of the positive effects of MMT. Finally, participants reported distinctive treatment preferences, with the former preferring community-based treatment and the latter MMT. The research conclusions, developing targeted education about MMT for people at the Compulsory Detoxification Centres could help improve access to accurate and

evidence-based health and treatment information. The study may also help providers understand and adjust services needed for target population in the future (Liu, 2013). A study by WHO (2017) examined both patients' perceptions and service providers' perceptions of challenges in MMT implementation in China. Methods Four focus groups were conducted in two Chinese cities, Shanghai and Kunming, to explore the perceived and experienced barriers in MMT participation in China. All focus group discussions with participants were audio taped and transcribed. Results service providers and patient participants reported positive but also expressed concerns about side effects and continued heroin use during MMT. They also identified barriers in participating and remaining in MMT, including affordability acceptability (methadone as a substitution, dose, long-term nature), accommodation and accessibility (inconvenient operation hours, lack of transferability to other MMT clinics during travel) and competition between public health and public security. The findings concluded that implications for reconsidering the current MMT policies and practices in order to improve access, utilization and, ultimately, the effectiveness of MMT in China.

Basically, China has recently adopted methadone maintenance treatment (MMT) as a national strategy to address the problem of drug abuse and related public health issues such as HIV and HCV infections. However, low enrolment and retention rates suggest that barriers may exist in MMT utilization. This study examined both patients' perceptions and service providers' perceptions of challenges in MMT implementation in China. Method Four which is focus groups were conducted in two Chinese cities, Shanghai and Kunming, to explore the perceived and experienced

barriers in MMT participation in China. All focus group discussions with participants were audio taped and transcribed.

Results of service providers and patient participants reported positive experiences (e.g. effects of MMT in curbing withdrawal symptoms) but also expressed concerns about side effects and continued heroin use during MMT. They also identified barriers in participating and remaining in MMT, including affordability (fee requirement), acceptability (methadone as a substitution, dose, long-term nature), accommodation and accessibility (inconvenient operation hours, lack of transferability to other MMT clinics during travel) and competition between public health and public security. Therefore the present findings have implications for reconsidering the current MMT policies and practices in order to improve access, utilization and ultimately, the effectiveness of MMT in China.

McCaughrin, et. al (1996) developed a multi-dimensional model of health service access. It is particularly relevant for this study because the theory was developed based on clients in outpatient substance abuse treatment. The model specifies six domains for studying access to substance abuse treatment, including affordability (the cost of the treatment services in relation to the client's ability to pay), acceptability (client's and provider's view and opinion of treatment practices' acceptability, including their willingness to participate), accommodation (an agency's flexibility in adjusting certain operations, such as hours of operation, according to their client's abilities to access their services), availability (the amount and type of service available with regard to clients' needs such as service volume and format),

service diversity (the comprehensiveness of related treatment services such as employment counselling) and competitive stance (an organization's ability to compete with other institutions for clients).

Bart (2011) developed a brief 10 item scale to measure client satisfaction with treatment for substance use problems. The Treatment Perceptions Questionnaire (TPQ) was developed from two independent studies. The first field study recruited 123 subjects from inpatient and community treatment programmes. Each respondent completed an interviewer-administered questionnaire comprising the TPQ and other measures of personal/social functioning and treatment processes and perceptions.
A sub-sample (n = 38) participated in a three-day re-test administration of the instrument with two interviewers. In a second study of outcomes from oral and injectable methadone maintenance treatment, the TPQ was administered to a further 33 patients as part of a six-month outcome evaluation. Results from these studies show that the instrument has good construct and discriminate validity, good internal reliability and acceptable test-retest reliability.

NIDA (2011) showed that the Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) National Survey on Drug Use and Health, 23.5 million persons aged 12 or older needed treatment for an illicit drug or alcohol abuse problem in 2009 9.3 % of persons aged 12 or older of these, only 2.6 million 11.2% of those who needed treatment received it at a specialty facility. SAMHSA also reports characteristics of admissions and discharges from substance abuse treatment facilities in its Treatment Episode Data (TEDS). According to TEDS, there were 1.8

million admissions in 2008 for treatment of alcohol and drug abuse to facilities that report to State administrative data systems. Most treatment admissions 41.4% involved alcohol abuse. Heroin and other opiates accounted for the largest percentage of drug-related admissions 20%, followed by marijuana (17%).

A study by Stotts, et al (2012) showed that therapies are effective for managing opioid dependence community treatment programs are increasingly choosing detoxification. Unfortunately, success rates for opioid detoxification are very low, in part, due to physical and psychological symptoms associated with opioid withdrawal. Few behaviour therapies specifically address the distressing experiences specific to opioid withdrawal. A novel behavioural treatment, Acceptance and Commitment Therapy (ACT), works from the premise that the avoidance of unpleasant private experiences (thoughts, feelings, bodily sensations) is ubiquitous yet may be pathogenic, resulting in treatment drop-out and further drug use. This Stage I pilot study developed and tested an ACT-based opioid detoxification behavioural therapy.

Opioid dependent patients (N = 56) who were attending a licensed methadone clinic were randomized methods to receive either 24 individual therapy sessions of ACT or Drug Counselling (DC) in the context of a 6-month methadone dose reduction program. The results of this study showed that no difference was found on opioid use during treatment, 37% of participants in the ACT condition were successfully detoxified at the end of treatment compared to 19% of those who received DC. Fear of detoxification was also reduced across time in the ACT condition relative to DC. The researcher concluded that this first study of ACT to assist opioid detoxification

indicates promise. Research is needed to refine specific treatment strategies for this population to further strengthen effects.

Ward (2006) reviews the evidence for the effectiveness of methadone maintenance as used in the treatment of opioid dependence. Findings from randomized controlled trials and observational studies suggest that methadone maintenance reduces heroin use, crime, injection-related risk behaviours and premature mortality among people dependent on opioids. The research further suggests that two aspects of treatment are important in ensuring this effectiveness. Methadone treatment is more effective when higher doses (>50 mg) are employed and, overall, the evidence suggests that a treatment goal of successful maintenance on methadone rather than total abstinence is appropriate. The importance of ancillary services in treatment outcome is less clear and is the subject of current research and debate.

Fudala, et. al (2003) found that addicted individuals (IDU) 323 (ages 18 to 59) received one of three treatments for 4 weeks. One group of 109 patients received tablets to talking 16 mg buprenorphine and 4 mg naloxone the second group (105 patients) received tablets totalling 16 mg buprenorphine only and the third group (109 patients) received placebo tablets. All tablets were identical in appearance and taste. Patients reported to the clinics for dosing every weekday and took their medications home for weekends and holidays. Study patients and placebo patients also participated in up to 1 hour of individualized counselling per week.

Continue to say that, Opiate use was monitored through urine tests every Monday, Wednesday, and Friday the plan for the initial double-blind, 4-week. As a result of

scientific research, we know that addiction is a disease that affects both the brain and behaviour. We have identified many of the biological and environmental factors and are beginning to search for the genetic variations that contribute to the development and progression of the disease. Scientists use this knowledge to develop effective prevention and treatment approaches that reduce the toll drug abuse takes on individuals, families, and communities. The total number of methadone patients has increased in the past five years.

Bhati (2008) showed that between 1987 and 1992, the total number of patients grew by 27.6%. The client census was relatively stable between the mid-1970s and the mid-1980s, seesawing between 70,000 and 80,000. The growth in patients since 1987 may be attributed to many factors an increase in the survey response rate from 78% in 1987 to 85% in 1992, efforts to contain drug-related crime, an expanded public health effort related to the AIDS and tuberculosis epidemics, and to a concern for drug-related infant mortality. In addition, federal block grant expenditures for drug treatment grew during this period, accompanied by mandates to the states to ensuring The total, 329 detained heroin users and 112 active MMT clients were recruited from a local Compulsory Detoxification Centre and MMT clinic, respectively. One hundred and ninety-five metropolitan clients enrolled in the community-based methadone programme in Victoria, Australia were surveyed in order to evaluate client perspectives of methadone treatment delivered from primary health care settings. Results indicated that the average daily methadone dose was 41 mg, ranging from 7 mg to 140 mg (Masao, 2015) continue to said, most clients were found to have reduced their heroin use and criminal activity since commencing methadone. A

number of concerns about the programme were identified, however, including the high proportion of weekly income spent on methadone-related activities and a high use of tranquillizers by clients on higher methadone doses. In general the community-based methadone programme was found to be an acceptable methadone of service delivery to metropolitan clients.

A study by Dvoriak (2015) fifty-four individuals were asked if they were interested in the study and 50, demographically similar to other samples of opioid addicted Ukrainians, agreed to participate. Two died of non-study related causes the other 48 completed assessments at weeks 4, 8 and 12, and 47 completed follow up at week 20. Significant reductions were seen in use of heroin ($p<.0001$), other opiates/analgesics ($p< 0.0001$), and HIV risk behaviours (drug, sex, total all $p <0.0001$). All 48 patients chose to continue methadone after the 12-weeks of study medication ended. Unlike most opioid treatment studies, sexual risk was somewhat higher than injecting risk at study intake.

Longitudinal observational study of a 12week course of methadone treatment in 25 HIV+ and 25 HIV opioid addicted individuals recruited from a harm reduction program and the city AIDS Centre. Drug use and HIV risk were assessed at baseline and weeks 4, 8, 12 and 20 all patients were offered continued methadone maintenance in the Kyiv city program at the end of 12 weeks. Research concluded that Methadone maintenance was well accepted by HIV+ and HIV opioid dependent individuals and has the potential for significant public health impact if made more widely available with sustained access and support.

Continue to spread knowledge in major health issues confronting patients on MMT (O.R=4.778, 95%C.I=1.671-13.665, *p*=.004) and age-group (O.R=1.455, 95%C.I=1.007, 2.103, *p*=.032) were significantly associated with the level of physical health care intervention. In addition, years of practice (O.R=1.514, 95%C.I=1.070, 2.143 *p*= 019), age-group (O.R=1.553, 95%C.I=1.107, 2.177, *p*=.011) and service provision (O.R=7.8, 95%C.I=2.301, 26.444, *p*<.0001) were identified as predictors of community pharmacists' attitudes. Barriers to engagement identified from the structured interview include lack of privacy, training, job description and unpredictable behaviour of patients' relater access to treatment.

A study by Magura, et. al (2013) on assessment of the patient acceptability after the switch methadone syrup/capsules and the diversion/misuse liability of the methadone capsule, a study through an anonymous questionnaire was conducted between March 2011 and May 2012 in two methadone centres of the region at France. Results forty-one patients (men 75.6%) participated; with a median age of 37 years the median duration of syrup methadone maintenance therapy was 1 year majority of patients (80.5%) described side-effects due to the syrup formulation. Median daily dose at the switch to methadone capsules was 75 mg six patients described differences in the pharmacologic effect between the two formulations.

A study by Chou, et. al (2013) on examined long term improvement of quality of life amongst heroin users enrolled in MMT. Methods the sample contained 553 heroin dependent individuals from 4 hospitals in northern Taiwan who enrolled in MMT for an average of 184 days. Result after controlling for demographic and clinical

characteristics, there were statistically significant improvements in the psychological and environmental domains between baseline and 6 months. Significant improvements were found in psychological and social domains between baseline and 12 months. Research concluded that methadone maintenance treatment improves heroin users' long term quality of life in the psychological and social relationship domains.

This Stage I pilot study will employ a randomized, controlled, between groups design in which 70 opiate dependent patients seeking methadone detoxification has been randomized into one of two treatment conditions ACT opiate detoxification therapy or Drug Counselling. Both therapies will be delivered in the context of a 5-month methadone dose reduction based on a linear dosing strategy. Efficacy variables include at Texas. Stotts (2013), abstinence rates during and month after detoxification as assessed by regular urine screens retention of patients in treatment and patient satisfaction and treatment acceptability. Reduction in HIV and Hepatitis C risk behaviours and changes in psychosocial functioning (e.g, employment, and family, legal) will also be explored, along with mediators/moderators of the therapy.

2.4 Conceptual Framework

Copeland (1993) shows that several problems have impinged on the ability to generate conceptual models that explain drug use and problem behaviors among Latinas. Most conceptual models used to guide research efforts on drug abuse and other problem behaviors have been largely developed for men. These models assume that the same constructs explain both male and female behaviors. However, research

efforts with females have demonstrated many differences between male and female problem behaviors. In addition, there is consensus among researchers that drug use and other problem behaviors (e.g. criminal activity) cannot be understood solely on the basis of a single theory.

The proposed conceptual framework combines elements from several theoretical perspectives: the stress-vulnerability model the family interactional model and the social theory. These models complement one another by possible factors that explain drug use and problem behaviors. The stress-vulnerability model posits a clear relationship among stress exposure and increased likelihood of drug use and problem behaviors. There is considerable evidence suggesting that differences in stress exposure and lack of resources e.g institutional and social supports contribute to place women at risk of drug use.

The presence of vulnerabilities such as victimization and psychological distress is conceptualized is associated with drug use. For the proposed model, stress is defined broadly to include circumstances such as life stresses (e.g divorce, death of spouse) as well as role strains e.g burdens in parental, occupational, and housekeeping responsibilities as an important factor that, together with life and role strains childhood incorporating. Levels of stress exposure are also expected to vary across socio-demographic characteristics. Interpersonal, neighborhood, and institutional factors are seen as particularly significant to the stress-vulnerability relationship.

Stitzer, et. al (2000) argues that drug abuse treatments generally derive from a conceptual and theoretical definition of the problems to be treated and of their

underlying causes. Two primary schools of thought have been advanced to explain the clinical characteristics of substance dependence and have led to different treatment approaches. These contrasting views have been reviewed and discussed more fully by Marlatt and Gordon (43). The "disease model" postulates that substance-dependent individuals have a biological abnormality (possibly genetic) that predisposes them to seek and use chemical substances to excess. In this view, drug-seeking behavior is outside the control of the afflicted individual. The treatment approach that has derived from the disease model emphasizes admitting powerlessness over drugs or alcohol, accepting total abstinence as the goal of change, and adopting the norms and values of a new social group, the Alcoholics Anonymous (AA) self-help group, in order to achieve and sustain abstinence (20). The disease model is highly regarded by clinicians, but it has not been extensively researched and therefore currently lacks strong empirical support.

The "learning model," which flows mainly from an academic research tradition, rests on recent scientific evidence that drugs act as primary reinforces directly on brain reward systems and that orderly learning processes, both classical and operant, underlie the acquisition and maintenance of drug self-administration behavior. Treatments developed under a learning model acknowledge the chronic relapsing nature of dependence, as well as the important role of the physical and social environment in promoting relapse versus abstinence.

Furthermore, these treatments call for development of new behavioral strategies on the part of the substance abuser, as well as reorganization of the physical and social

environment, to counteract relapse tendencies engendered by learned drug associations. Consistent with its roots in academia, the behavioural approach has received considerable evaluation, much of which supports the effectiveness of this general approach to treatment. The purpose of the present chapter is to review recent developments in learning-based approaches to treatment of heroin, cocaine, and alcohol.

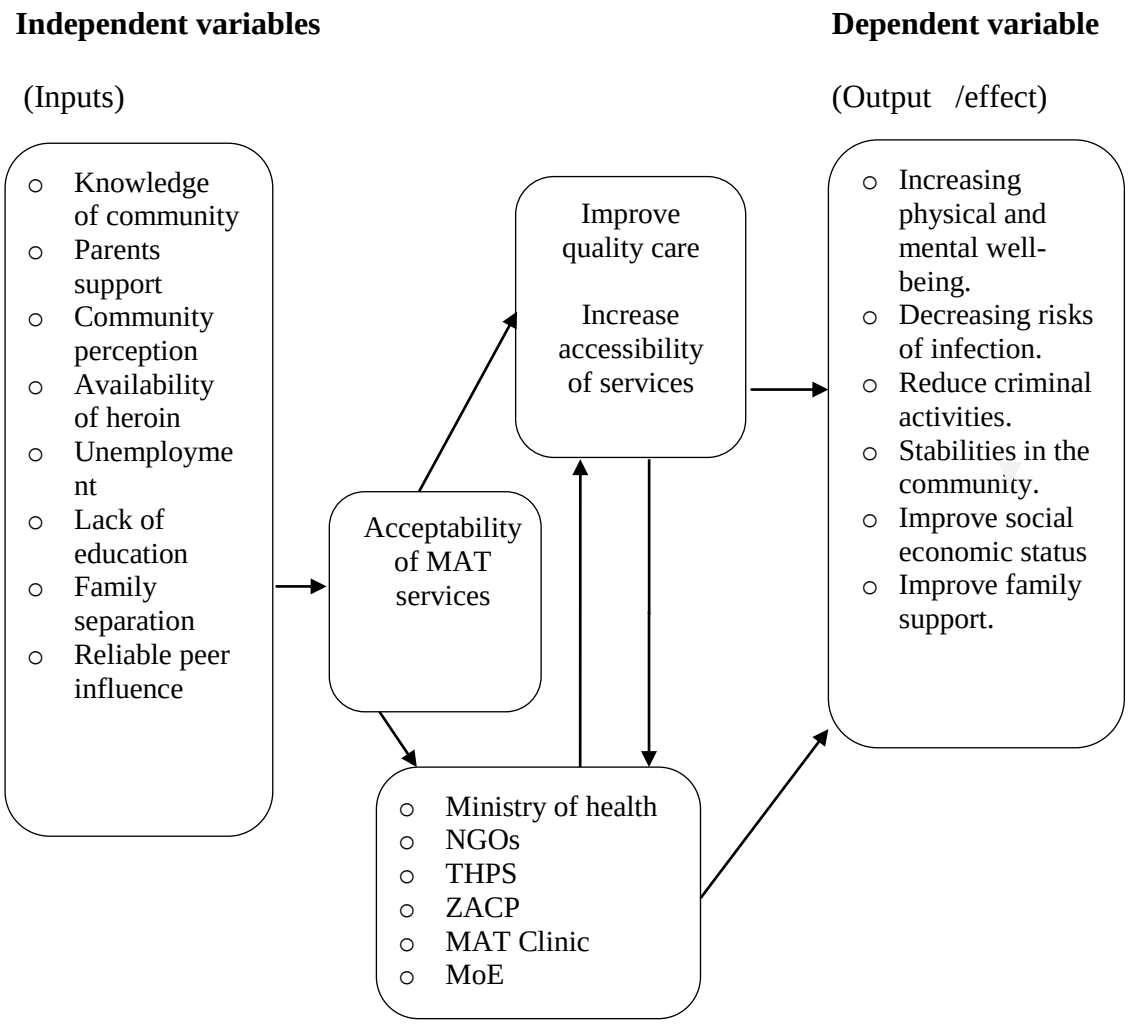

Figure 2.1: Conceptual Frame Work

Source: Developed by the Researcher, 2016

2.5 Policy Review

Methadone treatment for opioid dependency dates back to 1969, and since that time has come to be endorsed as an effective method of treatment. It is now available in every State and Territory except for the Northern Territory, and is provided in a diversity of treatment settings involving both the public and private sectors. A National Methadone Policy was adopted in 1993 which reflects a national position on the role of methadone, and provides core operational procedures to guide the provision of services. Despite agreement on these principles, there has been significant divergence between jurisdictions on the systems and structures by which services are delivered. This has led to a range of service settings and control mechanisms, and differing roles for the public and private sectors between States. In assessing the potential demand for methadone services, a review of a number of published studies was undertaken.

These studies suggest that the number of regular heroin users in Australia in 1993 was of the order of 60,000 persons, with up to twice as many again being irregular users. This represents an overall prevalence rate of 21 persons per 1,000 people aged between 15 and 44 years, up from 14.4 four years previously. However, the extent to which potential methadone clients are likely to enroll in methadone programs is uncertain, and will be determined as much by the availability of and access to programs, as it will by their attitudes to participation. Despite the fact that a greater proportion of regular heroin users now participate in methadone programs, the data suggest that demand has not been fully met even if a majority of heroin users are not interested in enrolling in methadone.

A comparison of methadone treatment services throughout Australia indicates that there are many areas of commonality between the States and Territories in regard to their philosophy of treatment. The principles of methadone maintenance treatment underpin all services, and reflect international experience in the use of maintenance therapy as an effective treatment for opioid dependence. The various State guidelines for treatment are similar in their content, and provide for comparable treatment regimens across State boundaries, (WHO, 2013).

2.6 Conclusion

Literature review help researcher to understand what others have found about the problem understudy. It involves systematically identification location and analysis of documents contains information related to research problem being investigated. This chapter presented different research finding on conceptual as well as statistical information about acceptance of methadone services from different sources in and out of Tanzania and Zanzibar.

The chapter provides a reviewed literature in relation to acceptance of Methadone services at Zanzibar Tanzania, which include things like attitudes, knowledge, source of information and community perception on those services. Finally looked on benefit that assist client after joining in the MAT clinic for services, also the conceptual frame, theoretical framework and others documentary literature review were also analysed in this chapter.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

Research Methodology is a way systematically established to solve a research problem which can also be taken as a science of studying how research is done scientifically. Though it, students study the various step that general adopted by a researcher in the studding the research problem along with the logic behind it. This chapter presents procedure that has been used in conducting the study. It consists of various sections such as the design of the study, geographical coverage area, study population, sample and sampling technique, sample size procedure and data collection technique on acceptance of methadone services at Mental hospital Zanzibar.

3.2 Research Design

Research design can be thought of as the structure of research it is glue that hold all of element in a research project to gather. A design is used to structure the research, to show how all of the major parts of the research project work to gather to address to try the central research questions. A research design can be regarded as an arrangement condition for collection and analysis of data in manner that aim to combine relevant purpose (Kothari, 2008).A research design is the overall plan or strategy for conducting the research. In this study a descriptive both qualitative and quantitative methods was used to maximize the research strength and minimize the limitations of each method.

3.3 Descriptive Design

Cross-sectional design is appropriate for this study because the aim is to make comparison to PWID before and after joint for MAT services the current situation and to obtain in depth information pertaining to acceptability of MAT services in the area of the study. The design is aimed to cross what exist with respect to study variables in order to answer the research questions. In relation to this study, using this design was allow the researcher to get reliable information to the respondents pertaining to the effective MAT services and make conclusive recommendations on improving the services so as to be effectively operated.

3.4 Qualitative Research Method

Qualitative research method involves the use of qualitative data such as interviews to investigate complex sensitive issues, feelings, insight and perceptions from study respondents toward the problem investigated and to enrich the results with people words and action. Kothari (2008) stated that qualitative method is usually focuses more on the experience of the participants and often conducted through interviews and diaries of participants. Patterns in the information are ascertained from reviewing the information rather than quantifying the information. Qualitative method can also be helpful in understanding the experience of research participants and getting a deeper look at the information collected through quantitative research. Kombo and Tromp (2006) refer quantitative methods as the process of assigning numerical events according to rules. It also involves the collection of numerical data in order to explain phenomenon. They state that quantitative method uses the empirical process to collect, analyze data and draw conclusion based on objectives and numerical data.

Data are quantified into numbers and patterns that allow interpretation. In this study quantitative method is used to collect data from the statistical records which can explain how many clients engaged for services in MAT clinic in past one year's period and data will be presented in numerical form.

3.5 Quantitative Research Method

Kombo and Tromp (2006) refer quantitative methods as the process of assigning numerical events according to rules. It also involves the collection of numerical data in order to explain phenomenon. They state that quantitative method uses the empirical process to collect, analyze data and draw conclusion based on objectives and numerical data. Data are quantified into numbers and patterns that allow interpretation. In this study, quantitative data were collected through the use of questionnaires.

3.6 Study Area

The study was be carried out at Kidongo chekundu Mental Hospital at urban district in Zanzibar, this district is among the 5 district of Zanzibar. The study site is purposely selected because the urban district have a high number of heroin users rather others area. Kidongo chekundu Mental Hospital located at Kidongo chekundu ward, whereby to the north it is bordered by Kwaboko street, to the south it is bordered by Meya street, to the East bordered by Magomeni street and to the West it is bordered by Kwahani street. Kidongo chekundu was purposely selected because the hospital is situated at the centre of Zanzibar town where a large number of people seek consultations, treatment and mental services.

Also, it is the only hospital in Zanzibar with the highest incidence of mental cases compared with other District and cottage hospitals in Zanzibar. Another reason which motivates the researcher to select this area is that the hospital possesses a large number of health care professionals of psychiatric problems, and it is the hospital which receives a large number of patients who come to seek for health care services.

3.7 Study Population

A population is a group of individual object or items from which samples taken for measurement (for example population of students). Population refers to any entire to any group of person or element that have at least one thing in common for instance, students at Kenyatta University. Population also refers to the lager group from which the sample taken (Kisuli, et. al., 2006). The sample populations were all composed of males and female respondents of PWID those who attended clinics at methadone for services and treatments and stakeholders as a beneficiaries and managerial officials from Ministry of health Zanzibar and community members that are a part of parents, care taker and who providing support in the community.

In this respect, MAT clinic is comprised of seven unities and the sample comprised of healthcare professionals, supporting staff working in the clinic, patients who are attending in the clinic for services and treatment and managerial officials from NGOs, THPS and community members from field. The characteristics of health care professionals include Assistant Medical Officers, Nurses, Medical Laboratory and Social Worker. Patients are also included in the population as they were the end user of hospital services.

3.8 Sampling Procedure

Sample is a finite part of a statistical population whose properties are studied to gain information about the whole. Yin (1994) said that, sampling is the procedure a researcher uses together people, place or things to study. Kothari (2008) defined sample is a segment of the population selected to represent the population as a whole. In this study, sample is needed by a researcher to draw conclusion about large groups. Ideally, the sample should be representative and allow the researcher to make accurate estimates of the thoughts and behaviour of the larger population. This method used to select the number of respondents from the group of client that attended clinic for methadone services.

3.9 Stratified Sampling

Babbie (1999) state that stratified random sampling involves dividing your population into homogeneous sub group and then taking a simple random sample in each sub group. The sample is selected in such away as to ensure that certain sub group in the population are represented in the sample in population to their number in the population. This method is appropriate when the researcher is interested in issues related to gender, race or age disparities in the population. Michael (2007) state that stratified random sampling requires the separation of the defined target population into different groups called strata, and the selecting of samples from each stratum. This is useful as the study had the different groups of professionals skewed within the targeted population. Stratified sampling gave the researcher an opportunity to study each stratum and make relative comparison between the strata, and made estimate for the population and got representative from each stratum.

3.10 Sample Size

The sample size of this study was compose of 50 respondents composed of both male and female, 25 PWID who use MAT services, 15 community members, and 10 beneficiaries. The distribution of sampe size is indicated in the table below:

Table 3.1: Sample Distribution and Size

Respondents	Numbers of respondents
Ministry of health	2
Employees in the programme	1
Employers	1
MAT staff	2
ZYF	2
ZAYDESA	1
THPS	1
Community member	15
Clients	25
Total numbers of respondents	**50**

Source: Researcher's Analysis, 2016

3.11 Data Collection Techniques

Data collections in this study deployed several methods of data collections. Babbie (1999), discussed the need of using various data collection techniques in research, as to provide more comprehensive understanding of the topic under study and reduce chance of bias. Therefore, various combinations of data collection techniques used to increase the reliability of the study findings.

3.10.1 Interviews

Interviews are either that of face to face between the researcher and respondents or interviews and interviewees or conversion through the phones aimed at collecting the information required the study. The effectiveness on interview depends on how the questing has been prepaid and the ability of the researcher in using this method.

Interview is defined as a data collection technique that involves oral questioning of respondents either individually or group (Verkervisser, et. al., 2003). In this study semi structured interview was used to obtain information that cannot be directly observed. Interviewer enabled to probe more information, observe and record reactions and behaviour from respondents pertaining to the problem studied. Interview was used together information from community members, PWID admitted to MAT clinic for services. This method allowed more freedom to respondents to express their feelings, opinions, and perceptions toward the problem investigated. The interviewer can probe more information from respondents as required, observe and record their reactions and behaviours.

3.10.2 Questionnaires

Questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always the case as the questionnaires are invented to gate picture what respondents have (Adam, 2003). White (2002) explained that, questionnaires are regarded as a series of questions each one providing number of alternative answers from which the respondents can choose. Normally there are structured and semi structured Questionnaires (Adam, 2003). In this study we used semi structured questionnaires through self-administered.

Self-administered questionnaire is a data collection tool in which written questions are presented that to answer by the respondents in written form (Verkervisser et al,

2003). The self-administered questionnaires were diploid to together information from literate population of healthcare professionals. In this study, a hand delivery questionnaire to health care professionals has been done and collected later. Close and open ended questions were used. Self-administered questionnaires have an advantage of easy analysis when processed by most of statistical software. Written questionnaires reduce interviewer bias because there is uniform question presentation. The application of this data collection technique was that, the study respondents were able to read and write, questionnaires were easily mailed to representative sample to be completed with greater confidentiality and mostly used to representatives' sample of individuals who have agreed in advance to participate.

3.10.3 Observation

Observation method requires that the researcher must be present in the field. This means that in order for the observation to take present the observer must be present when the even happens. Data is obtained by the help of the sense organ i.e by seeing, hearing, smelling, testing and touching. To make observation successful you have to adhere to some conditions **(**White, 2002**).** Such conditions include for example, accurate reporting and description of the topic under investigation, free access to all aspects of the investigation. Observation method was used to collect data during MAT services provision in the study area.

3.11 Types of Data

3.11.1 Primary Data

Refers to the information collected from the field by the researchers and /or their

researcher assistance. They are named primary date because they are freshly collected by the researches and/ their research assistance and it has not been manipulated by others or used for other purpose beyond the studies being undertaken. In most cases researchers use different method /techniques for collecting the data require and that no single method is best than the other. Using different methods/technique enabled researchers to collect more reliable and valid data all in all with purpose of testing the hypothesis or providing answer to research questions. Primary data are collected through the following methods which are commonly used in the less developed countries. Is a data observe or collect directly from first-hand or is a data collect direct from field. Research trials and surveys both generate primary, or original, data. This information can be qualitative including feelings or opinions expressed in response to questions quantitative or mathematical such opinion, view, ideals or information was conduct from direct to the parents/community members from field.

3.11.2 Secondary Data

Secondary data are data obtained from literature sources or data collected by other people for some other purpose. Thus secondary data provide second hand information and include both row data and published ones (Saunders, et. al, 2009). Some of this data collected and stored by organization including details on the payroll, income statement and copies of letters and minutes of meeting. Newspapers, joiners and textbooks are also sources of secondary data Documentary review is one among the essential technique of the data collection in this study, that been used for the sake of getting secondary data from target population. This data have been

obtained through Ministry of health, documents, reports and records to investigate in detail the nature and trend of the problem. Also documents, reports, journals, manual, presentation papers, books and NGOs reports and data base have been reviewed to permit examination recognize, how and manner in which dispute resolution mechanism are being worked in MAT clinic . The crude data has analyzed to get clear picture on the real situation of an acceptability of MAT services at MAT clinic. Documentary review is one of the data collection methods that used in this study for the sake of getting secondary data from hospital records. Secondary data was be collected through documentary reviewed, this is one of the data collection methods that used in this study for the sake of getting secondary data from respondent's records and data base information. The crude data were analyzed to get clear picture on acceptability of methadone services at Zanzibar.

3.12 Data Analysis

Data analysis refers to computation of certain measures along with searching for pattern on relationship that exist among the data group Kothari (2008). Thus the process of analysis aim to detecting whether our observation support the hypothesis would formulated before going into the field to collect the information, or reject them. At the stage of research design care must given to the analysis design to ensure that an appropriate analysis technique is though out well invoice.(Adam, 2003).The crude data was analysed to get clear picture on the acceptability of MAT services at Zanzibar. Data analysis is a process of inspecting, cleaning, transforming and modelling data with the goal of highlighting useful information, suggesting conclusion and support decision making. Data was be obtaining from the field has

been checking for consistency and validity. That data obtaining through interview and documentary reviewed was processed and classified by the help of the most common software of SPSS programme.

3.13 Data Processing

Data processing means that the data should be in its most useful form, well presented and informative. Computer data processing is any process that uses a computer program to enter data and summarize, analyze or otherwise convert data into usable information. It involves recording, analyzing, sorting, summarizing, calculating, disseminating and storing of data within the context of quantitative research, the data processing steps refers to the process of presenting and interpreting your data. The steps involved in data processing for quantitative data are editing coding, and analysis.

3.14 Ethical Considerations

Any research done can make others happy or can inflict harm to others therefore a number of ethical issues have to be reviewed or taken into consideration. In this study, the issue of ethical consideration was highly considered, confidentiality and anonymity of respondents was considers as they were neither asking their names nor their really identification to be revealed to anybody. The explanation was given to all respondents regarding to the purpose and benefit of the study. Consent for participating in the study was obtained from the respondents and the confidentiality of the information and right to withdraw from the study was ensured. On the logical part, the researcher asked for the permission to conduct the research from the OUT

who prepared official correspondences to seek research permit at Zanzibar. On the logical part, the researcher asked for the permission to conduct the research from the Open University of Tanzania who prepared official correspondences to seek research permit at Mnazi Mmoja referral hospital in Zanzibar.

3.15 Conclusions

This chapter deals with research methodology that represents procedure that has been used in conducting the study. This is organized under the following manner; research design, research area, study population, sample, sample procedures, sample size, data collection techniques, data analysis, data presentation ,ethical consideration and limitation of the study. These methods helped the researcher to smoothly collect, process and analyse data of this study.

CHAPTER FOUR

4.0 PRESENTATION ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents and analyses the findings as an attempt to answer the questions raised in chapter one. These findings are presented in sequence according to the specific objectives of the study. The researcher has relied on data collection together with the reports based on specific information concerned with assessment on acceptability of methadone services to verify validity of the research questions.

The chapter further presents demographic characteristics of respondents, explores respondents knowledge of Methadone and their perceptions on the treatment.However, for the purpose of a successful achievement of the pre-set objectives the researcher conducted interviews questionnaires to the main, community and PWID, and administered questionnaire for stakeholders which have the same value in gathering data where interims known as social partners formed in tripartite form i.e. MoH, MAT staff, NGOs e.g. ZYF, ZAYEDESA, ZACP and THPS that employers and employee in the programme that corporative and assists the services by one or other hands for deliveries that services.

To that end, data were gathered data from 50 respondents all of them interviewed and other completed the equal to 100%.This study used questionnaires and conducted interview by using the same question which has the same value in gathering data in which comprised sections as has been directed by research objectives. These

questionnaires were distributed to the entire aforementioned selected respondents with the total number of 50 respondents. However the number of the questionnaires which were collected was 50respondents who were equal to 100% of the total number.

4.2 Characteristics of Respondents

The researcher found it useful to identify the personal information of the respondents in terms of their age, level of education, positions of the employees at the workplace, training and experience of staff on MAT matter and dispute, sectors of working in which employers and employees fall, and nature of the disputes. These characteristics are separately presented below.

4.2.1 Age of Respondents

This study examined gender of respondents to determine which age category accepted methadone in urban district in Zanzibar. The results are shown in the Figure 4.1 below.

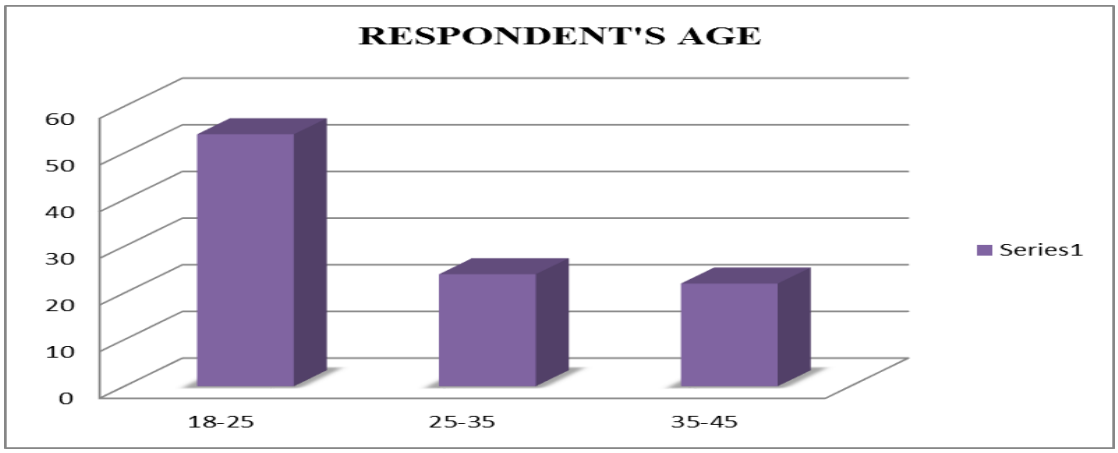

Figure 4.1: Distribution of Respondents by Age Group

Source: Data collected and computed by the researcher, 2016

Figure 4.1 shows that 27 (54%) respondents were aged between 18 and 25 years. 12 (24%) respondents were aged between 25 and 35 years, while 11 (22%) were aged between 35 and 45 years. Age of the respondents was important variable in this study because it has direct influence on the use of substance in many countries and that age influences the productivity of a given country. Similarly, findings from to NIDA (2011) show that substance abuse and mental health services23.5 million persons aged of 12 or older needed treatment for an illicit drug or alcohol abuse problem and 9.3 % of persons aged 12 or older of these, only 2.6 million 11.2% of those who needed treatment received it at a specialty facility for example MAT clinic.

Similarly, Brands (2013) showed a significant increase in older patients between 1996 and 2003 ($p < 0.001$). During that period, the percentage of patients aged 50 and over rose almost tenfold, while the proportion of patients aged fewer than 30 dropped significantly from 52.8% to 12.3%. The average methadone dose ($p < 0.001$) and the 1-year retention rate ($p < 0.001$) also increased significantly.

Furthermore, Brands shows that in 1996, 74.5% of the population reported using heroin during the preceding month while in 2003, 47.1% reported past-month heroin use. In contrast, the prevalence of self-reported cocaine use in the past month rose significantly from 36.5% in 1996 to 49.6% in 2003. Data from 1996 and 2003 show that patients aged 40 and older tended to report previous-month heroin use less often than younger patients (1996: 64.2 vs 75.4%, Chi = 4.08, $p = 0.043$; 2003: 42.2 vs 50.4%, Chi = 3.87, $p = 0.049$) while this was not the case for past-month cocaine use which did not differ according to age.

4.2.2 Education Level of Respondents

This study examined gender of respondents to determine which age category accepted methadone in urban district in Zanzibar. The results are shown in the Figure 4:2below.

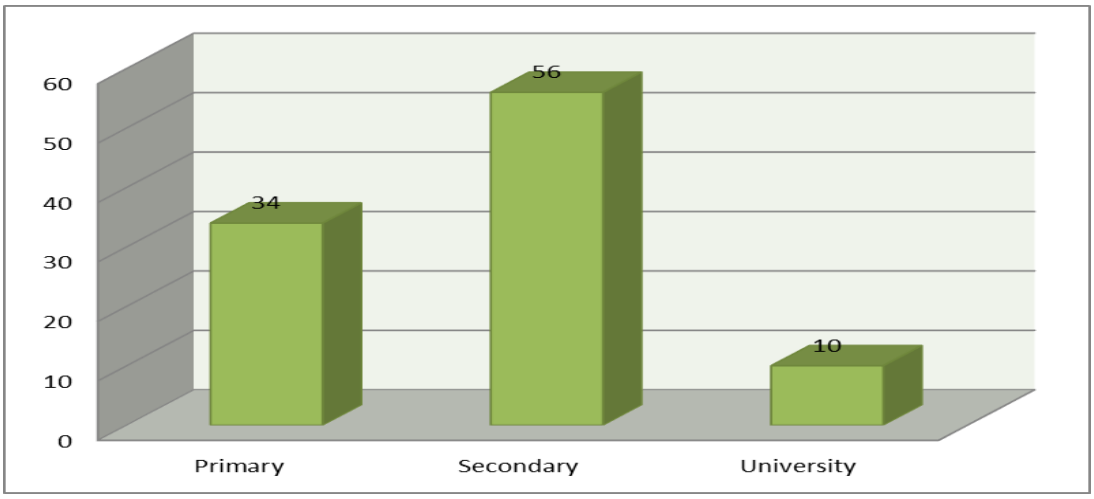

Figure 4.2: Education Level of the Respondents

Source: Data Collected and Computed by the Researcher, 2016

Figure 4.2 shows that 17 (34%) respondents completed primary education. 28 (56%) respondents had completed secondary education, while 5 (10%) had completed higher education. Level of education of the client influenced people to get engaged into the IDU and leading to joblessness among majority of the youth. Also, results have shown that other people dropped from school because of being involved into substance abuse.

4.2.3 Marital Status of the Respondents

This study examined marital status of respondents to determine which marital status category accepted methadone in urban district in Zanzibar. The results are shown in the Figure 4:3 below.

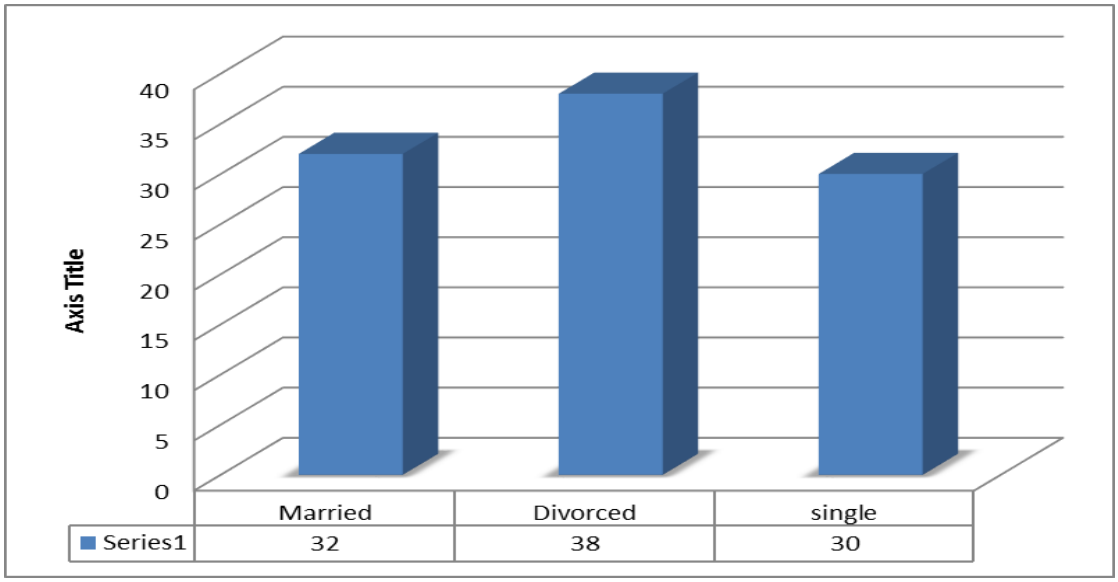

Figure 4.3: Marital Status of the Respondents

Source: Data Collected and Computed by the Researcher, 2016

Figure 4.3 shows that 19 (38%) of respondents were divorced. 16 (32%) respondents were married, while 15 (30%) respondents were single. This study has shown that many clients faced the problem of forced divorced and family separation due to their engagement into the substance abuse. Also, the study established that marriage helped the clients to comply with the services. In support of this, Liu (2013) has shown that marital status, employment, gender, methadone dosage have been shown internationally to influence clients' decision to enter into treatment, medical compliance and better treatment outcomes.

4.2.4 Respondents' Occupation

This study examined occupation of respondents to determine which category accepted methadone in urban district in Zanzibar. The results are shown in the Figure 4:4 below

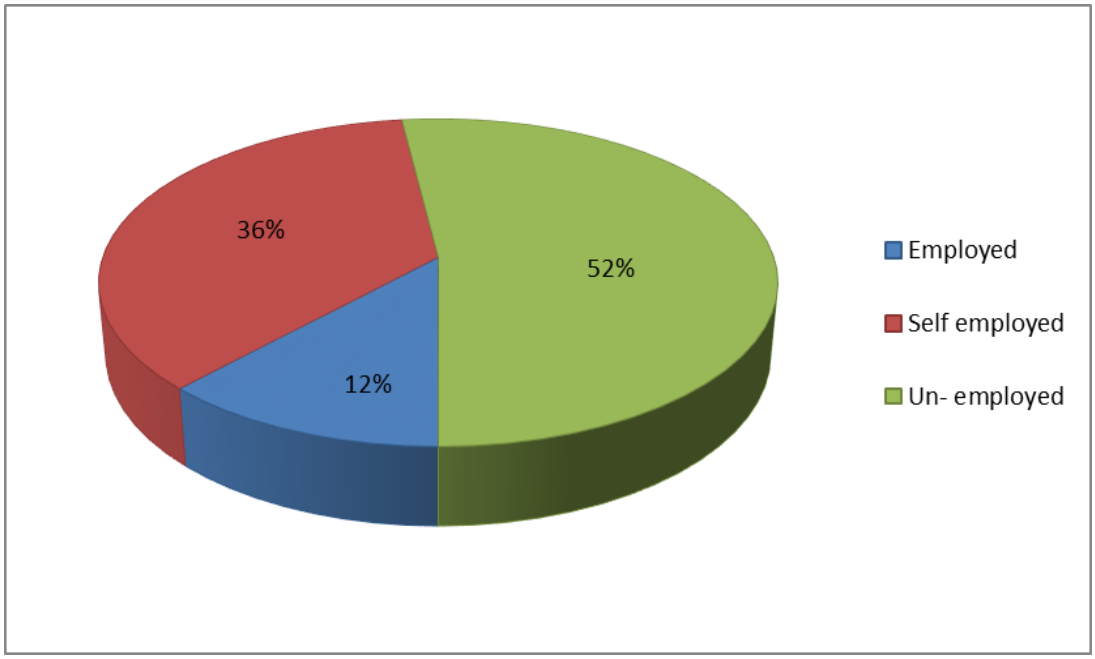

Figure 4.4: Distribution of Study Respondent's Occupation

Source: Data Collected and Computed by the Researcher, 2016

Figure 4.4 shows that 26 (52%) respondents were unemployed. 18 (36%) respondents were self-employed, while 6 (12%) were employed. The findings shows that majority of the clients lost their job due to their engagement in the use of substance which made them to lose their jobs and become unemployed and dependent. But Powers and Anglin (1992) in a study of 933 heroin addicts in methadone maintenance treatment have shown that rates of employment (and marriage) increased during treatment period. The opposite finding on 95 chronic opioid users who spent at least 1 cumulative year in methadone maintenance treatment were compared with 77 chronic opioid users who spent less than 1 cumulative year in methadone maintenance treatment. Those who were on methadone maintenance treatment for more than 1 year had a higher average time

employed (mean of 42 months) than those who were in treatment for less than 1 year (mean of 35 months).

4.3 Respondents' Knowledge about MAT Services

This study examined knowledge of respondents to determine which category accepted methadone in urban district in Zanzibar. The results are shown in the Figure 5 below.

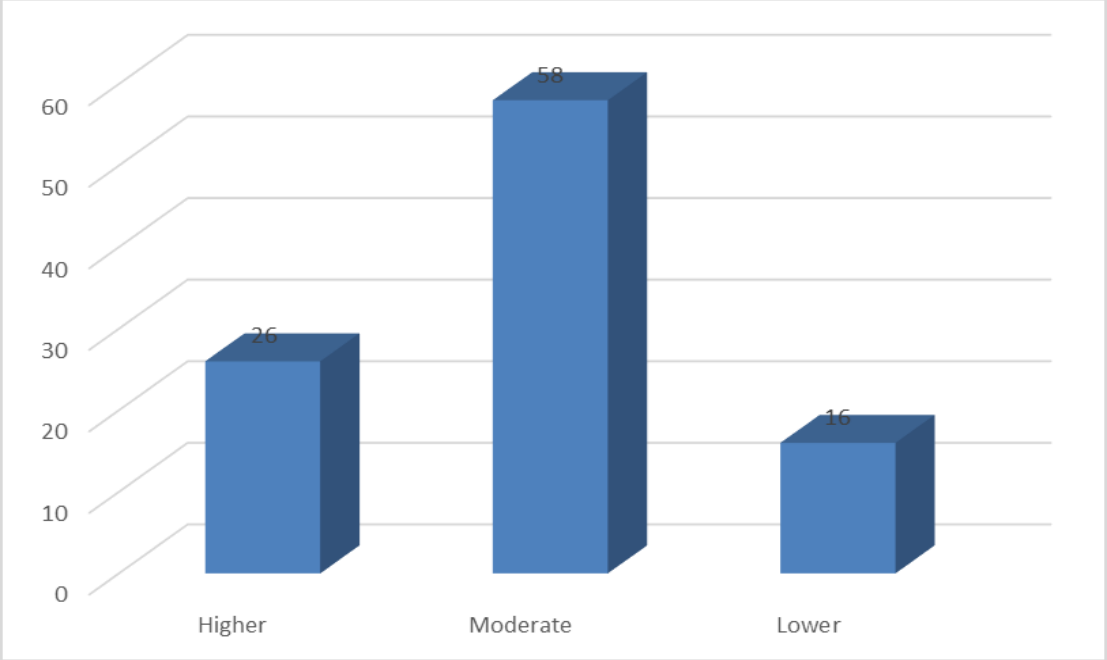

Figure 4.5: Respondents' knowledge of MAT Services

Source: Data Collected and Computed by the Researcher, 2016

Figure 4.5 shows that 29 (58%) respondents had moderate understanding of MAT. 13 (26%) respondents had higher knowledge about MAT, while 8 (16%) respondents had lower knowledge of MAT. The results show that clients 'knowledge of MAT services influenced provision of quality care. The study further discovered that developing targeted education about MMT for people through Compulsory

Detoxification Centres could help improve access to accurate and evidence-based health and treatment information. Existence of compulsory detoxification centres helps service providers to understand and adjust services to the needs and interests of the target population in the future (Liu, 2013).

Also Liu, et al (2013) showed that **s**everal patients noticed physical reactions and expressed concern about the side effects of methadone reflecting a lack of knowledge of methadone among MMT patient. In connection to that, one patient had this to say:

> I only started methadone treatment a bit more than two months ago, I'm just wondering if it has any influence on my physical health. I feel a burning sensation inside after taking it.

In connection to that, respondents' knowledge of MAT services made it easier for them to explain the different benefits they obtained through MAT services. Some argued that MAT services helped them to change their behaviour. They further argued that most of them resumed their marriages, stopped being substance users, regained the support from their families, they were re-employed and improved their health. Moreover, the study showed that some started living with their parents. Similar findings were supported by NIDA (2011) which found that MMT reduced mortality and the median death rate of opiate-dependent individuals in MMT is 30% of the rate of those not in MMT.

Possible reduction in sexual risk behaviors, although evidence on this point is conflicting, reduced criminal activity improved family stability and employment potential and improved pregnancy outcomes. Using commonly accepted criteria for medical interventions, several studies have also shown that MMT is extremely cost-

effective. NIDA (2014) agreed with me by said MMreduces or eliminates the use of heroin, reduces the death rates and criminality associated with heroin use, and allows patients to improve their health and social productivity. In addition, enrolment in methadone maintenance has the potential to reduce the transmission of infectious diseases associated with heroin injection, such as hepatitis and HIV.

Similarly, McKeganey (2006) found that Methadone was used for recovery from heroin addiction, has a success rate of more than 3.4%, the study observed a group of 695 heroin addicts who started taking treatment in 2001 at 33 different addiction centres across Scotland (Clarke, et al, 2001). Despite these interactions, methadone use can improve adherence in HIV-positive patients, resulting in better outcomes of antiretroviral therapy in terms of viral load suppression and increases in CD4 cell counts. It may also reduce new HIV infections, not only by reducing injection behaviour, but also by reducing the number of sexual partners a person has and reducing the use of sex in exchange for drugs or money.

Same findings were reported by Batten, et al (1993) who argued that, an estimation of 117,000 patients received methadone treatment. This figure is calculated from client counts reported to NDATUS in 1991, adjusted for the 82 % response rate to the survey. A 1990 survey estimated the national total at 112,943 patients receiving methadone, of which approximately 92% of patients were considered to be in maintenance and 8% in detoxification. The result said that participants identified major problems in providing services in MMT clinics including lack of resources, professional training, and institutional support. Difficulties in pursuit of career,

concern for personal safety, low income, heavy working load, and poor opinion of MMT by Chinese society often contributed to greater stress and burnout among the service providers. MMT programs in China desperately need additional resource allocation and institutional support for the current and perhaps future expansion of the programs. The service providers are in urgent need of professional training to improve the quality of care they can offer MMT services.

4.3.1 Respondents' Sources of Information about MAT Services

This study examined sources of information of the respondents about MAT services in urban district in Zanzibar. The results are shown in the Figure 4:6 below.

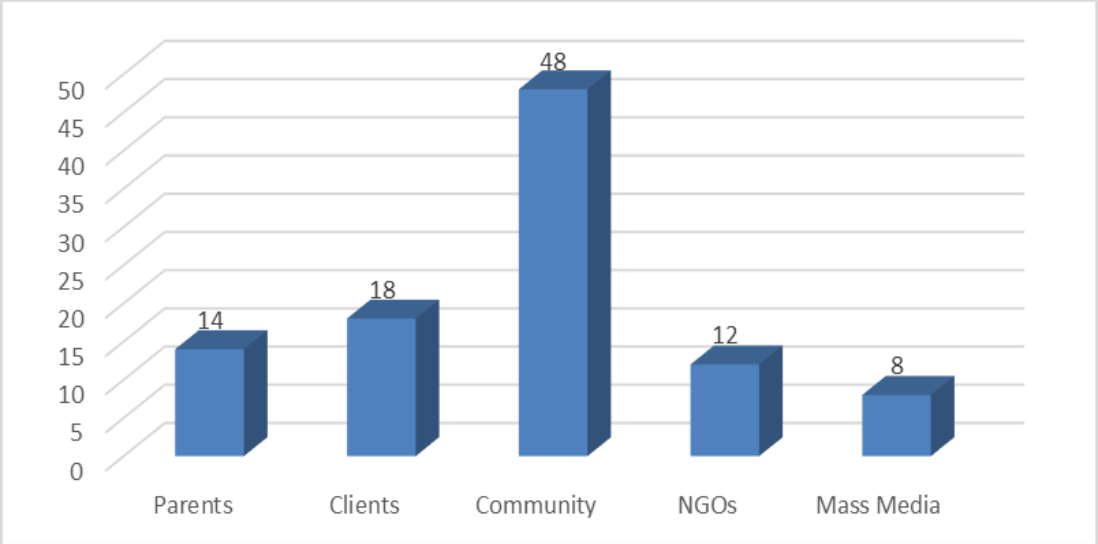

Figure 4.6: Respondents' Responses on Sources of Information about MAT Services

Source: Data Collected and Computed by the Researcher, 2016

Figure 4.6 shows that 24 (48%) respondents reported that they obtained information about MAT from community members. 9 (18%) respondents said that their source of

information about MAT services from clients. 7 (14%) respondents mentioned parents. 6 (12%) respondents mentioned Non-Governmental Organisations, while 4 (8%) mentioned mass media as their source of information about MAT services. The study found that due to globalization, the world has become a single village. Therefore the accessibility of information becomes easier to everybody.

4.3.2 Respondents' Acceptance on MAT Services

This study examined acceptance of the respondents about MAT services in urban district in Zanzibar. The results are shown in the Figure 4:7 below.

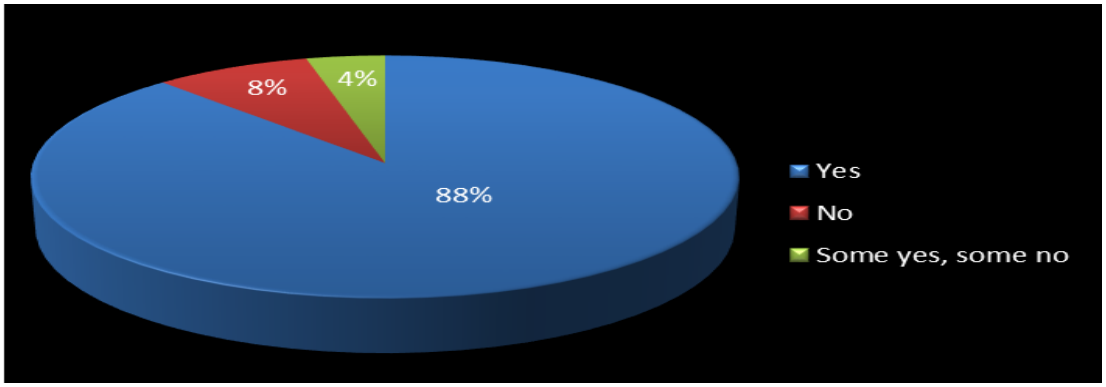

Figure 4.7: Respondents' Acceptance on MAT Services

Figure 4.7 shows that 88% of the clients agreed that MAT services were accepted in the community and only 8% of respondent said that this service not acceptable. This agrees with Stotts, et al (2010) who found that acceptance and commitment therapy, opiate dependence, methadone detoxification to date, methadone maintenance (MM) is the treatment of choice for opiate dependence. Patients typically enter MM treatment after heroin or other opiate dependence is well-established, with the average length of stay at any particular clinic being 1-2years.

Deck (2009), supports MMT services though a modest number of clinics more than 10,000 clients in each state were followed for 3 years after an initial admission for opiate use between 1993 and 2000. Medicaid clients in both states had far greater access to MMT than their non-medical counterparts, controlling for differences in client characteristics using propensity scores. MMT programs have been widely accepted in China by authorities as an effective therapeutic approach to treat opioid dependence and a prevention strategy to reduce the transmission of various infection diseases (Liu, 2013).

4.4 Community Perceptions Towards MAT Services

This study further examined community perceptions towards MAT services in urban district in Zanzibar. The results are shown in the Figure 4.8 below.

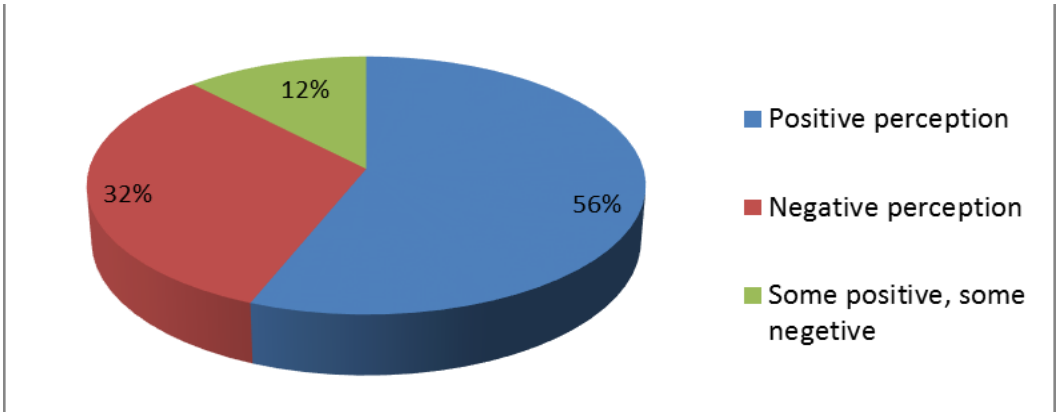

Figure 4.8: Community Perception on MAT Services

Source: Data Collected and Computed by the Researcher, 2016

Figure 4.8 shows that 28 (56%) respondents had positive perceptions towards MAT services. 16 (32%) respondents had negative perceptions, while 6 (12%) respondents had mixed perceptions towards MAT services. In this regard, the study found that

parents of the clients perceived MMT services in a positive way because it assisted their children to be treated and change their behaviour. Magura, et. al (2013) argued that clients perceive MAT as life-changing step in the right direction. Though a difficult decision to make, once drug users decide to seek the help of a methadone treatment program, his or her life will be changed for the good. This means that just by choosing methadone maintenance treatment client already have a better chance at recovery than if were to choose counselling and therapy alone.

Also (Liu 2013) support my findings by stating that majority of MMT patients reported to have "positive" attitudes towards MMT, including believing that entering the MMT programme could help them with "living a normal life" (80.2%), "craving attenuation" (87.4%), "reducing illegal drug consumption (91.9%), and "preventing HCV and HIV/AIDS" (62.2%). In contrast, a lower percentage of participants at the Compulsory Detoxification Centre believed that MMT could help them with "living a normal life" (57.9%), "craving attenuation" (69.9%), "reducing consumption of illegal drugs (62.5%), and "preventing HCV/HIV/AIDS" (45.9%).

However, CAMC (2012) showed once on methadone one can catch a cold or any other illness just like anyone else, but you're much less prone to illness than illicit drug users. People on methadone are less likely to use needles, and more likely to eat well and take good care of themselves. When you're on methadone you won't wake up sick every morning. If anything, methadone will help you to get well. More over long term use of methadone damages the liver, the thyroid gland and the memory.

4.5 Conclusion

Chapter four has discovered that MAT services have high acceptance in the study area as it helps the addicts to recover and continuo with their daily day to day. Basically, the study has found out that to accept MAT services is not something easy but when someone starts the therapies normally his or life changes to better condition. It is very important therefore to increase and enhance MAT services so that more and more addicts are served.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusion and recommendations of the results from chapter four as related to the views of scholars in the literature reviews and in the background of the study. The findings and discussion has been given in chapter four which have answered the research questions. The conclusions reached, are based on the discussion of the findings. The recommendations are made from the conclusion. The areas for further research have been explored emanating from the questions in the entire study.

5.2 Summary

The findings of the study indicate that respondents' characteristics had close relationship with the acceptance on Methadone Maintenance therapy in urban district in Zanzibar. These included age and education background of the clients, young age and education back ground of the clients are the most leading to engage in the Inject able drugs users compared with older client, the same time the findings shows that those clients who are abroad are the most productive age group. Also, majority of clients experienced forced divorce and separation from their family members due to the use of substances. It has been difficult to obtain extra information from other clinics because Zanzibar has only one clinic that delivers MAT services.

The first specific objective explored respondents' knowledge about MAT services in urban district in Zanzibar. Results have shown that though the majority of

respondents in urban district had moderate knowledge about MAT services, they were aware of the benefits of the services. These included helping them to change their behaviour, resuming their marriages, stop being substance users, regaining the support from their families, being re-employed and improving their health.

The second specific objective analyzed the main sources of information about MAT services in urban district in Zanzibar. Results have shown that the main source of information was the community. Other sources included parents, clients, NGOs and mass media. This therefore showed that majority of people in the district accepted methadone services which were provided at Zanzibar methadone clinic.

The third specific objective assessed the community perceptions towards MAT services in urban district in Zanzibar. The results have shown that many people had positive perceptions towards methadone services in urban district, hence acceptability of Methadone services.

5.3 Conclusions

Based on the foregoing summary, this study concluded that:

i) Many people in urban district in Zanzibar were well aware of the Methadone services. This has been proved by the explanations given by respondents on the benefits they received from methadone services but have lower knowledge about these services.

ii) The major source of information about Methadone services in urban district in Zanzibar was the community member. Others included parents, clients, NGOs as well as few people gate information from mass media.

iii) Many people shows acceptance on Methadone services that were offered at urban district at Methadone clinic Zanzibar.

5.4 Recommendations

Methadone is promoted globally as an ‘essential medicine’ as part of ‘evidence-based’ interventions for treating heroin addiction and preventing HIV is witnessing a growing contribution to national HIV incidence linked to drug injecting, with estimates of HIV prevalence among people who inject drugs (PWID) as high concentration on Treatment for heroin addiction in Zanzibar. Injection drug users (IDUs) are often at a high risk for HIV and HCV infections and much social issue. Zanzibar faces many challenges, such as low enrolment according to the target, high school dropout rates, dependence, lack of family support, relapsing and lower knowledge of community about methadone services.

From the findings of this study the following are recommended:

At National Level: The Government of SMZ through Ministry of Health and other government departments and agencies should establish strategies to control the abuse of substances in order to save lives of those who become drug addicted and improve their living conditions. Also, it should provide training to the community members and clients on methadone issues and family support.

At District Level: The district council should continuously conduct advocacy to the influential people in the community including community and religious leaders and others to assists in creating awareness on methadone services and provide support to IDUS and assist them with income generating activities.

5.5 Need for Further Study

Results of this study might not be generalized and concluded on the acceptability of methadone services in the country. There is a need for further research to assess the impact of methadone treatment among client attending clinic for methadone treatment.

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APPENDICES

Appendix 'A': Interview preamble

Interview guide for Assessment of the acceptability methadone services at urban district Zanzibar for PWID beneficiaries and community at Zanzibar town in.

You are asked to participate in this research conducted by Khamis Bhai Ibrahim currently enrolled for Master Degree in Social Work 2016.

The results of this study will contribute to my thesis/dissertation which will be submitted in partial fulfilment of the requirements for the attainment of Master of Social Work as well as will contribute to improve the work of Health social work in Zanzibar.

You have been selected as a possible participant in this study in your capacity as MAT provider and employee in the health sector in Zanzibar.

1. Purpose of the study: The purpose of the research is to assessment the acceptability of MAT services at Zanzibar

2. Procedure: If you volunteer to participate in this study, we would ask you to answer the questions/statements honestly and to the best of your knowledge.

3. Potential Risks and Discomforts: Participation in this study does not predispose anyone to any risk, discomfort or inconvenience except for the time that it takes to complete the questionnaire.

4. Potential benefits to Subjects and/or to Society: The potential benefit of this study is to improve the MAT services especial to that client who diagnoses and have any infection for providing one roof services

5. Confidentiality: Any information that is obtained in connection with this study and that can be identified with you will remain confidential, will be uses solely and only for purposes of knowledge generation and will be disclose only with your permission or as required by Programe. As a matter of confidentiality, you will not be asked to indicate your personal or similar identification details. the questionnaires will also be secured in the Department of MAT

8. Identification of Researcher: If you have any questions or concerns about the research, please feel free to contact:

Khamis Bhai Ibrahim, Researcher on NO: 0777484765 – Email secnebhai@hotmail.com.

Interview Questions

The following are Questions intended to get data related to assessment of the acceptability

methadone services at urban district Zanzibar for PWID 2016.

General Details

Sex.....

No……

Strict……

Please (√) tick in the box that appropriate describe your

1. Age of respondents

Below 30	31 – 40	41 – 50	51 and above

2. What is your education status?

Not attended to school	Primary education	Secondary education	Higher Secondary education	Other specify

3. What is your occupation?

Employment	Unemployment	Self-employment	House wife	Other specify

4. What is you marital status?

Marriage	Divorced	Single	Others/ separation

5. Do you understand the meaning of MAT services?

Yes ☐ No ☐ If yes explain them

High	Knowledge	☐
Moderate	Knowledge	☐
Lower	Knowledge	☐

6. Where did you get the information about MAT services?

Parents	Media	Community	Others

7. Do you know any kind of services that are provided by MAT clinic to IDUS?

Yes ☐ No ☐ if yes list them

1
2
3

8. Are the services provided by MAT effective? No ☐

Yes ☐

If yes how.....

9. How PWID clients are admitted to MAT clinic?

……

10. How those services can be provided?

……...

11. Those service is it acceptance to the community

Yes ☐ No ☐ if yes how?

……

12. That procedure is it effective to the clients?

Yes ☐ No ☐ if yes how?

1
2

13. What are the challenges faced by addicted drug users who are not engaged in MAT services?

.....

……

14. What are the challenges faces clients within MAT services?

……

.....

15. What are the community perceptions on MAT services?

……..……

…….……

16. What are your recommendations on MAT services?

……

……

THANK YOU VERY MUCH

Appendix 'B'

Interview questions for community members

Questionnaire for assessment of the acceptability methadone services at urban district Zanzibar for community 2016.

General details

Sex.....

No……

Street……

Please (√) tick the box the appropriate describe your

1. Age

Below 30	31 – 40	41 – 50	51 and above

2. What is your education status?

No attended to school	Primary education	Secondary education	Higher Sec education	Other specify

3. What is your relationship with the client?

Wife	Husband	Mother	Father	Other specify

4. Do you understand the meaning of MAT services?

Yes ☐ No ☐ If yes explain them

5. Where did you get this information?

Parents	Media	Community	Others

6. Did you understand the services provided MAT clinic for the clients?

Yes ☐ No ☐ if yes list them

1
2

7. These services assist the clients? Yes ☐ No ☐

8. If yes how.....

.....

9.How can PWID clients be admitted to MAT clinic?

……

……...……...……..……

10. How those services can be provided?

……...

……

11. There any changes may occur since that services initiated if yes list them

.....

.....

12. Are Methadone services acceptable by the community?

Yes ☐ No ☐ if yes discuss?

……

…..……

13. What are the challenges facing clients when they lack MAT services?

.....

……...……

14. What are the challenges facing clients while already served in MAT services?

……

.....

15. What is the community perception on MAT services?

……

……

16. What is your recommendation on MAT services?

……

……

THANKS

Appendix 'C'

Self-administered questionnaire

Self-administered questionnaire for an assessment of the acceptability of Methadone services at urban district of Zanzibar for stakeholders 2016.

Sex.....

No…….

Street……

General details

Please (√) tick the box the appropriate describe your:

1. Age

Below 30	31 – 40	41 – 50	51 and above

2. What is your education status?

Primary education	Secondary education	Higher education	Bachelor degree	Other specify

3. What is your responsibility on MAT services?

……

……

4. Did you have any reasons to initiate these services?

Yes ☐ No ☐ If yes list them

……

……

5. Do you pay for the Methadone services or they are provided free of charge?

Paid	Cost sharing	Free of charge	Others

6. Are the services well affordable to the clients?

Yes ☐ No ☐ If yes/no explain

.....

7. Which area of Methadone services needs some more improvement?

……

8. Are Methadone services acceptable to the community?

Yes ☐ No ☐

9. What challenges do you face? If yes list them

1
2
3

10. Has any change occurred to the community since the inception of Methadone services?

1
2

12. What are the problems faced by clients who are not engaged in MAT services?

……

13. What are the challenges faces clients who already engaged on MAT services.

……

14. What is the community perception on MAT services?

1
2

15. What are your recommendations on MAT services?

…….....…..……..……..……..……..

THANKS

THE OPEN UNIVERSITY OF TANZANIA
DIRECTORATE OF RESEARCH, PUBLICATIONS, AND POSTGRADUATE STUDIES

Kawawa Road, Kinondoni Municipality,
P.O. Box 23409
Dar es Salaam, Tanzania
http://www.out.ac.tz

Tel: 255-22-2666752/2668445
Ext.2101
Fax: 255-22-2668759,
E-mail:drps@out.ac.tz

Date: August 2nd 2016.

TO WHOM IT MAY CONCERN

RE: RESEARCH CLEARANCE

The Open University of Tanzania was established by an act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No. 55 in the official Gazette. The act was however replaced by the Open University of Tanzania charter of 2005, which became operational on 1st January 2007. In line with the later,the Open University mission is to generate and apply knowledge through research. To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance,on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology,to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you Ms. Bhai Ibrahim Khamis Reg.No. PG201507791 pursuing Master of Social Work.We hereby grant this clearance to conduct a research titled ***"Assessment on acceptability on methodone services at Urban District of Zanzibar".***She will collect her data at Kidogo Chekundu Mental Hospital in Zanzibar Region from August, 2016, October 2016.

Incase you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O. Box 23409, Dar es Salaam. Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours sincerely,

Prof Hossea Rwegoshora
For: VICE CHANCELLOR
THE OPEN UNIVERSITY OF TANZANIA

CC: Babati Town Director
P.O.Box 383
Babati.

SERIKALI YA MAPINDUZI - ZANZIBAR
ZANZIBAR REVOLUTIONARY GOVERNMENT
WIZARA YA AFYA
MINISTRY OF HEALTH

BARAZA LA UTAFITI, WAU
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TELEGRAM: HEALTHMIN

MOH RESEARCH COUNCIL
P.O. Box 239
ZANZIBAR

ETHICAL CLEARANCE LETTER

PROTOCOL NUMBER: ST /0002/Dec/016 **DATE: 14 December ,2016.**

BHAI IBRAHIM KHAMIS
RESEARCHER STUDENT

PROTOCOL TITLE: "Assessment on acceptability of methadone services at urban District of Zanzibar".

RE: ETHICAL CLEARANCE FOR CONDUCTING MEDICAL RESEARCH IN ZANZIBAR.

This is to certify that the research protocol entitled ""**Assessment on acceptability of methadone services at urban District of Zanzibar"** was received and reviewed by the Zanzibar Medical Research and Ethics Committee on December, 2016.

We would like to inform you that the decision of the committee to this protocol was "**Approved"**.

The permission to undertake data collection is for one year beginning from the date of this letter.

The principal investigators have to provide progress report after six months and final report to the Ministry of Health and the Zanzibar Medical Research and Ethics committee ZAMREC.

Seek permission to publish from ZAMREC.

Any change made to the protocol need to be submitted to the committee for approval prior to its implementation

Thanks in advance,

DR. MSAFIRI MARIJANI
SECRETARY
ZAMREC
ZANZIBAR.

Figure: 6 Shown the study area

APPENDIX 'D'

GLOSSARY OF TERMS

Assessment: The process of documenting knowledge, skills, attitudes, perception and beliefs.

Acceptability: Is to be something that is considered to be socially ok or within the realm of what is appropriate, or something that is tolerable but not necessarily desired.

Behavior: Refers to actions usually measured by commonly accepted standards is behavior at the party was childish.

Buprenorprine: A semisynthetic narcotic analgesic that is administered in the form of its hydrochloride $C_{29}H_{41}NO_4 \cdot HCl$ to control moderate to severe pain and treat opioid dependence

Behavior change: Modification in behaviour (mainly human) in public health. The change may happen spontaneously and involuntarily without any intervention, or it may be systematic and motivated as prompted by conditioning. Whatever the transformation, it decidedly affects your overall function as an individual.

Community level: The community should be involved and mobilize through meeting to create awareness and important of attending school to their children.

District level: Th**e** District Council should carry out advocacy to the influential people, community leaders and other peoples to create awareness on important of education to school children.

Drug injection: A method of introducing a drug into the bloodstream via a hollow hypodermic needle and a syringe, which is pierced through the skin into the body (usually intravenous, but also intramuscular or subcutaneous

Effectiveness: The degree to which objectives are achieved and the extent to which targeted problems are solved.

Heroin: Is an illegal, highly addictive drug processed from morphine, a naturally occurring substance extracted from the seed pod of certain varieties of poppy plants.

Harm reduction: A range of public health policies designed to lessen the negative social and/or physical consequences associated with various human behaviors, both legal and illegal.

Infection: Posses major problems to child labour because they are poorly equipment to combat multiple organisms in their working area.

IDU: A method of introduce drug in to the blood stream via a hallow hypodermic needle and syringe when is through skin in to the body either by intravenous, intramuscular or subcutaneous

Methadone: A liquid form mediation it is used to treat moderate to severe pain when around the clock pain relief is needed for a long period of time to heroine Injectable Drug Users.

Methadone clinic: Is a clinic which has been established for the dispensing of methadone (Dolophine), a schedule II narcotic analgesic, to those who abuse heroin and other opiatesthe focus of these clinics is the elimination or reduction of opiate usage by putting the patient on methadone.

Opiod: Any morphine-like synthetic narcotic that produces the same effects as drugs derived from the opium poppy (opiates), such as pain relief, sedation, constipation and respiratory depression.

Shehiya: The lower level administrative structure in Zanzibar Government

Steroid: Any of several fat-soluble organic compounds having as a basis 17 carbon atoms in four rings; many have important physiological effects