ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATIONAL AND BEHAVIORAL STUDIES DEPARTMENT OF SPECIAL NEEDS EDUCATION

Attitude of Health Professionals towards Persons with Disabilities and its Associated Factors at St. Paul Hospital, Addis Ababa, Ethiopia.

BY

HANNA ASEFA FEREJA

JANUARY, 2023

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATIONAL AND BEHAVIORAL STUDIES DEPARTMENT OF SPECIAL NEEDS EDUCATION

Attitude of Health Professionals Towards Persons with disabilities and its associated factors at St. Paul hospital, Addis Ababa, Ethiopia.

A THESIS SUBMITTED TO COLLEGE OF EDUCATIONAL AND BEHAVIORAL STUDIES DEPARTMENT OF SPECIAL NEEDS EDUCATION OF ADDIS ABEBA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN SPECIAL NEEDS EDUCATION.

BY

HANNA ASEFA FEREJA

ADVISOR: TILAHUN ACHAW (Dr)

JANUARY, 2023
ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATIONAL AND BEHAVIORAL STUDIES DEPARTMENT OF SPECIAL NEEDS EDUCATION

Attitude of Health Professionals Towards Persons with disabilities and its associated factors at St. Paul hospital, Addis Ababa, Ethiopia

BY

HANNA ASEFA FEREJA

Signed by Examining Committee:

Examiner________________________ Signature ___________ Date __________

Examiner ________________________Signature ___________ Date _________

Advisor _________________________ Signature ___________ Date _________

Declaration

I, Hanna Asefa Fereja, hereby declare that, this thesis entitled - Attitude of Health Professionals Towards Persons with disabilities and its associated factors at St. Paul hospital, Addis Ababa, Ethiopia has not been submitted partially or fully by any other person for an award of a degree in any other institution. All the sources I have used in this research have been totally acknowledged.

Name of the graduate, Hanna Asefa Fereja
Signature________________________
Date________________________

This thesis has been submitted for examination with my approval as University advisor Tilahun Achawe (Dr)
Signature________________________
Date________________________

ACKNOWLEDGMENT

First and for most my deepest gratitude goes to Addis Ababa university, department of special needs education for giving me the chance to do this research topic and apply my theoretical knowledge of research methodology in to practice.

I would also like to express my deepest gratitude to my advisor Dr. Tilahun Achaw for his unreserved support and constructive comments throughout the research process.

I also extend my special thanks to SPHMMC administrative since my effort wouldn’t have been real without their assistance.

I sincerely thank the vice heads of each department who facilitated the data collection activities. I am grateful to my friend and colleagues Dawit and Tsinat and all data collectors for their committed efforts.

My appreciation and dedication goes to all SPHMMC staffs for their unreserved support throughout the course work.

Lastly my thanks go to all research participants who took part in the study without whom this research wouldn’t have been possible.

TABLE OF CONTENTS

LIST OF TABLES v

LIST OF FIGURES vi

List of abbreviation 7

Abstract 1

INTRODUCTION 2

1.1 Background of the study 2

1.2. Statement of the problem 5

1.3 Research Questions 6

1.4 Scope of the study 6

1.5 Limitation of the Study 6

1.6 Objective of the study 6

1.6.1 General Objective 6

1.6.2 Specific Objectives 6

1.7 Significance of the Study 7

1.8 Operational definition 7

CHAPTER TWO 8

LITRATURE REVIEW 8

2.1 Introduction 8

2.2 Prevalence of Disability in Ethiopia 8

2.3 Types of disability 9

2.4 Cause of Disability 11

2.5 Models of disability 11

2.6 What is Attitude? 16

2.7 Theories of Attitude 17

2.8 Attitude of Society towards Persons with Disabilities ... 21
2.9 Health Care Professionals ... 21
2.10 Attitudes of health professional towards disability ... 21
2.11 Influence of Attitudes on Healthcare Experiences ... 23
2.12 Relation of attitude of health professional with Sociodemographic data ... 24
CHAPTER THREE ... 28
METHODOLOGY ... 28
3.1. Research Design ... 28
3.2. Study Area ... 28
3.3. Population ... 29
3.4 Inclusion and Exclusion criteria ... 30
3.5. Sample size and Sampling Technique ... 30
3.6. Sampling technique ... 30
3.7 Tools of Data Collection ... 32
3.8 Procedures of Data Collection ... 34
3.9 Methods of Data Analysis ... 35
3.10 Data quality management ... 35
3.11 Ethical Considerations ... 35
SUMMARY ... 36
CHAPTER FOUR ... 37
RESULT ... 37
4.1 Socio-Demographic Characteristics: ... 38
4.2 Health Professionals' Scale of Agreement On Attitude Towards Disabled ... 40
4.3 Overall Mean Contact Scores for The Study Sample ... 42
4.4 Factors Associated with Attitude of Health Professionals Towards Disabled ... 45

CHAPTER FIVE 46

5. DISCUSSION 46

6. CONCLUSION 49

7.RECOMMENDATION 50

REFERENCE 51

Annex I. Questioners 56

LIST OF TABLES

Table 1. Employee Data of SPHMMC 29
Table 2: Total health professionals in selected department 31
Table 3. Socio-demographic characteristics of respondents among health professionals working in SPHMMC, Addis Ababa, Ethiopia, 2022(n=412) 37
Table 4: Showing the health professionals' attitude towards disabled person measures among health workers in SPHMMC, Addis Ababa, Ethiopia, 2015EC. 39
Table 5: Response of health professionals' describing the frequency of contact with disabled persons, SPHMMC, Addis Ababa, Ethiopia, 2015ec. 40
Table 6: Logistic regression analysis result for the factors associated with attitude towards disabled persons among health care professionals in SPHMMC, Addis Ababa, Ethiopia, 2015 . 44

LIST OF FIGURES

Figure 1: Map of Gulele Sub city and its hospitals 28

Figure 2: Schematic presentation of the sampling procedures used in the study 32

Figure 3: A pie chart showing the overall attitude level towards disabled persons among health professionals in SPHMMC, Addis Ababa, Ethiopia, 2022.. 40

List of abbreviation

AOR	Adjusted Odds Ratio
ATPD	Attitude towards Person with Disability
COR	Crude Odds Ratio
CPD	Contact with Person with Disability
CwDs	Children with Disability
DA-IAT	Disability Attitude Implicit Associated Test
GYNI/OBS	Gynecology and Obstetrics
ICF	International Classification of Function
PWD	Person with Disability
SPHMMC	Saint Paulos Hospital Millenium Medical College
SPSS	Statistical Package for Social Sciences
WB	World Bank
WHO	World Health Organization

Abstract

The experience that people with disabilities face while using health care services is a complex interaction between their medical condition and the social and physical environment. The attitude of health professional affects the rehabilitation outcome and interaction with the society. The aim of this study is to assess the attitude of health professionals towards person with disability in St. Paul Millennium Medical College Hospital in Ethiopia. A cross- sectional survey was conducted from November 10 to December 9, 2022; to assess the attitude towards disabled patients among health care professionals in St. Paul Millennium Medical College Hospital. The sample size for the study was calculated using single population formula, and a total of 422 study participants were recruited for the study, using random sampling techniques. Data was collected using a self-administered questioner developed by using Attitudes Towards Disabled Persons Scale, consisting of 20 items rated on a six-point Likert Type Scale. The collected data was entered to Epi data software and exported to SPSS version 26, for further analysis. Descriptive and Inferential statistical analysis was conducted to describe the variables and to identify the association between dependent and independent variables. Healthcare professionals participating in the study were with mean age of 27.9±4.1 years. The study showed the proportion of health professionals having a positive attitude towards disabled people to be 77.2%. In addition, factors that showed a statistically significant association with the attitude of health professionals towards disabled persons include: Age of the participants [AOR= 2.67; 95%CI (1.33-11.45)], profession of the participants physicians[AOR=0.25; 95%CI(0.71-0.88)], income level [AOR= 2.97 ; 95%CI(1.34–12.76)],presence of disabled person in family [AOR= 3.12; 95%CI(1.74–14.22)] and contact with disabled[AOR= 2.22; 95%CI(1.98–5.15)]. age of the health care professionals, profession, income level, presence of disabled person in the family, and having contact with disabled persons were determinants of having negative attitude towards disabled persons. Therefore, interventions to improve the attitude of health professionals should focus on the identified factors.

Key words: attitude, health professionals, person with disability

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The term "disability" has a contested definition for a variety of reasons. There are several reasons why we consider disability to be "debatable." In the past, it was associated with a socially secluded group. Traditionally, "inability" was used as an alternative to "disability" to indicate legal obligations and constraints on those people's constitutional rights (Ikhlaq et al., 2020).

Although the World Health Organization had formerly defined disability as ‘any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being (Barbotte et al. 2001), the organization changed the term ‘disability’ in 2001.

The United Nations Convention on the Rights of Persons with Disabilities also “acknowledges that disability is an evolving concept emphasizing the significant impact that attitudinal and environmental barriers in society may have on the enjoyment of the human rights of persons with disability” (UNCRPD, 2007:13). From the above definitions it’s clear that the environment which includes the attitudes of others is significant when considering disability.

According International Classification of Functioning, Disability has been defined as “an umbrella term for impairments, activity limitations or participation restrictions” resulting from the interaction of the individual with the health condition and with the environment in which the individual finds him or herself (WHO, 2001:3).

International Classification of Functioning, Disability and Health (ICF) also uses the term ‘disability’ to denote a multidimensional phenomenon resulting from the interaction between people and their physical and social environment. Thus, disability and functionality are influenced by the interaction between health conditions and contextual factors, which can be human or environmental (WHO 2004). It is now accepted that functioning and disability are influenced by the interaction of health conditions and contextual factors that can be both human and environmental (WHO 2006). Although the concept of disability develops socially, its meaning changes depending on the culture and time (Oliva Ruiz et al., 2020).

The people having disabilities comprise a considerable portion of the population of the world. According to an estimate these people makes up to 15% of the world population, among this population almost one fifth or more portion of these encounter severe difficulties (Abang, 1988)

The World Health Organization (WHO) and the World Bank (WB) year 2011 estimated that about 80% of the global 1 billion persons with disabilities (PwDs) currently live in developing

countries where rehabilitation services are poor or non-existent. These numbers are increasing both globally and in developing countries due to population growth, man-made and natural disasters, war, accidents and aging. According to the World Disability Report prepared by the World Health Organization (WHO) in 2011 the incidence rate of disability in adults worldwide was 15.6%

(11.8% for high-income code, 18.0% for those with low income (Şimşek et al., 2020a).

As reported by world Health organization; among the world population, almost 2.9% are severely disabled and 12.4% were having moderate long term disability. Children aged 0–14 years have, on average, 5% worldwide occurrence of severe and moderate disability, and it increases to 21% in individuals aged 15–59 years, while persons of 60 years and above age have 46% prevalence. Low and middle income countries encounter higher percentage of moderate and severe levels of disability for all age groups as compared to high income countries (Mathers 2008).

Based on the World Report on Disability jointly issued by the World Bank and World Health Organization (WB Bank and WHO 2011) there are an estimated 15 million children, adults and elderly persons with disabilities in Ethiopia, representing 17.6 per cent of the population. A vast majority of people with disabilities live in rural areas where access to basic services is limited. In Ethiopia, 95 per cent of all persons with disabilities are estimated to live in poverty (MOLSA 2010).

According to Japan International Cooperation Agency (2002), the situation for people with disabilities in Ethiopia is even more tragic and severe because of a variety of pre and postnatal disabling factors like infectious diseases, labor and delivery issues, under nutrition, malnutrition, harmful cultural practices, a lack of adequate child care and management, civil war, and recurring drought and famine, as well as the lack of early primary and secondary preventive measures. Lack of public empathy, ignorance of the prevalence and severity of disabilities, and a lack of basic necessities like employment opportunities and access to healthcare are the main issues facing people with disabilities today. The Ethiopian National Disability Action Network (2010) provides extensive evidence that individuals with disabilities encounter obstacles when trying to participate as equal members of society everywhere in the globe. The magnitude of barriers that people with disabilities face, particularly in developing nations like Ethiopia, have largely excluded them from mainstream society and made it extremely difficult for them to access community resources and services, including health care services. Despite the fact that

decades have passed since the international community acknowledged the issue and enacted various mechanisms to advance their position, this segment of society still faces several obstacles.

A study in Oromia region found that 55 per cent of the surveyed persons with disabilities depend on family, neighbors and friends for their living, while the rest generate meager income through self-employment, begging and providing house maid services (CARDOS 2007).

Individuals with disabilities require frequent visits to healthcare institutions (Moscoso-Porras & Alvarado, 2018). Despite this Person with disability encounter many problems in their environment, perhaps the most important of these problems is about receiving quality health services. Compared to the general population, disabled individuals encounter health problems more often, and require health service more frequently(İnan et al., 2013).

WHO (2011) states that people with disabilities are more likely to have poorer health outcomes, lower academic attainment, and job issues, all of which could contribute to a high poverty rate. According to Liaqat and Akram (2014), people with disabilities become emotionally and psychologically distressed due to a lack of social support from society in the form of educational and employment prospects. Negative effects of these emotional disorders include low self-esteem, depression, anxiety, and low life satisfaction.

Persons with disabilities and their caregivers are frequently treated unfairly by individuals, institutions, and society, limiting their ability to live full and meaningful lives (Kritsotakis et al., 2017). A recent study done by Aiden and McCarthy (2014), also shows that person with disabilities and their families received negative treatment at work, in shops, in the playground, and on the street. Person with disabilities also have difficulty satisfying their basic needs, obtaining housing achieving their human rights in the physical environment, engaging in social life, and gaining access to education and health care. People with disabilities, according to WHO and World Bank data, have fragile health, low academic performance, and limited financial means, resulting in a lack of access to health care.

Negative attitudes and limited understanding around disability and people with disabilities can contribute to poor mental health and wellbeing and lead to societal exclusion across many life domains. Alongside a variety of different types of impairments (e.g. physical, psycho-social, sensory, intellectual, neurological), people with disabilities live in a variety of contexts with different intersecting identities. This may include gender, age, education status, employment and

economic status, and, geographical location. How these contexts and different characteristics intersect, lead to very different experiences of disability.

Patients are more motivated to recover from their illnesses when they have a positive mindset. A negative attitude, on the other hand, prevents patients from adapting to and accepting their impairments. As a result, this can indirectly lower their self-esteem. According to Krahn et al. (2015), healthcare providers were ill-equipped to handle the complicated medical and psychosocial requirements of people with impairments.

Therefore, realizing the importance of positive attitude displayed by healthcare professionals, this study was conducted to identify general attitude of healthcare professionals towards person with disabilities in Saint Paulos Hospital. Besides, this study is aimed to investigate the relationship between attitude with influential factors which are, profession, gender, age, working experience, marital status, Income level, either the respondents have family members or close relatives who are disabled and contact with person with disability.

1.2. Statement of the problem

Person with disability must have equal access in gaining basic needs like housing, food, education, rights and quality health access. Despite this disabled people may not receive the same quality of health care as the general population, nor benefit as much from routine screening programs, with severity of disability reducing participation in health promotion (Diab & Johnston, 2004).Persons with disabilities have problems receiving equal excess to education, healthcare, employment and social activities in the communities (Brostran, 2006; Gordon, Feldman, Tantillo & Perrone, 2004; Hernandez, keys & Balcazar, 2000; Tsang, Chan & Chan, 2004). Roush (1986) reported that negative attitudes towards persons with disabilities are common in society, but are not directly voiced.

The way disabled people are received and treated at a health facility can serve as either a barrier or a facilitator to accessing healthcare services. Past experiences of negative health worker attitudes discourage the use of health services in the future. Several studies have reported that healthcare providers show negative attitudes towards disabled people (Barratt & Penn, 2009; Coomer, 2012; Maart & Jelsma, 2013; Munthali et al., 2013; Ravim & Handicap International, 2010). The negative attitudes include the use of derogatory language and lack of patient-health worker rapport.

Health care professionals' negative attitudes towards persons with disabilities can impact on the quality and range of rehabilitation services offered, and also hinders the development of the

therapeutic relationship (Estes et al., 1991, Gething, 1992, & Miller, 1996). Therefore, it is intended to have tangible or reliable study that can give the reflection of health professionals' attitude towards person with disabilities.

1.3 Research Questions

-What are health professional's attitudes towards persons with disabilities in SPHMMC?

-What socio-demographic factors has impact on health professional's attitude towards person with disabilities?

- What are some of the possible intervention strategies to be recommended to address the problems of persons with disabilities in SPHMMC.

1.4 Scope of the study

The scope of the study focus mainly on health professional's attitude towards person with disability and socio demographic factors like age, income level, profession, contact with persons with disability, marital status and having relation with person with disability in families' in SPHMMC.

1.5 Limitation of the Study

Because of financial and time constraints the scope of the study is limited to health professionals who works in SPHMMC. And it is delimited to the attitude survey of health professionals towards person with disabilities in SPHMMC.

1.6 Objective of the study

1.6.1 General Objective

The general objective of the study is to assess the attitude of health professionals Towards Persons with disabilities and its associated factors at Saint Paul's Hospital, Millennium Medical College, in Addis Ababa, Ethiopia

1.6.2 Specific Objectives

- To determine the attitude of health professionals towards persons with disabilities among in St. Paul Hospital Millennium Medical College.
- To assess factors associated with the attitude towards persons with disability among health professionals in St. Paul Hospital Millennium Medical College.

1.7 Significance of the Study

From the study the researcher hops that better understanding on attitudes of health professionals towards person with disability would permit policy-makers and health professionals to design intervention strategies to change negative attitudes towards persons with disabilities and improve medical and rehabilitation services on improving health professional's attitude by creating awareness and to empower persons with disability. It Can also be used as a baseline information source for organizations or persons who are interested to work in the area of attitude of health professionals towards persons with disability. The study can also Give relevant information about the situation of health professional's attitude towards person with disabilities who works in Saint Paulo's hospital.

1.8 Operational definition

Attitude: Feelings' of health professionals' towards persons with disabilities particularly in Saint Paulo's hospital.

Positive attitude: score greater or equal to from the total mean score of attitudes.

Negative attitude: score lower than the total mean score of attitude.

Disability: those clients or patients with visual, hearing and physical impairments who came in SPHMMC for health service.

Health professionals: qualified health personnel in SPHMMC's different units, which includes physicians, midwives, nurses, pharmacists and physiotherapists.

CHAPTER TWO
LITRATURE REVIEW

2.1 Introduction

Disability is part of being human and is integral to the human experience.it result from the interaction between health condition such as dementia, blindness or spinal cord injury and range of environmental and personal factors. An estimation of 1.3 billion people or 16% of the global population experience a significant disability today. Persons with disability are divers group and factors such as sex, age, gender identity, sexual orientation, religion, race, ethnicity and their economic situation affects their experience in life and their health needs. Person with disabilities die earlier, have poorer health and experience more limitations in everyday functioning than others. (WHO 2022).

The progression from impairment to disability and then handicap begins with impairment. These are the definitions: Any loss or abnormality of the psychological, physiological, or anatomical systems, as well as other genetic or environmental factors, constitutes an impairment. Disability is defined as any limitation or lack of capacity to perform a function in a way that is deemed to be normal for a human being; and According to age, sex, social and cultural characteristics, a person's handicap is a disadvantage that restricts or prevents them from performing a function that is expected of them (WHO, 1980).

2.2 Prevalence of Disability in Ethiopia

Unfortunately, there is a lack of adequate and trustworthy statistics information regarding the prevalence disabilities in Ethiopia. Nonetheless, we must accept the WHO assessment due to at least three reasons. The occurrence of the two main causes of disability, poverty and illiteracy, is the first. The existence of infectious diseases that results disability is the second. The persistent drought, starvation, and war are the final factor. In Ethiopia according to Tirusew (Tirussew et al., 1995) prevalence and type of disability is Motor Disorder (41.2%), Visual Impairment (30.4%), Hearing Impairment (14.9%), Mental Retardation (6.5%), Speech and language Disorder (2.4%), Multiple Disorders (2.0%), and Behavioral Disorder (2.0%).

2.3 Types of disability

There are different types of disabilities that happened to human beings for different reasons. Disability by type include: Motor disorders, Visual impairment, hearing impairment, Mental Retardation, Speech and Language disorders, Behavioral problems, and Multiple disabilities.

Behavioral Disorders

Examples of behavioral disorders include those that cause a great deal of personal suffering, as shown by self-deprecating remarks, irrational concerns, melancholy, and depression, or an inability to establish friends. The effective performance of others is hampered by various behavioral abnormalities such as hostility, strange remarks or acts, and disruptive rule infractions. Environmental conflict, which includes aggressive-disruptive, hyperactive, and social maladjustment issues, and personal disturbance, which includes anxiety-depression and social withdrawal issues, can lead to behavioral disorders (1994) Haring et al.

Mental Retardation

Mental Retardation is another kind of disability that happens to human being for different reasons. According to the AAMR (1992) manual, mental retardation is defined as follows:

"*Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly sub average intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work. Mental retardation manifests before age 18*." (American Association on Mental Retardation, 1992, p.5).

Communication Disorder

Communication disorder include language and speech difficulties. The impairment of voice (the lack of or aberrant production of vocal quality, pitch, volume, resonance, and/or duration), articulation of speech sounds, and/or fluency are all examples of speech disorders (the abnormal flow of verbal expression, characterized by impaired rate and rhythm which may be accompanied by struggle behavior). The disability or aberrant use of spoken, written, and/or other symbol systems is referred to as a language disorder. The condition may affect any combination of the structure of language (phonologic, morphologic, and syntactic systems), the meaning of language (semantic system), and the pragmatic function of language in communication. combination (Haring, et al., 1994, p.352).

Visual Impairment

This can be defined legally and educationally. The evaluation of visual acuity and field of vision is part of the legal definition. A person is considered legally blind if their better eye's visual acuity is 20/200 or below, even with corrective lenses like glasses, or if their field of vision is so small that the broadest diameter covers no more than 20 degrees of the visual spectrum. A person who sees at 20 feet what someone with normal vision sees at 200 feet is said to see at a fraction of 20/200. Those who are legally blind are eligible for a number of legal privileges, including tax breaks and funding for specialized materials. Low vision is the term used in educational definitions of visual impairment to describe visually challenged people who can read and write, even if they use magnifying glasses or books with large print.

People with visual impairment are misunderstood in society, and it is widely believed that blind individuals are dependent and helpless. The truth is that a blind person may be as independent and have a strong personality as a sighted person, given the right mindset and learning opportunities (Hallahan & Kauffman, 1991).

Hearing Impairment

This includes persons who have deafness and hard of hearing. Deafness has been defined as a sensory deficiency that prevents a person from receiving the stimulus of sound in all or most of its forms and as a condition in which perceivable sounds (including speech) have no meaning for ordinary life purposes. Hard of Hearing is when a person has a significant hearing loss that makes some special adaptation necessarily (Heward & Orlansky, PP.252-253).

Leprosy Disability

Leprosy may develop from harm caused by natural or artificial disasters, biological factors that affected the person before birth, or both. Leprosy is one of these variables and one of the main causes of disability worldwide. Leprosy is a chronic illness that affects the nerve cells in many body regions, impairing both fine and gross motor function. The disease's mutilating effects cause patients to feel a significant deal of anxiety and horror.

Due to stigma, the leprosy-related impairment has a greater impact on the person's social life than on his physical capabilities. Many social groups have various misconceptions about leprosy. Due to prejudice against those who have this illness brought on by erroneous assumptions and a lack of information, many victims have been persecuted and isolated.

Motor Disorders

These mental health issues are brought on by brain damage. Sensory capacities, cognitive processes, emotional receptivity, and motor function are typically impacted by brain injury. In addition to physical disability, a very high percentage of children with cerebral palsy also have hearing impairments, visual impairments, perceptual problems, speech defects, behavioral disorders, mental retardation, or any combination of these symptoms. Moreover, they could display traits like drooling or facial twitches. (Heward & Orlansky, 1995)

2.4 Cause of Disability

ICF states that disability arises from the interaction of health conditions with contextual factors – environmental and personal factors. These factors can be either facilitators or barriers. Environmental factors include: products and technology; the natural and built environment; support and relationships; attitudes; and services, systems, and policies. Personal factors can be motivation and self-esteem, which can influence how much a person participates in society WHO 2011.

2.5 Models of disability

The moral and/or religious model: Disability as an act of God

The Judeo-Christian tradition is one of several religious traditions that use the moral/religious model of disability, which is the earliest explanation of disability (Pardeck & Murphy 2012:xvii). One of the main moral and/or religious conceptions of disability holds that the condition should be viewed as a punishment from God for a specific sin or crimes that the person with the disability may have committed. McClure (2007:23) laments the detrimental impact the moral and/or religious model of disability has had on preaching, pointing out how some interpretations of the Bible exclude PWDs by connecting ""blindness," "lameness," "deafness," "uncleanness" (chronic illness), "mental illness (demonic possession), and other forms of disability with human sin, evil, or spiritual ineptitude." human sin, evil, or spiritual disability Occasionally, any sin that a person's parents or ancestors may have done is also considered to be a potential factor in the development of their infirmity (Henderson & Bryan 2011:7) Rimmerman (2013:24) emphasizes the potentially devastating effects of such a view, in that it may result in entire families being excluded from social involvement in their local communities, in addition to the detrimental effects of this paradigm on the disabled person and his or her family.

The notion that disabilities are basically a test of faith or perhaps salvific in nature is another wellknown manifestation of the moral and/or religious model of disability. Using the example of

"individuals and families are carefully selected by God to receive a disability and are given the opportunity to redeem themselves through their perseverance, resilience, and piety," Niemann (2005:106) provides a succinct illustration of the concept of disability as a test of faith.

The medical model: Disability as a disease

From the mid-1800s onwards, the medical (or biomedical) model of disability began to gradually replace the moral and/or religious model in lie of significant advances in the field of medical science. Olkin (1999) outlines the basic characteristics of the medical model of disability: Disability is viewed as an internal medical issue that affects the person. It is essentially aberrant and pathological since it is a flaw in or failure of a biological system. The objectives of intervention include rehabilitation, as well as the fullest potential improvement of the physical condition (i.e., the adjustment of the person with the disability to the condition and to the environment). People with disabilities are expected to take advantage of the wide range of services that are available to them and to spend time acting as patients or learners who are assisted by qualified experts (p. 26).

Because it defines disability in a fundamentally negative sense, the medical model of disability is occasionally also referred to as the "personal tragedy" model (Thomas & Woods 2003:15). Disability is viewed as being inherently bad, pitiable, "a personal tragedy for both the individual and their family, something to be prevented and, if possible, remedied" (Carlson 2010:5).

PWDs diverge from what is normal, according to the medical model. Words like "invalid," "cripple," "spastic," "handicapped," and "retarded" all come from the medical model (Creamer 2009:22). The idea that people with disabilities (PWDs) cannot be compared to people with able bodies is strengthened by this perspective on disability. 'The medical model of interpretation of disability projects a dualism which tends to categorize the able-bodied as being 'better' or superior to those with disabilities,' Johnstone (2012:16) claims.

The social model: Disability as a socially constructed phenomenon

According to the social model (sometimes also referred to as the minority model), it is society 'which disables people with impairments, and therefore any meaningful solution must be directed at societal change rather than individual adjustment and rehabilitation' (Barnes, Mercer & Shakespeare 2010:163). Fundamental to the social model of disability is the notion that disability is ultimately a socially constructed phenomenon. UPIAS (1976) emphasizes the importance of this social dimension in its definition of disability:

Disability is a social condition that calls for three things in order to be eliminated: (a) no one factor, such as incomes, mobility, or institutions, should be treated in isolation; (b) disabled people should take control of their own lives with the help of others; and (c) professionals, experts, and others seeking assistance must be dedicated to fostering this control by disabled people. (p. 3)

The identity model: Disability as an identity

The identity model (or affirmation model) of disability is closely related to the social model of disability but places a fundamentally different focus on it. This model differs in that it "claims disability as a positive identity," whereas the social model also acknowledges that the experience of disability is socially produced (Brewer et al. 2012:5). Brewer et al. (2012) offer the following illuminating definition, which also explains how the identity model departs from the social model's approach: Disability, like gender or race, is a sign of belonging to a minority identity according to the identity model. According to an identity model, a person with a disability is essentially characterized by a particular kind of experience in the world, specifically a social and political experience of the negative effects of a social structure that wasn't created with persons with disabilities in mind. While the identity model owes a lot to the social model, it is more concerned with developing a positive definition of disability identity based on experiences and circumstances that have led to the creation of a distinct minority group known as "people with disabilities" rather than the ways in which environments, policies, and institutions make people disabled. (p. 5) The identity model has influenced many in the disability community, inspiring PWDs to adopt a positive self-image that celebrates 'disability pride' (Darling & Heckert 2010:207)

The human rights model: Disability as a human rights issue

The human rights model of disability is another one that closely resembles the social model of impairment. Degener (2017) points out a number of significant discrepancies between the social model and the human rights model, despite the fact that some researchers see them as almost identical. First off, the human rights model goes beyond simple explanation, providing a theoretical framework for disability policy that emphasizes the human dignity of PWDs. While the social model aids in understanding the underlying societal elements that impact our perception of disability (Degener 2017:43). Second, in the sense that "it embraces both sets of human rights, civil and political as well as economic, social, and cultural rights," the human rights model integrates both first and second generation human rights (Degener 2017:44). Thirdly, the human rights model respects the reality that some PWDs are indeed faced with such difficult life circumstances and argues that such factors should be taken into consideration in the development of pertinent social justice theories, whereas the social model generally fails to appreciate the reality of pain and suffering in the lives of some PWDs (Degener 2017:47). Fourth, the human rights paradigm "leaves place for minority and cultural identification," whereas the social model "does not pay appropriate attention to the issue of identity politics" (Degener 2017:49). Fifth, the human rights model acknowledges that properly developed prevention policies may be viewed as an example of human rights protection for PWDs, whereas the social model primarily criticizes public health policies that promote the prevention of impairment (Degener 2017:52). Last but not least, while the social model can be useful in explaining why so many PWDs live in poverty, the human rights model gives valuable recommendations for enhancing the lives of PWDs (Degener 2017:54).

The cultural model: Disability as culture

The cultural model of disability developed in the North American context, where disability studies have been approached in an interdisciplinary manner by a number of scholars working in the social sciences and humanities. (cf. Michalko 2002; Titchkosky 2007) outline the primary characteristics of the cultural model, specifically in terms of how it differs from the medical model and social model. While the medical model and the social model each focus on only one factor in their approach to disability, the cultural model focuses on a range of cultural factors. Such factors may include medical and social factors but are by no means limited to these factors. Accordingly, the cultural approach does not seek to define disability in any specific way but

rather focuses on how different notions of disability and non-disability operate in the context of a specific culture.

The cultural model of disability is gaining increasing acceptance in the disability community, especially through its adoption by a number of deaf culture theorists (cf. Holcomb 2013; Lewis 2007).

The charity model: Disability as victim hood

The charity model views PWDs as unfortunate victims who deserve sympathy. The Charity Model views people with disabilities as victims of their handicap, as Duyan (2007:71) says. They are suffering, and their position is awful. In order to help PWDs, able-bodied individuals should do whatever they can since "they need unique services, special institutions, etc. because they are different" (Duyan 2007:71). The charity model attempts to act in PWDs' best interests by promoting "humane treatment of persons with disabilities," in contrast to the moral and/or religious model of disability, which has a generally negative view of PWDs (Henderson & Bryan 2011:7– 8). In the disability community, the charity model is seen negatively by a large portion of people. The paradigm is frequently criticized for portraying PWDs as helpless, depressed, and dependent on others for care and protection, which perpetuates negative stereotypes and preconceptions about PWDs (Seale 2006:10).

The economic model: Disability as a challenge to productivity

The economic model of disability takes an economic analysis-based approach to disability, concentrating on "the many debilitating impacts of an impairment on a person's skills, and in particular on labor and job capabilities." (Armstrong, Noble & Rosenbaum 2006:151, original emphasis). The economic model stresses the value of "respect, accommodations, and civil rights to people with disabilities," but these issues are secondary to the economic model's assessment of a handicapped person's capacity for employment and economic contribution (Smart 2004:37). Governments frequently use the economic model as a fundamental point of reference when developing disability policy (Jordan 2008:193). The economic model of disability has come under fire for conceptualizing disability in terms of a cost-benefit analysis nearly entirely and failing to consider other significant issues (cf. Aylward, Cohen & Sawney 2013; Smart 2004). Such an emphasis on the economy could lead to the dehumanization of people with disabilities as if they were somehow "missing parts" (Stone cited by Smart 2004:40).

The limits model: Disability as embodied experience

According to the limits model of disability – a distinctly theological model of disability developed by Creamer (2009) – disability is best understood with reference to the notions of embodiment and 'limitness'. First, in order to comprehend the concept of embodiment, McFague (1993), along with other embodiment theologians, contends that when practicing theology, one should take seriously the reality of the human body. From this perspective, it is necessary to consider the actuality of embodied experience as a significant source when practicing theology (Creamer 2009:57). Such theological reflection, according to Creamer (2009:56), focuses on "all that is written on, of, or by the body, going far beyond sensory experiences to include science, politics, economics, media, and many other concerns of postmodern life," in addition to "all that is written on, of, or by the body." Furthermore, this strategy has significant implications for how the problem of disability is handled, especially when taken into account in the context of what Creamer (2009:96) terms "limitness." The limits model contends that it's critical for individuals to acknowledge that all people deal with some degree of constraint on a daily basis (Creamer 2009:109). Also, we encounter these constraints to differing degrees during every stage of our lives (Creamer 2009:118).

2.6 What is Attitude?

Attitude is a denotable abstract or tangible object or statement may elicit a good or negative affective reaction, according to Bruvold (1980). According to Zinbardo (1998), attitudes can be attributed to learned opinions about which behaviors are appropriate for dealing with particular categories of persons or problems. Although reasonably steady, attitudes can nonetheless be changed.

According to Wood and Wood (1980), attitude is an assessment of a person, thing, circumstance, or problem that is generally consistent. They assert that attitude is made up of three parts: cognitive, affective or emotional, and behavioral. Regarding the attitudinal object, thoughts and beliefs make up the first cognitive components. In other words, a person's understanding of what is true or false, good or terrible, desirable or undesirable is represented by the cognitive component of attitude. Your feelings toward the attitudinal items make up the second aspect of attitude, the emotional component.

It is also known as the affective component because, under the right circumstances, a belief has the power to elicit an effect of changing intensity that is focused on the subject of the belief. The behavioral component is the third element of attitude. It deals with our natural tendency to behave in certain ways toward the attitudinal object. It is known as the behavioral component because, when appropriately activated, the belief, which is a response and propensity with a variable threshold, must result in some actions.

2.7 Theories of Attitude

A theory can be defined as a system that is comprised of empirical data, derived from observation and/ or experimentation and their interpretation (Luthans, 2008). In another words, a theory must grow out of systematic analysis of the past events. A theory could be likened to a map where a few points are known while the road between them are inferred. There are several theories of attitude formation and attitudinal/behavioral changes. Wrightsman (1985) identified five different theories of attitude change to which include; Stimulus-response and reinforcement theories, Social judgement theory, Consistency theory, Self-perception theory and Functional theory.

Stimulus-Response and Reinforcement Theories:

A stimulus, sometimes known as stimuli, is a psychological term describing a thing, an occurrence, or a person. This is a characteristic of traditional conditioning. Here, we learn to only react to stimuli that are identical to the first conditional stimulus. Our related behavioral reaction to comparable stimuli we encounter in our surroundings is known as stimulus generalization. We respond the same manner to a stimulus that is comparable to the original stimulus to which we were conditioned, whether it be an object, an event, or a person. According to the behaviorist viewpoint, our behavior is something we learn or are "conditioned" to do. As a result of associating a specific stimulus with a specific response, we develop learned behaviors. When we see a bus, we wave our hand for it to stop. In many cases, reinforcement aids in the development of stimulus response behavioral units. The assumptions behind stimulus-response and reinforcement theories are that attitudes only change when the incentives for adopting a new reaction are higher than the incentives for adhering to the previous response. Verbal-conditioning techniques can be used to raise the intensity with which some attitudes are held.

Social-Judgement Theory

Social influence is the process by which individuals affect the feelings, beliefs, and behaviors of others. The assimilation contrast theory by Sherif and Hovland (2002) and the adaption level theory by Helson (2002) are two illustrations of social judgement theories of attitude change. In the assimilation-contrast theory, attitudes are conceptualized in terms of a reference scale. This scale has a section called the latitude of acceptance, the borders of which are the extents to which the respondent would agree with the attitude statements. New positions must be proposed in an effort to change attitudes within this acceptability range.

Consistency Theories of Attitude Change

Theories represent attitudes. A family of consistency theories in psychology, including Helder's (2001) balance theory, Osgood and Tanenbaum's (2000) congruity theory, Festingers (2000) cognitive dissonance theory, and Brehm's (2001) reactance theory, assist explain how attitudes are organized and change. The underlying premise of these ideas is that individuals alter their attitudes in order to eliminate contradictions between opposing attitudes and behaviors. The Cognitive Dissonance Theory has sparked the greatest debate and investigation of all the consistency approaches to attitude formation and change. A person is said to have cognitive dissonance if they have two cognitions, one of which is in conflict with the other. The idea of cognitive consistency helps us organize and modify our attitudes. According to this principle, we should make an effort to have harmony between our attitudes and behavior, as well as between our beliefs, values, and attitudes. In order to organize attitudes, beliefs, and behavior into internally consistent structures, which is behavior that is consistent with both us and other people, human rationality is assumed to be almost Vulcan-like. Our social interactions depend so heavily on cognitive consistency that its absence or reverse (inconsistency) makes us feel psychologically uneasy. Our objective is to lessen or prevent cognitive inconsistency. How we achieve consistency between our thoughts, feelings and behaviors may differ quite markedly from what we would understand as rational behavior.

Cognitive Dissonance

Leon Festinger put out the cognitive dissonance theory. Festinger claims that humans experience anxiety when we hold two competing beliefs. For instance, if we are aware of how to fix our automobile but still take it to a technician, we will make an effort to calm down, a process known as dissonance reduction, by rationalizing our actions. When we lack the necessary equipment or the necessary amount of time to remedy the problem, we might excuse the technician from working on our car. Another instance of cognitive dissonance is when our beliefs and actions conflict. For instance, a person who understands smoking cigarettes is dangerous for his health but nevertheless smokes may excuse this behavior by claiming "he is not smoking that much." Moreover, cognitive dissonance is based on the tenet "you get what you pay for." This is explained by the notion that higher price equals higher quality. The theory behind it states that something must be more valuable if you have to sacrifice more for it to be valuable (higher quality). A sense of uncomfortable agitation brought on by discovering a cognitive discrepancy is known as cognitive dissonance. These conflicting perceptions could be one's opinions, convictions, or awareness of one's behavior. According to the cognitive dissonance theory, people have a strong urge to eliminate discomfort by altering their attitudes, beliefs, and behaviors or by defending or rationalizing them. One of the most influential and thoroughly researched theories in social psychology is cognitive dissonance theory. Although the cognitive dissonance theory was initially conceived as an attitude change theory, many social psychologists today view it as a theory of the self-concept. Dissonance is most noticeable when there is a mismatch between a person's behavior and their self-concept, such as when they do something that causes them to feel ashamed. In an effort to neutralize the threat, this may lead to self-justification. Typically, cognitive dissonance results in a shift in attitude, alteration of behavior, self-affirmation, or justification of the behavior.

Self- Perception Theory

Self- perception theory, offered a completely different explanation of attitude change. It proposes that people observe their behavior and then change their attitudes as to be consistent with their behavior. Bem (1992) links our actual behavior to what we think about an attitude object. It is our behavior that determines the attitude we hold. To use one of Bem's examples, 'since I eat brown bread then I must like brown bread.' Self-perception theory states that a person forms his or her attitudes through self-observation of their behavior.

The phrase "self-concept" refers to the whole of a person's self-perceptions. The self-concept, which Markus (1997) claims is made up of cognitive molecules termed self-schema and is a belief that people have about themselves that directs the processing of self-reliant information, is composed of these molecules. Self-schemas refer to a person's overall self-concept.

The perception of our own behavior is the subject of numerous theories. According to Bem's self-perception hypothesis from 1992, when it's challenging to understand internal signs, people can obtain insight into themselves by paying attention to their own behavior. According to Festinger's (1954) social comparison theory, when people are unsure about their own abilities or opinions, they evaluate them by comparing them to those of others. There is also the facial feedback theory, which states that changes in emotion can be reflected in changes in face expression. Self-concepts are developed via a variety of processes, such as self-reflection, input from others, self-perception, and social comparison.

People learn about themselves and draw conclusions that are important to their self-esteem by comparing themselves to relevant others. Social comparisons can be "upward" or "downward," i.e., they can be made with persons who have higher status or abilities or with people who have lower status or abilities. It's common to make negative comparisons in an effort to feel better about yourself.

Self-perception is a specific type of attribution that entails drawing conclusions about oneself from the behavior of oneself. Over-justification, a phenomena associated with too many extrinsic rewards (such as money), has been seen by psychologists to have a negative impact on intrinsic motivation. Humans focus on the reward, and when it is no longer available, they get disinterested in the work. This represents a significant deviation from reinforcement theory.

Self-esteem concerns how much an individual comes to regard, or value, him or herself as a person. Self-esteem is influenced by the reaction of others to us, and the comparisons made of us by other people (Argyle, 1983). Self- image is how we see ourselves as individuals, which is important to good psychological health. At a simple level this might see you perceive yourself as a good or a bad person, beautiful or ugly. Self-image and how it comes about has an effect on how we as individuals think, feel, and behave in relation to our world. The summary of self-concept theory has to do with how individual understand, perceive, value, evaluate themselves while interacting with other fellow human beings in a given environment or while reacting to an event.

Functional Theory

The basic proposition of the functional theory of attitude change is that people hold attitude that fit their needs. In order to change their attitude, we must determine what these needs are. Among the functions that attitude may serve are: The instrumental, adjustive or utilitarian function, The ego-defensive or externalization function, The knowledge or object appraisal function and, The value-expressing function.

2.8 Attitude of Society towards Persons with Disabilities

A tendency to react in an evaluative manner to other people, ideas, and events is known as an attitude. They are made up of attitudes, emotions, and propensities for behavior. There are many different and intricate responses to disability. They are based on elements deemed relevant to and crucial for the development of attitudes (for example, family background, culture and personality). Age, sex, and other demographic factors seem to be important influences on how attitudes toward the disabled are expressed rather than how those attitudes are formed. (Berns, 1985; Myers, 1983; Siller, 1976).

2.9 Health Care Professionals

Healthcare professionals play a critical role in determining the direction and priorities of services to the disabled. Healthcare professionals consist of physicians, nurses, speech and language therapists, occupational therapists, physical therapists, psychologists, therapeutic therapists, and social workers. The quality of healthcare services is directly influenced by the attitudes of healthcare professionals towards the disabled. A better understanding of complex relationship between healthcare professionals' knowledge, attitudes, and behaviors would improve rehabilitative services to the disabled (Godan, Brajkovic, & Godan, 2008).

2.10 Attitudes of health professional towards disability

Healthcare professionals’ attitudes towards people with disabilities vary based on a wide variety of factors. Opinions and attitudes may vary depending on factors such as age, gender, political views, level of education, years of experience, general knowledge of disabilities, as well as level of staff training on disabilities (Shiloh et al., 2011; Tervo & Palmer, 2004; Van Puymbrouck et al., 2020). Factors associated with the lowest implicit and explicit biases in particular included

younger age, female gender, strong liberal views, contact with someone who has a disability, or having a disability oneself (Van Puymbrouck et al., 2020). However, the most prominent factors noted in two studies found that the type of disability had more of an impact on attitudes (Lewis & Stenfert-Kroese, 2010; Shiloh et al., 2011). A full factorial experimental study (N=234) found that health professionals were more likely to exhibit negative attitudes towards people with observable disabilities compared to people with disabilities that could not be seen (Shiloh et al., 2011). Healthcare professionals were also more likely to hold more positive attitudes towards injured persons than persons who are disabled by illness. A cross-sectional study (N=262) discovered there was a tendency to have more negative attitudes towards caring for individuals with intellectual disabilities compared to physical disabilities that were more visible (Lewis & Stenfert-Kroese, 2010).

Professionals of some healthcare disciplines tend to have more positive attitudes towards people with disabilities compared to other disciplines. The attitudes of nurses varied across studies. Several studies found that nurses and nursing students had more negative attitudes on average than other professions (Au & Man, 2006; Tervo & Palmer, 2004; White & Olson, 2012). A review of the literature found explicit attitudes towards disability among nurses and nursing students tended to be less positive compared to other health professionals (Au & Man, 2006; Tervo & Palmer, 2004; White & Olson, 2012). Two cross-sectional survey studies found that nursing students and professionals had significantly lower mean Attitudes Toward Disabled Persons (ATDP) scores than other disciplines including physical therapy, audiology, psychology, speech, and occupational therapy (Au & Man, 2006; Tervo & Palmer, 2004). Occupational therapists tended to have the highest mean attitude scores compared to other professions (Au & Man, 2006; White & Olson, 2012). Other studies in nursing suggest attitude may be more context dependent. The results of an exploratory descriptive study surveying nurse managers' attitudes towards nurses with disabilities (N=219) found that the managers' attitudes were primarily positive towards their staff nurses with disabilities and that the managers were generally confident in the nurses' competence and job performance (Wood & Marshall, 2010).

A cross-sectional study found no significant differences in the average scores within the discipline among nurses, nursing students, and nursing aids (Lewis & Stenfert-Kroese, 2010). Additionally, a comprehensive, cross-sectional study of the implicit and explicit disability attitudes of healthcare professionals (N=25,006) found healthcare providers' conscious and non-conscious attitudes towards people with disabilities did not align (Van Puymbrouck et al., 2020).

While a majority of healthcare professionals self-reported not being biased against individuals with disabilities, the implicit attitude scores on the Disability Attitudes Implicit Association Test (DA-IAT) revealed that a large majority of the professionals were biased against disabled people, and therefore preferred nondisabled people (Van Puymbrouck et al., 2020).

A person's disability may be viewed as a negative trait by a physician. He/she may also feel that a person with a disability is different from normal. In either case, these attitudes or reactions can affect the quality of medical care for the person with disability. For example, biased health services staff may allocate resources away from persons with disability. Negative attitudes of peers may adversely influence the beliefs of other physicians, compounding the adverse outcomes of the negative attitudes (Mitchell et al., 1984).

2.11 Influence of Attitudes on Healthcare Experiences

Individuals with disabilities have described negative encounters with healthcare professionals. A grounded theory study and a cross-sectional study revealed individuals with disabilities reported unmet needs including inadequate care during visits and feeling diminished in care due to negative attitudes of nurses and other providers (De Vries McClintock et al., 2016; Lewis & StenfertKroese, 2010). Individuals with intellectual disabilities reported being dissatisfied with many aspects of the hospital care they received (Lewis & Stenfert-Kroese, 2010). A cross-sectional survey study found that negative attitudes of healthcare professionals were the biggest barrier to health services for people with disabilities (Tervo & Palmer, 2004).

Negative attitudes, misperceptions, and bias of health professionals may contribute to poor health services and outcomes. Two cross-sectional studies found that attitudes of rehabilitation health professionals had significant influence on the rehabilitation and intervention outcomes of people with disabilities (Tervo & Palmer, 2004; White & Olson, 2012). Health professional's attitudes influence the way they think and act and patients are able to sense these attitudes which can affect their self-image and self-perception and affect their rehabilitation process and outcomes (White & Olson, 2012). Another cross-sectional study of implicit and explicit disability attitudes of healthcare professionals (N=25,006) found healthcare providers' beliefs and attitudes towards persons with disabilities influenced clinical decision making, referrals, and patient encounters (VanPuymbrouck et al., 2020).

The United States Department of Health and Human Services (n.d.) Healthy People 2020 study, as cited in Van Puymbrouck et al. (2020), found that providers' misunderstandings about persons

with disabilities contributed to under referrals and disparities in health management strategies. Healthcare students and professionals with disabilities also report negative experiences associated with the attitudes of other professionals and students. A cross-sectional qualitative study (N=944) on the rates of disclosure of disability among medical students revealed that medical students may not disclose that they have a disability due to the stigma and negative attitudes of others (Miller et al., 2009). This finding was supported by a qualitative, grounded theory study (N=56) looking at the experiences of health professionals with disabilities, many of whom stated they do not disclose their disability in fear of being treated differently because of stigmas in the workplace (Battalova et al., 2020).

In multiple cases, individuals did not want to disclose their disability because of negative comments classmates or colleagues made about disabilities (Battalova et al., 2020; Miller et al., 2009). Their hesitation to reveal a diagnosis was also related to the conflicting, stereotypical perceptions of health professionals and disabled persons. As Battalova et al., (2020) stated, health professionals are seen as "healthy" and "autonomous" whereas people with disabilities are thought of as "dependent" and "unpredictable". Participants in both studies reported experiences of others questioning whether they were competent to complete a health program or provide care as a clinician due to their disability (Battalova et al., 2020;Miller et al., 2009).

2.12 Relation of attitude of health professional with Sociodemographic data

Attitudes toward persons with disability can be influenced by demographic variables such as age, gender, nationality, marital status, educational grade level, socioeconomic status, place of residence (rural vs urban), and experience with disability.(Livneh, 2012) .The literature informs us that people with disabilities often experienced barriers to health services due to provider's inappropriate attitudes and behaviors (Devkota et al., 2017;Smith et al., 2004). Study (Zubair & Hussain, 2018)found that younger healthcare providers were more positive in their attitudes towards people with disabilities than the older providers.

Dorji and Solomon (2009) also asserted that younger respondents might have greater opportunities to interact with people with disabilities during their education. Similarly in (Zubair & Hussain, 2018), younger respondents showed more positive attitude compared to older respondents. This finding was consistent with the findings of a study conducted in South India and Bhutan, but contradicts the findings of studies conducted in Europe and North America.

(Dorji & Solomon, 2009;(Bakheit & Shanmugalingam, 1997); Tervo & Palmer, 2004) and also stated that age and working experience have negative correlation with attitude towards disability(Dorji & Solomon,
2009). In the contradictory to the above findings (Şİmşek et al., 2020) and Abdulwahab & AlGain (2003), conduct research which show that there is no any relationship between age ,attitude of health professional and duration of employment in the profession.

There was an inconsistent finding about the gender influences; however, some researchers found that women tended to hold a more favorable attitude toward persons with disabilities than men did. (Chen et.al, 2002; Yuker and Block,1986) , Satchidanand et al. (2012) and (Şİmşek et al., 2020) . In contrast studies reported that there was no significant difference in attitudes between men and women toward persons with disabilities Tervo et al. (2002) .(Zubair & Hussain, 2018)stated that male found positive however most respondents were female.

Professionals of some healthcare disciplines tend to have more positive attitudes towards people with disabilities compared to other disciplines. The attitudes of nurses varied across studies. Several studies found that nurses and nursing students had more negative attitudes on average than other professions (Au & Man, 2006; Tervo & Palmer, 2004; White & Olson, 2012). Study conducted in Korea stated that health professionals had negative attitudes towards disabled individuals. Previous study by (Matziou et al., 2009) reported poor attitude by nursing profession. One possible reason for this most probably due to the difficult and stressful working environment in nursing profession. Early exposure with regard to handling disabled patients would be helpful to develop favorable attitude among nurses (Matziou et al., 2009)In a research conducted in comparison of health professionals with students the health profession has higher mean attitude than students. social workers' professions had high attitude level than students of social workers. Meanwhile, Satchidanand et al. (2012) also found that healthcare professionals hold less favorable attitude than first year students. Increasing burden of time and energy placed on healthcare professionals as they advance might be one of the reasons lead to this finding.

A study comparing attitudes among nurses, physiotherapy and occupational therapy students also revealed that nurses held the least positive attitude towards disability, while occupational therapy students showed the most positive attitudes Tervo and Palmer (2004).(Zubair & Hussain, 2018) Physicians have more favorable attitude than others like Dorji and Solmon (2009)who compared attitude of physicians and nurse.it is because that physician might have great knowledge regarding human rights and rehabilitations of PWD .This is possible as physicians are usually

dealing more on patients right and directly involved in patients rehabilitations whereas nurse focus on providing basic cares Dorji and Solmon (2009).

Kılıç and Çıtıl (2019), reported that there was an inverse relationship between the education level of the participants and their attitudes towards disabled individuals. Similarly, in a study conducted in Manisa/Turkey, it was observed that as the education level increased, the positive attitude towards disabled individuals decreased; and it was determined that the positive attitudes of individuals with elementary education and below were statistically significantly stronger than those with higher education levels (KILIÇ & ÇITIL, 2019);Altiparmak & Sari, 2012). In a study conducted for employers in Bolu/Turkey, no significant difference was found between the education level and the attitude towards disabled people (Eratay & Çetin, 2013). Differently (Şİmşek et al., 2020) stated that there was significance relationship between attitude of health professions and education level where the average score of attitude increase as level of education increase but there was no difference between scores of under graduation and graduated degree participants and also between the scores of high school and associated degree graduates.

However, in a study conducted with nursing students, it was reported that the economic status of nurses did not have a significant effect on their attitudes towards disabled people (Uysal et al., 2014),where (Şİmşek et al., 2020):also found that attitude towards PWD was more favorable in those whose income was equal or higher than there expense .In addition in a study conducted in Ireland, it was found that individuals with better economic status had increased awareness about disabled people (Tutumu, n.d.).

The finding from (Zubair & Hussain, 2018) study showed that those respondents who have family members or close relatives who are disabled seemed to develop more positive attitude. This is similar with previous study by Abdulwahab and Al-gain (2003) who found that those who have prior experiences with people with disabilities seemed to have good perception. One possible reason for this is an increased knowledge on disability issues. This is also supported by finding from Satchidanand et al. (2012) who found that previous contact and experience with people with disabilities plays a significant role in determining attitude. It was asserted that contact or previous experience was the most influential factor in determining attitude. There are some study showing that showing that having a previous interaction with disabled people positively affects attitudes towards persons with disabilities (Devkota et al., 2017b). In some studies, in the literature, no significant relationship was found between the attitudes towards disabled individuals among the relatives of the participants according to their status of being a

disabled individual (Tutumu, n.d. ;Şahin & Bekir, 2016).(ŞImşek et al., 2020) states that no difference between presence of disability in family member and ATPD scores. Korean J. Rehabil. Nurs 2010;13(1):13-22 showed that contact was found to be dominant factors in affecting attitude of health professionals.

According to Abdulwahab & Al-Gain (2003), no association was found between age and working experience of healthcare professionals with attitude. Whereas in contrary, there was also finding stated that age and working experience have negative correlation with attitude (Dorji & Solomon, 2009).Dorji and Solomon (2009) asserted that younger respondents might have greater opportunities to interact with people with disabilities during their education. Similarly, (Zubair & Hussain, 2018) stated that younger respondents showed more positive attitude compared to older respondents. Those who have less working experience also have more positive attitude. Although we found a negative correlation for these two variables, it is also important to note that the negative correlation was weak (r-value 0 to -0.3). Meanwhile, Satchidanand et al. (2012) also found that healthcare professionals hold less favorable attitude than first year students. Increasing burden of time and energy placed on healthcare professionals as they advance might be one of the reasons lead to this finding. (ŞImşek et al., 2020) conduct research which show that there is no any relationship between age, attitude of health professional and duration of employment in the profession.

Person with disability face barriers in all aspects of the health systems. For example, lack of knowledge, negative attitude and discriminatory practices among health care workers; inaccessible health facilities and information and lack of information or data collection and analysis on disability, all contribute to health inequities faced by this groups WHO 2022.

CHAPTER THREE
METHODOLOGY

3.1. Research Design

A cross- sectional survey was employed to assess health professionals' attitude towards person with disabilities.

3.2. Study Area

The study was conducted at Saint Paul's Millennium Medical College (SPMMC), a referral and consultant hospital founded in 1947 by Emperor Haile Selassie in Addis Ababa, Gulele Sub City, woreda 09, with the goal of assisting the impoverished. The hospital has two branches which are affiliated under Aebet for trauma center and Mitchu for reproductive health. Abet Hospital was established with the purpose of providing patient-centered quality care running innovative training programs. The place where the hospital established was on the road from Yohannes church to Gojam Berenda. Currently the place of building which is located in Addis Ababa region Arada sub city Wereda 05. IT has departments: emergency medicine and critical care, plastic reconstructive and hand surgery, Orthopedics and Traumatology, Physiotherapy.

The hospital has a bed capacity of 700 inpatient beds, and more than 2000 patients, including emergency patients, visit the facility every day. The hospital is a national teaching hospital for a number of medical specialties. Medical, Surgical, Gynecology and Obstetrics, Optometry, Pharmacy, Laboratory, Social worker, Physiotherapists, anesthesia, and radiology are among the hospital's departments. There are around 3959 health professional, academics, and administrative staff members currently working in the hospital.

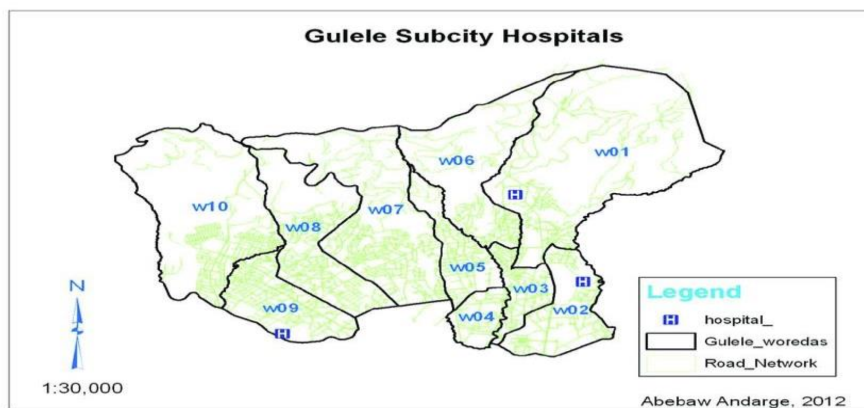

Figure 1: Map of Gulele Sub city and its hospitals

3.3. Population

According to the Hospital's human resource department, there are a total of 3,992 health care providers and support giving workers. And all health workers who are working in SPHMMC during the study period were the source population for this study.

The study population for this study were randomly selected health care professionals who are considered to have a direct contact with the patients (physicians, nurses, midwives, pharmacists, physiotherapists and social workers).

Table 1. Employee Data of SPHMMC

Health Care providers			
Profession	**Male**	**Female**	**Total**
Nurse	551	710	1261
Midwife	51	77	128
Laboratory	69	63	132
Anesthesia	21	35	56
Pharmacy	70	32	102
Radiology	21	17	38
Public health	52	30	82
Physiotherapy	5	3	8
Academic Staff (This are doctors)			
Professor	1		1
Associate professor	15	9	24
Assistant Professor	178	179	357
GP (Lecturer)	229	142	371
Social worker	2	1	3
Other Academy Staff	52	40	92
Total 2655			
Supportive Staffs			
Administration	352	616	968
Contract (Project, Covid, & Others)	142	227	369
Total			**3992**

N.B: this data was gathered from the hospital human resource

3.4 Inclusion and Exclusion criteria

Inclusion criteria: health professionals whose working experience is greater than 6month. **Exclusion criteria**: health professionals other than physicians, nurse, midwife, pharmacists, physiotherapy, who doesn't have frequent direct contact with patients.

3.5. Sample size and Sampling Technique

The sample size was determined using the formula for single population proportion and the following assumption were made. Significance level of 95% (0.05) and 5% margin of error was taken and 50% prevalence was taken among study subjects to obtain large sample size and 10% was added to compensate for non-respondents. So total of 422 health professionals were included in the study.

The sample size was calculated by using the following formula

$$n = \frac{\left(\frac{Z\acute{\alpha}}{2}\right) 2 * P(1-P)}{d2}$$

Where n= sample size

Z1- α /2 = confidence level corresponding to 95% CI = 1.96

P = is the maximum expected prevalence rate 0.5 d= is the

margin of the sampling error to be tolerated 0.05

The sample size was calculated by a formula using prevalence rate of 50% and 95% CI and 5% margin of error.

$$n = \frac{Z2\ 1 - \acute{\alpha}/2P(1-P)}{d2}$$

$$n = \frac{1.96\ 2 \times (0.5)\ (1-0.5)}{(0.05)\ 2}$$

= 384 Adding 10% non-response rate: 384+38 =422

3.6. Sampling technique

A probability sampling method was undertaken to get the required sample size. The total sample size was proportionally allocated to departments in the hospital according to the number of health professional in each department.

The total of health professionals from the six departments (Gynecology/obstetric, medical, surgical, optometry, pharmacy and physiotherapy) is as follow:

	Obs/gyni	Medical	Surgical	Optometry	Pharmacy	Physotherapy
Physicians	148	80	189	6	-	-
Nurse/midwife	128	97	146	46	75	11

Table 2: Total health professionals in selected department

Proportional allocation of the sample size was made for each department after knowing total health professionals of different units by using the following formula.

$$ni = \frac{Ni \times n}{N}$$

Where

ni = Total sample size in department i

Ni = Total number of health professionals in department i n

= Total sample size determined

N = Total number of health professionals in the hospital. The study subjects were selected by random probability sampling technique using lottery method.

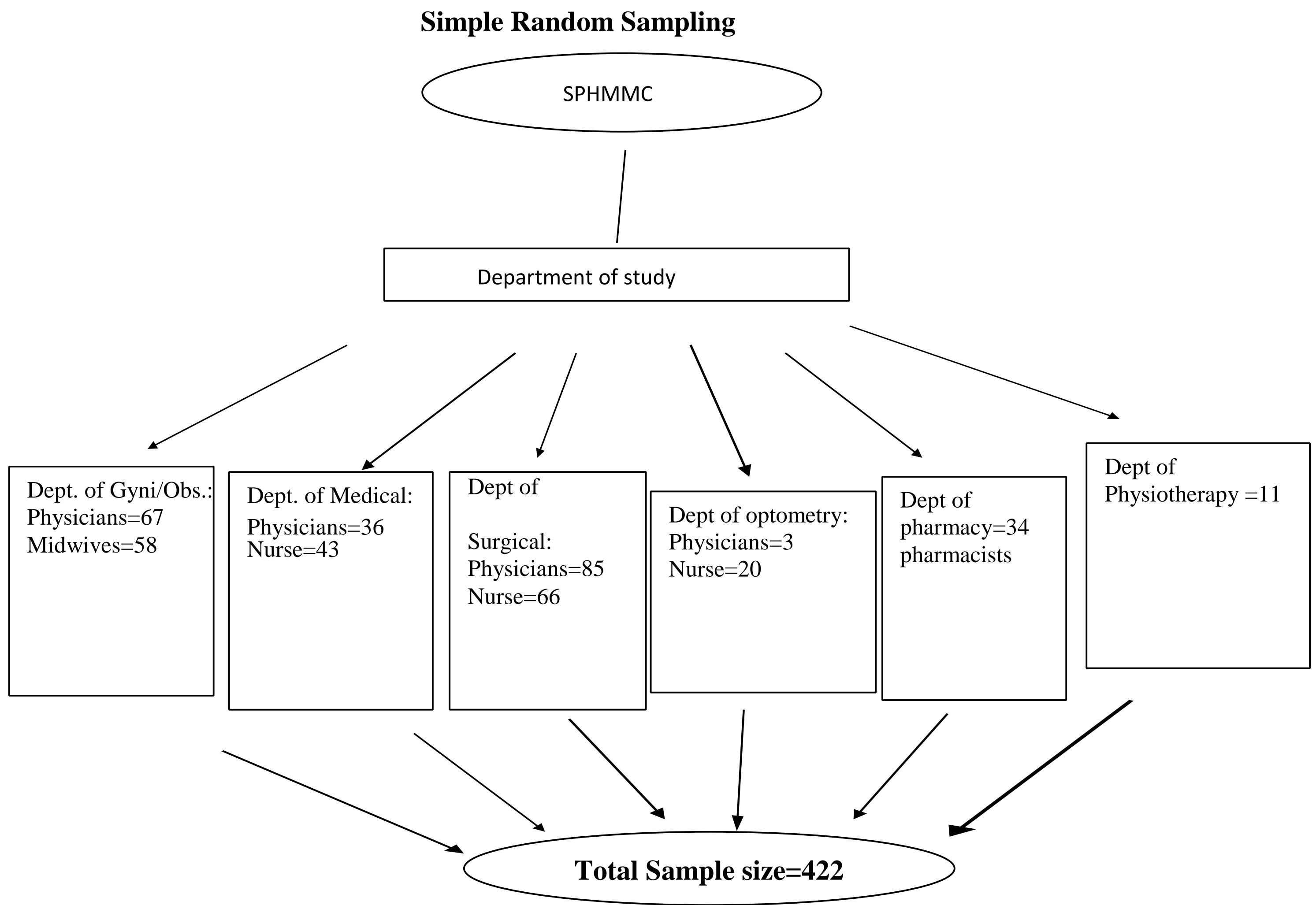

Figure 2: Schematic presentation of the sampling procedures used in the study

3.7 Tools of Data Collection

To collect data, a survey questioner was used, the questionnaire has three parts which is a structured survey questionnaire that is adapted from Yuker, Block, and Campbell, 1960.

A. Demographic Data:

The first section focuses on the demographic characteristics of the respondents using structured open-ended questions.

B. Attitude towards Person with Disability Questionnaire:

The Attitude Toward Disabled Persons Scale (Appendix A) was used to collect the data. The Attitude towards Disabled Persons Scale (ATDP); was designed as a measure of attitudes towards individuals with disabilities by (Yuker, Block, & Campbell, 1960. Three versions of the Attitudes Toward Disabled Persons Scale (ATDP, form O, form A, and form B) have been developed (Yuker & Block, 1986). Form O is the original form and contains 20 items (Yuker, Block, & Campbell, 1960). Forms A and B contain 30 items each (Yuker, Block, &Young,1970). All three versions (Forms O, A, and B), according to the test manual, are comparable to each other and can be utilized interchangeably (Yuker & Block, 1986).

The Attitude Towards Disabled Persons scale was developed to measure attitudes held by both disabled and able-bodied persons (Yuker & Block, 1986), furthermore the scale was designed to measure the attitudes of able-bodied people towards disabled people and the attitudes of disabled people towards other disabled people, or themselves. Research participants respond to test items by indicating their agreement or disagreement with statements on the instrument according to the six item Likert scale that ranges from -3 “I Disagree Very Much” to +3 “I Agree Very Much”. The ATDP-O scale was used in this study was because of its ease of administration and it had been carefully studied as an instrument measuring generalized attitude toward persons with disabilities (Antonak & Livneh, 1988). The ATDP-O has been widely used to measure attitudes (Yuker, Block &Younng, 1966; Antonak, 1980; Hafer, Wright, & Godley, 1983; Cannon & Szuhay, 1986; Vargo & Semple, 1987; Yuker & Hurley, 1987).

The scale is scored in the following manner (Haba & Ogiwara, 2001): the signs of items 2, 5, 6, 11 and 12 are changed. The sum of the items for the individual participants is determined.

Following this, the sign of the sum is reversed with total scores which could range from –60 to +60. To get rid of the negative values, a constant of 60 was added to all the scores. The total scores ranged from 0, indicative of a very negative attitude, to120, indicative of a very favorable attitude. The scale takes approximately 15 minutes to complete. The scale is internally consistent with 0.84 and test-retest reliability values of 0.66 to 0.89 (Tervo & Palmer, 2004).

C. Contact with Disabled Person scale measuring tool:

In addition to administering the ATDP scale the participants were also requested to complete questionnaire CDP (Appendix B), adapted from a questionnaire designed by Yuker and Hurley,1987). This scale was designed to capture the 'quantity and quality of a person's prior contact' with people with disabilities, such as the type and amount of contact components. The Scale contains 20 items when completing the CDP scale participants were requested to indicate their level of contact with disabled people on a Likert scale. Responses were scored from 1 "never",
2 "once or twice", 3 "a few times", 4"often" or 5 "very often". The scores ranged between 20 and 100. Scores between 20 and 60 indicated low contact, while scores between 61 and 100 indicated high contact. Therefore, higher scores reflected greater contact while lower scores reflected less contact. CDP scale have shown Cronbach alpha estimates ranging from .89 to .95 (Yuker & Hurley, 1987).

3.8 Procedures of Data Collection

Data collection is the process of acquiring and evaluating measuring information on targeted variables in a systematic manner that allows researchers to answer research questions, test hypotheses, and assess outcomes.

The first step in the data collection process was to obtain ethical approval from the Ethical Review Board Committee of Addis Ababa University. Then after acquiring the ethical clearance and supporting letter, the proposal has been submitted to St. Paul Millennium Medical College Research Department along with the clearance and supporting letter via soft copy. After data collection permission allowed, in order to collect data from the selected samples, the appropriate and necessary instrument or questionnaire was reviewed to test its validity. After that the researcher visited each department and collected the data. Data was collected over a four-week period. The researcher explained the aim of the study to the health professionals and invited them to partake. The health professionals who were willing to partake in the study signed the consent form (Appendix c) and completed the questionnaire. The health professionals took at least 15 minutes to half an hour to complete the questionnaire. Then, the data has been gathered from health care workers, who are currently working in SPHMMC.

Variables

Dependent Variable-Attitude of health professionals

Independent Variables-Sociodemographic variables (age, sex, professional, working experience, marital status, income level, contact with disable person, family history of disability)

3.9 Methods of Data Analysis

The Statistical Package for the Social Sciences (SPSS) version 26 was used for capturing and Analysis of the data. For each question, a key code was created, and responders' responses were recorded according to the question's code. Different test of measurements was used to analyze descriptive statistics such as mean, standard deviation and frequency. The descriptive data was presented using frequency tables and then expressed as percentages, means and standard deviation. Statistical significance was considered at $\alpha. \leq 0.05$. Dependent and independent variables was assessed using crude odds ratio with 95% confidence interval. Adjusted odds ratio was also calculated using logistic regression analysis to control potential confounding variables.

3.10 Data quality management

The instrument was derived from standard data collection tools and the quality of data was assured through careful design of the questioner. It was pre-tested for clarity, sensitivity, time as well as consistency of responses by taking 5% of the sample size, was conducted in a similar population, necessary modifications were made accordingly before use. Proper orientation prior to filling the questioner was made and data were carried out after the information was checked again for completeness & internal consistency. The validity of the scale was determined for both the scale

ATPD and CDP using Cronbach alpha. The reliability coefficient was 0.71 and 0.91 respectively.

3.11 Ethical Considerations

In acquiring data, approaching potential participants, organizations, and performing the entire research, this study has followed the required ethical measures and steps. First ethical clearance was obtained from Addis Ababa University Review Board Committee. Then the hospital administrators were asked with a written permission to conduct the research in the hospital compound on health care professionals. After that a written informed consent was provided for research subjects that further explain the purpose of the study was clearly explained to the participants. Research participants was also informed in advance that participation is on the basis of voluntary and withdrawal from the research process is possible at any time.

In addition, the issue of confidentiality was clearly communicated with the research participants. The participants were informed that their names would not be attached to the information that

they provide and that the information obtained from them would be kept confidentially. Furthermore, the participants were aware that there would be no other benefits except hot gratitude from the researchers. But the researcher will inform the participant just about the importance of the study, how to add a new information and knowledge for further investigation.

SUMMARY

This chapter describes the research setting, study population, study design and sampling procedures. Furthermore, this chapter describes and outlines relevant methodological issues such as methods of data collection, reliability and validity of the instrument and data analysis. The results of this analysis were tabulated and are presented in chapter four.

CHAPTER FOUR

RESULT

Table 3. Socio-demographic characteristics of respondents among health professionals working in SPHMMC, Addis Ababa,

Characteristics/Variables	Numbers	%
Age group		
20 – 29	173	42
30 – 39	155	37.6
40 and above	84	20.4
Sex		
Male	246	59.7
Female	166	40.3
Marital status		
Married	202	49.0
Single	180	43.7
Divorced/separated	21	5.1
Widowed	9	2.2
Educational level		
Undergraduate degree	346	84.0
Masters and above	66	16.0
Professions		
Physicians	149	36.2
Nurses/midwife	210	51.0
Pharmacy	35	8.5
Physiotherapist/social workers	18	4.4
Working experience in the profession		
Junior level	295	71.6
Senior level	117	28.4
Monthly Income status(in ETB)		
<5000	46	11.2 46.1
5000-10,000 above	190	42.7
10,000	176	
Presence of disabled person in family/close environment		
Yes	106	25.7
No	306	74.3

Ethiopia, 2022(n=412)

4.1 Socio-Demographic Characteristics:

A total of four hundred and twelve health sample were collected. Ten questioners were not completed, and not included in the analysis. Thus, the response rate was 97.6% (412/422). Table 2 shows the socio-demographic characteristics the respondents.

The age of the participant health professional ranges from 21 to 47 years. The mean age was 27.9 with Standard Deviation of (SD±4.1) years and the majority of participants 173(42%) were between 20-29 years old. Most 246(59.7%) of the participants were male health professionals and 346(84%)had an undergraduate degree educational background; and 210(51%) of them were nurses/midwives,149(36.2%)of them physicians, 35(8.5%) pharmacy professionals and 18(4.4%) of them are physiotherapist/social workers in profession. About 202(49%) were married, and 180(43.6%) were not married, the rest were widowed and divorced. Regarding to the presence of a disabled person in the family or close environment, 306 (74.3%) denied that they have a family member or someone in their close environment with disability and 106(25.7%) claimed to have one.

Table 4: Showing the health professionals' attitude towards disabled person measures among health workers in SPHMMC, Addis Ababa, Ethiopia, 2015EC.

Variable	Category	Frequency	Percentage
Parents of disabled children should be less strict than other	Agree	224	54.4
	Disagree	188	45.6
Physically disabled persons are just as intelligent as nondisabled ones	Agree	228	55.4
	Disagree	184	44.6
Most disabled people feel sorry for themselves	Agree	173	55.4
	Disagree	239	58
Disabled people are the same as anyone else	Agree	288	42
	Disagree	124	30.2
There should not be special schools for disabled children	Agree	183	69.8
	Disagree	229	55.1
It would be best for disabled persons to live and work in special community	Agree	234	44.9
	Disagree	178	43.1
It is up to the government to take care of disabled persons	Agree	201	48.8
	Disagree	211	51.2
Most disabled people worry a great deal	Agree	229	55.5
	Disagree	183	44.5
Disabled people should not be expected to meet the same standards as non-disabled people	Agree	201	48.9
	Disagree	211	51.1
Severely disabled people are harder to get along with than those with no disability	Agree	197	47.8
	Disagree	215	52.2
It is almost impossible for a disabled person to lead a normal life	Agree	168	40.8
	Disagree	244	59.2
You should not expect too much from disabled people	Agree	176	42.7
	Disagree	236	57.3
Disabled people are more easily upset than nondisabled people	Agree	199	48.2
	Disagree	213	51.8
Disabled people are as happy as non-disabled ones	Agree	186	45.1
	Disagree	226	54.9
Severely disabled people are no harder to get along with than those with no disabilities	Agree	215	52.2
	Disagree	197	47.8
Disabled people tend to keep to themselves much of the time	Agree	212	51.5
	Disagree	200	48.5
Most disabled people feel that they are not as good as other people	Agree	210	51
	Disagree	202	49
You have to be careful of what you say when you are with disabled people	Agree	153	37.2
	Disagree	259	62.8
Disabled people are often grouchy	Agree	227	55.1
	Disagree	185	44.9
Disabled persons cannot have a normal social life	Agree	163	39.6
	Disagree	249	60.4

4.2 Health Professionals' Scale of Agreement On Attitude Towards Disabled

Two hundred eighty-eight (42%) agreed on disabled people are the same as anyone else. 234(44.9%) agreed on disabled persons should live and work in a special community. 201(48.8%) agreed on It is up to the government to take care of disabled persons. 199(48.2%) agreed on Disabled people are more easily upset than nondisabled people. Agreement on severely disabled people are harder to get along with than those with no disability comprises 197(47.8%). The total attitude level of the health professionals was measured as the composite score of the total attitude questions. Accordingly, the mean score for the total attitude questions was calculated and those who scored above the mean score were categorized as positive attitude towards disabled persons, while those who scored below the mean value classified as negative attitude. Thus most 318(77.2%) of them were classified as having positive attitude while, 94(22.8%) of health care professionals have a negative attitude. The likert scale which was in six item Likert scale that ranges from -3 "I Disagree Very Much" to +3 "I Agree Very Much" originally was summed in the form that agree and disagree. The mean score on the ATDP scale was 61.39 (SD±0.651) with scores ranging from 0 to 120 (out of a possible maximum of 120).

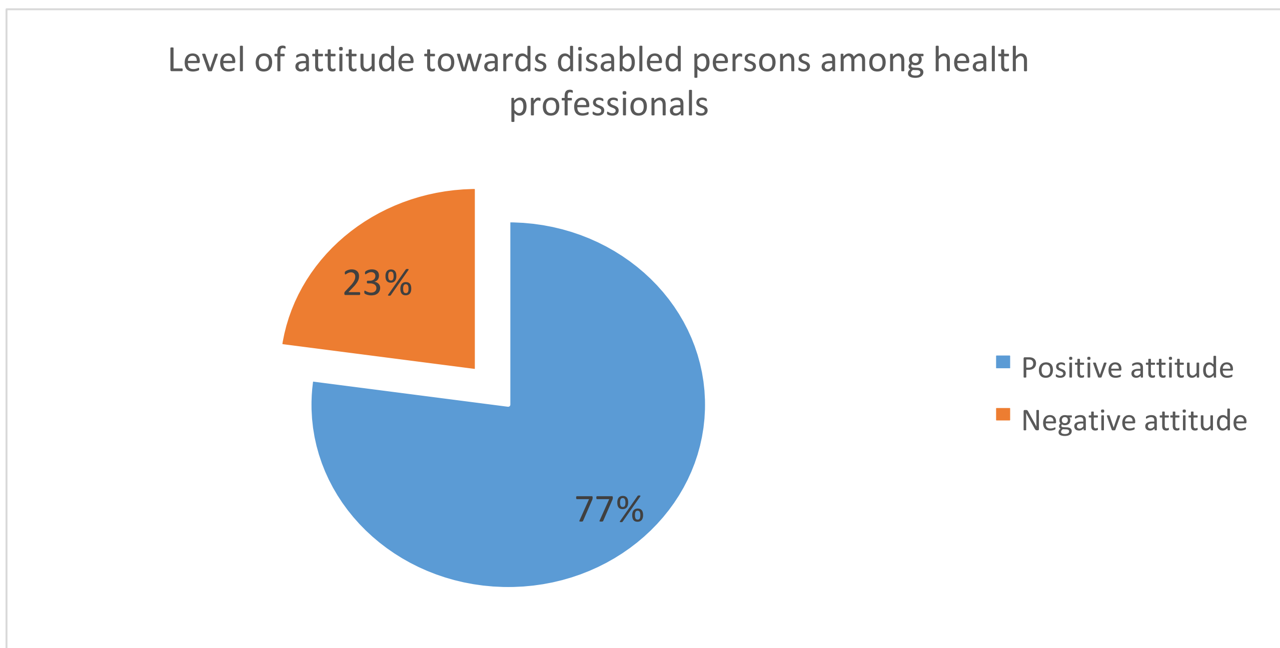

Figure 3: A pie chart showing the overall attitude level towards disabled persons among health professionals in SPHMMC, Addis Ababa, Ethiopia, 2022.

Table 5: Response of health professionals' describing the frequency of contact with disabled persons, SPHMMC, Addis Ababa, Ethiopia, 2015ec.

Variable	Category	Frequency	Percentage
How often have you had a long talk with a person who is disabled	Never	33	8
	Once/ twice	47	11.4
	Few times	129	31.3
	Often	115	27.9
	Very often	87	21.1
How often have you had a brief conversation with persons who are Disabled?	Never	26	6.3
	Once/ twice	64	15.5
	Few times	136	33.0
	Often	112	27.2
	Very often	74	18
How often have you eaten a meal with a person who has a disability?	Never	59	14.3
	Once/ twice	73	17.7
	Few times	108	26.2
	Often	91	22.1
	Very often	81	19.7
How often have you contributed money to organizations that help disabled persons?	Never	94	22.8
	Once/ twice	88	21.4
	Few times	92	22.3
	Often	76	18.4
	Very often	62	15.0
How often have disabled persons discussed their lives or problems with you?	Never	79	19.2
	Once/ twice	82	19.9
	Few times	118	28.6
	Often	71	17.2
	Very often	62	15.0
How often have you discussed your life or problem with a disabled person	Never	98	23.8
	Once/ twice	92	22.3
	Few times	77	18.7
	Often	80	19.4
	Very often	62	15
How often have disabled persons tried to help you with your problems?	Never	94	22.8
	Once/ twice	71	17.2
	Few times	94	22.8
	Often	86	20.9
	Very often	67	16.3
How often have you worked with a disabled client, student, or patient on the job?	Never	47	11.4
	Once/ twice	83	20.1
	Few times	96	23.3
	Often	109	26.5
	Very often	77	18.7

How often have you worked with a disabled coworker?	Never	89	21.6
	Once/ twice	68	16.5
	Few times	124	30.1
	Often	78	18.9
	Very often	53	12.9
How often has a disabled friend visited you in your home?	Never	141	34.2
	Once/ twice	83	20.1
	Few times	63	23.3
	Often	52	26.5
	Very often	73	18.7
How often have you visited disabled friends in their homes?	Never	125	30.3
	Once/ twice	94	22.8
	Few times	56	13.6
	Often	76	18.6
	Very often	61	14.8
How often have you met a disabled person that you like	Never	111	26.9
	Once/ twice	69	16.7
	Few times	90	21.8
	Often	78	18.9
	Very often	64	15.5
How often have you met a disabled person that you dislike?	Never	186	45.1
	Once/ twice	62	15
	Few times	51	12.4
	Often	55	13.3
	Very often	58	14.1

4.3 Overall Mean Contact Scores for The Study Sample

The total scores ranged from 0 to 20. The mean score of the participants was 2.9074. The mean score indicates that the participants have below average contact with PWD. A score of 0 indicates very low contact, while 20 indicates very high contact. Generally, most of the health care professionals involved in the study have a low level of contact with the disabled persons. As the mean score for CPD is 2.974 the score which was greater than 2.974 is considered to be positive contact with person with disability.

Table 6: Logistic regression analysis result for the factors associated with attitude towards disabled persons among health care professionals in SPHMMC, Addis Ababa, Ethiopia, 2015

Variable	Attitude				Pvalue
	Negative	**Positive**	**COR (95%CI)**	**AOR(95%CI)**	
Sex of respondents Male					
Female	63	183	0.67(0.41-1.08)	0.75(0.37-2.57)	0.443
	31	135	1	1	
Age of respondents					
20-29	32	141	2.32(1.29-4.19)	2.67(1.33-11.45)	0.006
30-39	33	122	1.95(1.08-3.52)	1.15(0.87-3.78)	0.057
40 and above	29	55	1	1	
Profession					
Physicians	35	114	0.65(0.18-2.38)	0.25(0.71-0.88)	0.031
Nurse/midwife	45	165	0.73(0.20-2.64)	0.45(0.13-1.55)	0.207
Pharmacy	11	24	0.44(0.10-1.82)	0.10(0.02-0.43)	0.002
Physiotherapist/social workers	3	15	1	1	
Educational level					
Undergraduate degree	82	264	0.71(0.36-1.40)	1.47(0.84-5.49)	0.063
Masters and above	12	54	1	1	
Working experience in the profession					
Junior level	67	228	1.02 (0.61–1.69)	2.97 (1.34–12.76)	0.045*
Senior level	27	90	1	1	
Income level					
<5000	16	30	0.53(0.26-1.08)	0.41(0.19-0.90)	0.026
5000-10,000	39	151	1.10(0.67-182)	0.93(0.43-2.00)	0.846
Above 10, 000	39	137	1	1	
Contact with disabled person					
Low contact	60	187	0.81(0.50–1.30)	2.22(1.98–5.15)	0.005*
High contact	34	131	1	1	
Presence of family member with disability					
No	79	227	2.11 (1.15–3.86)	3.12(1.74–14.22)	0.003*
Yes	15	91	1	1	

4.4 Factors Associated with Attitude of Health Professionals Towards Disabled

Logistic regression analysis was done to determine those important characteristics of health professionals that determine the attitude towards disabled persons. Thus, bivariable logistic regression analysis was done to select those candidate variables for the next step of multivariable logistic regression analysis with p-value of <0.2; the Sex and age group of health professionals, educational level, work experience, profession, marital status, income level, presence of a disabled person in the family/close environment, and contact with disabled persons were found to be significant ($p<0.2$) and selected for the next step of multivariable logistic regression analysis. The selected variables then entered to multivariable logistic regression analysis to control for confounding.

Accordingly the variables that showed statistically significant association (at $p<0.05$) with the dependent variable were identified as: Age of the participants from 20-29 years [AOR= 2.67; 95%CI(1.33-11.45)], profession of the participants physicians[AOR=0.25; 95%CI(0.710.88)],and pharmacists[AOR=0.45;95%CI(0.13-1.55)] income level less than 5000 [AOR= 0.41 ; 95%CI(0.19–0.90)],presence of disabled person in family [AOR= 3.12; 95%CI(1.74–14.22)] and contact with disabled[AOR= 2.22; 95%CI(1.98–5.15)].

CHAPTER FIVE

5. DISCUSSION

Introduction

This chapter discusses the findings of the study, and compares the results with results of similar studies. The attitudes of health professionals towards PWDs together with the influence of demographic variables on their attitudes is discussed.

All healthcare professionals are expected to provide the highest level of healthcare service to disabled individuals and equal services to each individual without any discrimination. There are studies in the literature reporting that the sociodemographic characteristics of healthcare professionals have an impact on their attitudes towards disabled people (Tervo RC, et al, 2004; Au KW, Man DWK, 2006; Sarı et al, 2010).

Profession, gender, age, working experience, and having family members or close relatives are the influential factors that determine health professional's attitude towards people with disabilities. (Zubair & Hussain, 2018)

In terms of this point of view, this study found that the mean ATDP score, used to determine the participants' attitudes towards disabled individuals was 61.39 (SD±0.651) which is relatively similar to mean score on study done in Pakistan to assess attitude and knowledge of health professionals towards disability. This result shows that healthcare professionals have positive attitudes towards people with disabilities. In Kılıç and Çıtıl's study performed between with physicians and nurses in 2019 and (Çağlar ŞİMŞEK, Sabanur ÇAVDAR, Ebru TEMİZ, Burcu GÜNDÜZ, Ebru YILMAZ YALÇINKAYA) revealed a moderate positive attitude, similar to this study. In contrast, in the study in which detailed interviews were used to investigate the attitude towards the disabled in Nepal, the attitudes of the health professional towards the disabled were examined, and it was found that the majority of the participants had negative attitudes towards disabled people; and their knowledge and skills were insufficient in the provision of health services for disabled individuals (Devkota HR,2017). (Korean J. Rehabil. Nurs 2010;13(1):13-22.) study conducted in Korea also stated that health professionals had negative attitudes towards disabled individuals.

In study conducted (Şimşek et al., 2020b), attitude towards person with disabled income status was found significantly more favorable in those whose income was equal or higher than their expenses. However in a study conducted with nursing students, it was reported that the economic status of nurses did not have a significant effect on their attitudes towards disabled people(Uysal et al., 2014).On the other hand, in a study conducted in Ireland, it was found that individuals with better economic status had increased awareness about disabled people(Tutumu, n.d.) which is similar to this study in which income shows significant relation with attitudes of health professionals towards person with disability.

A systematic review by Satchidanand et al. (2012) asserted that female was found to hold more positive attitude compared to male in line with this study. In contrast, Tervo et al. (2002) reported no significant difference between men and women toward persons with disabilities. In contrast. (Zubair & Hussain, 2018) stated that male found positive attitude however most respondents were female.

The finding from this study showed that those respondents who have family members or close relatives who are disabled seemed to develop more positive attitude. This is similar with previous study done by Abdulwahab and Al-gain (2003) who found that those who have prior experiences with people with disabilities seemed to have good perception. One possible reason for this is an increased knowledge on disability issues. This is also supported by finding from Satchidanand et al. (2012) who found that previous contact and experience with people with disabilities plays a significant role in determining attitude. It was asserted that contact or previous experience was the most influential factor in determining attitude. The finding in this study found that those who have people with disabilities as their family members or close relatives also showed more favorable attitude towards person with disability. Differently (ŞİmŞek et al., 2020) showed that there is no difference between presence of disability in family member and ATPD scores.

According to Abdulwahab & Al-Gain (2003), no association was found between age and working experience of healthcare professionals with attitude. (Zubair & Hussain, 2018), stated that younger respondents showed more positive attitude compared to older respondents which is in line with our study. This finding was consistent with the findings of a study conducted in South India and Bhutan, but contradicts the findings of studies conducted in Europe and North America. (Dorji & Solomon, 2009;(Bakheit & Shanmugalingam, 1997); Tervo & Palmer, 2004)

also stated that age and working experience have negative correlation with attitude towards disability (Dorji & Solomon, 2009)

There are studies in the literature showing that having any previous education on disability has positive effects on attitudes towards persons with disabilities (Tervo RC, Palmer G, Redinius P). In an intervention study conducted with nursing students at two different universities in Korya/ Turkey, it was determined that the group which received training on empathy activities and information for the disabled was much more positively affected than the control group (Geçkil et al 2017;53(1):82-93.). This study shows that education is significantly affects the attitude maintained towards disabled people which is similar with study done in USA with participating nursing students. (Cervasio K, Fatata-Hall K. The Attitudes of Nursing Students Toward Children with Disabilities: Differently in a study conducted for employers in Bolu/Turkey, no significant difference was found between the education level and the attitude towards disabled people (Eratay & Çetin, 2013)

6. CONCLUSION

The objective of the present study was to investigate the attitude of health professionals towards person with disability and its associated factor in SPHMMC.A total of 412 sample was collected. A scale consisting of 20 items which was designed by Yuker & Block, 1986 was used and scale which shows contact of health professionals with person with disability which was designed Yuker and Hurley,1987 was used for data collection. Initially, the instruments were administered on a pilot sample. Considering this, item analysis was carried. Percentages, tables, mean score and logistic regression was employed to analyses the data. Based on the findings, the attitude of health professionals was positive (77%), the mean age was 27.9 with Standard Deviation of (SD±4.1) years and the majority of participants 173(42%) were between 20-29 years old. Most 246(59.7%) of the participants were male health professionals and 346(84%)had an undergraduate degree educational background; and 210(51%) of them were nurses/midwives,149(36.2%)of them physicians, 35(8.5%) pharmacy professionals and 18(4.4%) of them are physiotherapist/social workers in profession. About 202(49%) were married, and 180(43.6%) were not married, the rest were widowed and divorced. Regarding to the presence of a disabled person in the family or close environment, 306 (74.3%) denied that they have a family member or someone in their close environment with disability and 106(25.7%) claimed to have one. Following this age of participant (20-29), profession being physician and pharmacists, income level being less than 5000, contact with disabled person and presence of family member with disability was found to be significant.

7.RECOMMENDATION

Organize the associations of person with disabilities to encourage and support to bring attitudinal changes to other able bodied persons towards person with disabilities. That is, by making health workers aware of Laws and Polices endorsed by government regarding rights of disabled persons. The society and the government have also responsibility creating conducive atmosphere for person with disabilities to have quality of health care by teaching the health professionals to develop skills to disability prevention and care and by improving the life style of person with disability. In addition to this new education must be added in the health education system and on job training must also be given for health professionals who are on work to make the health care more suitable for the person with disability who came to hospitals and health centers in seeking quality of care health care.

REFERENCE

1.Antonak, R. F. (1980). Psychometric analysis of the Attitude Toward Disabled Persons Scale, Form O. *Rehabilitation Counseling Bulletin*, *23*(3), 169-75.

2Aiden, H., & McCarthy, A. (2014). Current Attitudes towards Disabled People. Retrieved from Scope about Disability Website: https://www.scope.org.uk/Scope/media/Images/Publication%20Directory/Current-attitudestowards-disabledpeople.pdf?ext=.pdf)

3.Al-Abdulwahab, S. S., & Al-Gain, S. I. (2003). Attitudes of Saudi Arabian health care professionals towards people with physical disabilities. Asia Pacific Disability Rehabilitation Journal, 14(1), 63-70.

4.Altıparmak S, Sarı HY. Manisa ilinde engelli bireylere karşı toplumsal tutum. Anadolu Psikiyatri Dergisi 2012;13(2):110-6.

5.American Association on Mental Retardation (1992). Mental Retardation: Definition, Classification, and System of Supports (9th ed.). Washington, DC: American Association on Mental Retardation.)

6.Argyle, M. (1983). The social psychology of a work. London: Pengium Books.

7.Armstrong, S., Noble, M. & Rosenbaum, P., 2006, 'Deconstructing barriers: The promise of socioeconomic rights for people with disabilities in Canada', in R. Howard-Hassmann & C. Welch (eds.), Economic rights in Canada and the United States, pp. 149–168, University of Pennsylvania Press, Philadelphia, PA.)

8.Au KW, Man DWK. Attitudes toward people with disabilities: A comparison between health care professionals and students. Int J Rehabil Res 2006;29(2):155- 60.

9.Aylward, M., Cohen, D. & Sawney, P., 2013, 'Support, rehabilitation, and interventions in restoring fitness for work', in K. Palmer, I. Brown & J. Hobson (eds.), Fitness for work: The medical aspects, 5th edn., pp. 69–87, Oxford University Press, Oxford

10.Bakheit, A. M. O., & Shanmugalingam, V. (1997). A study of the attitudes of a rural Indian community toward people with physical disabilities. Clinical Rehabilitation, 11(4), 329– 334

11.Barnes, C., Mercer, G. & Shakespeare, T., 2010, 'The social model of disability', in A. Giddens & P. Sutton (eds.), Sociology: Introductory readings, 3rd edn., pp. 161–166, Polity Press, Cambridge.)

12.Battalova, A., Bulk, L., Nimmon, L., Hole, R., Krupa, T., Lee, M., ... & Jarus, T. (2020). "I can understand where they're coming from": How clinicians' disability experiences shape their interaction with clients. *Qualitative Health Research*, *30*(13), 2064-2076.

13.Bem, D.J. (1992). "Self Perception Theory". Advances in Experimental Social Psychology 6: 1-62.)

14. Berns, R, M. (1985). Child, Family, and Community. New York: CBS College Publishing.

15.Brewer, E., Brueggemann, B., Hetrick, N. & Yergeau, M., 2012, ‘Introduction, background, and history’, in B. Brueggemann (ed.), Arts and humanities, pp. 1–62, Sage, Thousand Oaks, CA.)

16.Bruvold, W.H. (1980). Are beliefs and behaviour consistent with attitudes? A preliminary restatement and some evidence from a survey research project. Paper presented at the meeting of the Western Psychological Association, Los Angles.

17.Cannon, B. J., & Szuhay, J. A. (1986). Faking can elevate scores on the Attitudes Toward Disabled Persons scale. *Rehabilitation Counseling Bulletin*.

18.CARDOS (2007) Research report on the General Conditions of People with Disabilities in Ethiopia, Addis Ababa .

19.Carlson, L., 2010, The faces of intellectual disability, Indiana University Press, Bloomington, IN)

20.Chen, R. K., Brodwin, M. G., Cardoso, E., & Chan, F. (2002). Attitudes toward people with disabilities in the social context of dating and marriage: A comparison of American, Taiwanese, and Singaporean college students. Journal of Rehabilitation, 68(4), 5.

21.Creamer (2009:57)(Creamer, D., 2009, Disability and Christian theology: Embodied limits and constructive possibilities, Oxford University Press, Oxford.),

22.Darling, R.B. & Heckert, D.A., 2010, ‘Orientations toward disability: Differences over the lifecourse’, International Journal of Disability, Development and Education 57(2), 131–143.)

23.De Vries McClintock, H. F., Barg, F. K., Katz, S. P., Stineman, M. G., Krueger, A., Colletti, P. M., ... & Bogner, H. R. (2016). Health care experiences and perceptions among people with and without disabilities. Disability and health journal, 9(1), 74-82. 24.Degener, T., 2017, ‘A new human rights model of disability’, in V. Della Fina, R. Cera & G. Palmisano (eds.), The United Nations convention on the rights of persons with disabilities: A commentary, pp. 41–60, Springer, Cham, Switzerland

25.Devkota HR, Murray E, Kett M, Groce N. Healthcare provider’s attitude towards disability and experience of women with disabilities in the use of maternal healthcare service in rural Nepal. Reproductive Health 2017;14(1):79

26. Dorji, S., & Solomon, P. (2009). Attitudes of health professionals toward persons with disabilities in Bhutan. Asia Pacific Disability Rehabilitation Journal, 20(2), 32-42.

27.Duyan, V., 2007, ‘The community effects of disabled sports’, in Centre of Excellence Defence Against Terrorism (ed.),)

28.Eratay E, Çetin EM. Bolu İlindeki İşverenlerin Engelli Çalışanlara Yönelik Tutumları. Kastamonu Eğitim Dergisi 2013;21:1681-94

29. Ethiopian National Disability Action Network (2010). Moving towards disability inclusion. Retrived fromhttps://www.ilo.org/wcmsp5/groups/public/---ed_emp/-ifp_skills/documents/publication/wcms_161517.pdf [12 December, 2019].

30.Festinger, L. (1954). "a theory of social comparison process". Human Relations 7: 117-140

31.Festinger, L. (2000). A theory of cognitive dissonance. Stanford, CA: Stanford University Press.)

32.Godan, A., Brajković, L., Fortuna, V., & Godan, L. (2008). The attitudes and sterotypes of supporting fields towards the persons with disabilities. *Collegium antropologicum*, *32*(3), 783-791.

33.Haba, Y., & Ogiwara, S. (2001). Attitudes of the citizens of Kanazawa and its vicinity towards the physically challenged. *Journal of Physical Therapy Science*, *13*(2), 107-113.

34.Hafer, M., Wright, W. R., & Godley, S. H. (1983). Dimensionality of the attitudes toward disabled persons scale revisited. *Educational and Psychological Measurement*, *43*(2), 459-463.

35.Hagler, P., Vargo, J., & Semple, J. (1987). The potential for faking on the Attitudes Toward Disabled Persons Scale. *Rehabilitation Counseling Bulletin*.

36.Hallahan, D, P. and Kauffman, J, M. (1991). Exceptional Children: Introduction to Special Education (5th ed.). Boston: Allyn and Bacon.)

37.Haring, N. G., McCormic, L. and Haring, T. G. (1994). Exceptional Chidren and Youth: An Introduction to Special Education. New York: Merill, Macmillan College Publishing Company.

38.Heider, V.(2001). Balance theory of personality development. California: Brooks/Cole Publishing Company, USA)

39. Henderson, G. & Bryan, W., 2011, *Psychosocial aspects of disability*, Charles C. Thomas, Springfield, IL.

40.Heward, W, L. and Orlansky, M, D. (1988). Exceptional Children (3rd ed.). London: Mifflin.)

41.Holcomb, T., 2013, Introduction to American deaf culture, Oxford University Press, New York)

42.Japan International Cooperation Agency Planning and Evaluation Department. (2002). Country profile on disability. Retrieved fromhttp://siteresources.worldbank.org/DISABILITY/Resources/Regions/Africa/JICA_Ethiopia.pdf [1 November, 2019].

43.Johnstone, D., 2012, An introduction to disability studies, Taylor and Francis, Hoboken.

44.Jordan, B., 2008, Welfare and well-being, Policy Press, Bristol.

44.Kılıç E, Çıtıl R. Attitudes of Physicians and Nurses Towards the Disabled and Awareness of Applications for the Disabled in a University Hospital. Turkish Journal of Family Medicine and Primary Care 2019;13(2):129-41

45.Kim, K. S., Park, Y. H., Lee, B. S., & Kim, J. Y. (2010). Comparison of the attitudes toward and contact with disabled person among health care professionals, lay persons, and disabled persons. *The Korean Journal of Rehabilitation Nursing*, *13*(1), 13-22.

46. Krahn, L., Deborah, W., & Rosaly, C. (2015). Persons with Disabilities as an Unrecognized Health Disparity Problem. American Journal of Health Problem, 105(2).

47.Kritsotakis, G., Galanis, P., Papastefanakis, E., Meidani, F., Philalithis, A. E., Kalokairinou, A., & Sourtzi, P. (2017). Attitudes towards people with physical or intellectual disabilities among nursing, social work and medical students. *Journal of Clinical Nursing*, *26*(23-24), 4951-4963.

48.Latapi, F. et al. (1980). Leprosy: Excerpta Medica. Amsterdamaaa: International Congress Series No. 466.)

49.Lewis, H., 2007, Deaf liberation theology, Ashgate, London, UK.

50.Lewis, S., & Stenfert- Kroese, B. (2010). An investigation of nursing staff attitudes and emotional reactions towards patients with intellectual disability in a general hospital setting. Journal of Applied Research in Intellectual Disabilities, 23(4), 355-365

51.Livneh, H. (2012). On the origins of negative attitudes toward people with disabilities. The Psychological and Social Impact of Physical Disability, Supra Note, 70.

52.Markus, H. (1997). "Self-schemeta and processing information". Journal of Personality and Social Psychology (35): 63-78.

53.Matziou, V., Galanis, P., Tsoumakas, C., Gymnopoulou, E., Perdikaris, P., & Brokalaki, H. (2009). Attitudes of nurse professionals and nursing students towards children with disabilities. Do nurses really overcome children's physical and mental handicaps?. *International nursing review*, *56*(4), 456-460.

54.McClure, J., 2007, Preaching words, Westminster John Knox Press, Louisville, KY.)

55.McFague, S., 1993, The body of God, Fortress Press, Minneapolis, MN

56.Michalko, R., 2002, The difference that disability makes, Temple University Press, Philadelphia, PA.)

57.Miller, P., & Haslam, C. (2009). Why employers spend money on employee health: Interviews with occupational health and safety professionals from British Industry. Safety Science, 47(2), 163169.

58.Ministry of Labour and Social Affairs (MOLSA) 2010)

58.Mitchell, K. R., HAYES, M., GORDON, J., & WALLIS, B. (1984). An investigation of the attitudes of medical students to physically disabled people. *Medical Education*, *18*(1), 21-23.

60. Niemann, S., 2005, 'Persons with disabilities', in M. Burke, J. Chauvin & J. Miranti (eds.), Religious and spiritual issues in counseling: Applications across diverse populations, pp. 105–134, BrunnerRoutledge, New York.)

61.Olkin, R., 1999, What psychotherapists should know about disability, Guilford Press, New York

62.Osgood, G and Tanenbaun, J. (2000). Congruity theory of attitude. In Sherif, G. and Hovland, E.B. (2002) (ed.)

63.Pardeck, J.A. & Murphy, J.W. (eds.), 2012, Disability issues for social workers and human services professionals in the twenty-first century, The Haworth Social Work Practice Press, New York.)

Psychosocial Implications. Department of Educational Psychology, Addis Ababa

64.Rimmerman, A., 2013, Social inclusion of people with disabilities, Cambridge University Press, Cambridge)

65.Şahin, H., & Bekir, H. (2016). Üniversite öğrencilerinin engellilere yönelik tutumlarinin belirlenmesi. Türkiye Sosyal Araştırmalar Dergisi, 20(3), 767–779.

66.Sarı, A., Alkan, C., & Karaipekli, A. (2010). Preparation, characterization and thermal properties of PMMA/n-heptadecane microcapsules as novel solid–liquid microPCM for thermal energy storage. *Applied Energy*, *87*(5), 1529-1534.

67.Satchidanand, N., Gunukula, S. K., Lam, W. Y., McGuigan, D., New, I., Symons, A. B., ... & Akl, E. A. (2012). Attitudes of healthcare students and professionals toward patients with physical disability: A systematic review. *American Journal of Physical Medicine & Rehabilitation*, *91*(6), 533-545.

68.Seale, J., 2006, E-learning and disability in higher education, Routledge, London

69.Shiloh et al., 2011; Tervo& Palmer, 2004; Van Puymbrouck et al., 2020).

70.ŞImşek, Ç., Çavdar, S., TemIz, E., Gündüz, B., & Yalçinkaya, E. Y. (2020). The Attitude of Healthcare Professionals Towards Disabled Individuals Sağlık Çalışanlarının Engelli Bireylere Yönelik Tutumu. 6(3), 545–553. https://doi.org/10.5222/jaren.2020.82435

71.Smart, J., 2004, 'Models of disability: The juxtaposition of biology and social construction', in T.
Riggar & D. Maki (eds.), Handbook of rehabilitation counseling, pp. 25–49, Springer, New York.)

72.Smith, E., Murray, S. F., Yousafzai, A. K., & Kasonka, L. (2004). Barriers to accessing safe motherhood and reproductive health services: the situation of women with disabilities in Lusaka, Zambia. Disability and Rehabilitation, 26(2), 121–127.

73.Tervo RC, Palmer G, Redinius P. Health professional student attitudes towards people with disability. Clin Rehabil 2004;18(8):908-15.

74.Tervo, R. C., & Palmer, G. (2004). Health professional student attitudes towards people with disability. *Clinical rehabilitation*, *18*(8), 908-915.

75.The United Nations Convention on the Rights of Persons with Disabilities

76.Thomas, D. & Woods, H., 2003, Working with people with learning disabilities, Jessica Kingsley Publishers, London

77. Tirussew, T. (2000). *Human Disabilities: Developmental, Educational and*

78.Titchkosky, T., 2007, Reading and writing disability differently, University of Toronto Press, Toronto.). Junior and Schipper (2013:23)

79.Tutumu, S. Ç. E. B. Y. The Attitude of Healthcare Professionals Towards Disabled Individuals.

80.UPIAS, 1976, Fundamental principles of disability, Union of the Physically Impaired against Segregation, London

81.Uysal A, Albayrak B, Koçulu B, Kan F, Aydın T. Attitudes of nursing students toward people with disabilities. Nurse EducationToday 2014;34(5):878-84. [CrossRef] 18.http://nda.ie/Publications/Attitudes/Public-Attitudes-to-Disability-in-IrelandSurveys/PublicAttitudes-to-Disabilty-Survey-PDF.pdf.April 8, 2019.

82.VanPuymbrouck, L., Friedman, C., & Feldner, H. (2020). Explicit and implicit disability attitudes of healthcare providers. Rehabilitation psychology, 65(2), 101.

83.White, M. J., & Olson, R. S. (1998). Attitudes toward people with disabilities: A comparison of rehabilitation nurses, occupational therapists, and physical therapists. Rehabilitation Nursing, 23(3), 126- 131.

84.WHO 2011

85.WHO 2022.

86.WHO Action Plan 2006.

87.Wood, D., & Marshall, E. S. (2010). Nurses with disabilities working in hospital settings: Attitudes, concerns, and experiences of nurse leaders. Journal of Professional Nursing, 26(3), 182-187.

88.Wood, E.R.G. and Wood, S.E. (1993). The world of psychology. Massachusetts, Allyn and Bacon.

89.World Bank and World Health Organization: World Report on Disability, Washington, D. C., 2011

90.World Health Organisation (WHO, 1980). *International Classification of impairment, disabilities, and handicaps: A Manual of Classification relating to consequences of disease. Geneva, Switzerland: Author.*

91.World Health Organization [WHO], 2004.

92.Wrightsman, S.L. (1985). Social psychology (3rd.Ed.). California: Brooks/Cole Publishing Company.)

93.Yuker, Block, and Campbell (1960)

94.Yuker, H. E., & Hurley, M. K. (1987). Contact with and attitudes toward persons with disabilities: The measurement of intergroup contact. *Rehabilitation Psychology*, *32*(3), 145.

95.Yuker, H. E., & Hurley, M. K. (1987). Contact with and attitudes toward persons with disabilities: The measurement of intergroup contact. *Rehabilitation Psychology*, *32*(3), 145.

96.Zimbardo, P.G. (1998). Psychology and life. (2nd. Ed.) Illinois: Forestman and Company.)

97.Zubair, M., & Hussain, T. (2018). Attitude of Healthcare Professionals Towards Understanding the Issue of Antimicrobial Resistance. Value in Health, 21(2015), S95.https://doi.org/10.1016/j.jval.2018.04.639

Annex I. Questioners

A: Socio demographic data:

Age: ________________

Sex: __________________

Educational level: ___________

Work experience___________________

Marital Status

Income Level_____________________

Profession ________________________

Family history with person with disability

B: attitude questions: Attitude Toward Disabled Persons: 20 items

Mark each statement according to how much you agree or disagree with it.

Please mark every one. Write +1, +2, +3 or – 1, – 2, –3, depending on how you feel in each case:

+3 =I agree very much

+2 =I agree pretty much

+1 =I agree a little

– 1 =I disagree a little

– 2 =I disagree pretty much

– 3 =I disagree very much

1. Parents of disabled children should be less strict than other parents
2. Physically disabled persons are just as intelligent as nondisabled ones
3. Disabled people are usually easier to get along with than other people
4. Most disabled people feel sorry for themselves
5. Disabled people are the same as anyone else
6. There should not be special schools for disabled children
7. It would be best for disabled persons to live and work in special communities
8. It is up to the government to take care of disabled persons
9. Most disabled people worry a great deal
10. Disabled people should not be expected to meet the same standards as non-disabled people

11. Disabled people are as happy as non-disabled ones
12. Severely disabled people are no harder to get along with than those with no disabilities
13. It is almost impossible for a disabled person to lead a normal life
14. You should not expect too much from disabled people
15. Disabled people tend to keep to themselves much of the time
16. Disabled people are more easily upset than nondisabled people
17. Disabled persons cannot have a normal social life
18. Most disabled people feel that they are not as good as other people
19. You have to be careful of what you say when you are with disabled people 20. Disabled people are often grouchy

C: contact history Contact with Disabled Persons: 20 items

Please mark each statement with a number indicating your answer to each question. Use a number from 1 to 5to indicate the following:

1 =never

2 =once or twice

3 =a few times

4 =often

5 =very often

1. How often have you had a long talk with a person who is disabled?
2. How often have you had a brief conversation with persons who are disabled?
3. How often have you eaten a meal with a person who has a disability?
4. How often have you contributed money to organizations that help disabled persons?
5. How often have disabled persons discussed their lives or problems with you?
6. How often have you discussed your life or problem with a disabled person?
7. How often have you tried to help disabled persons with their problems? 8. How often have disabled persons tried to help you with your problems?

9. How often have you worked with a disabled client, student, or patient on the job?
10. How often have you worked with a disabled coworker?
11. How often has a disabled friend visited you in your home?
12. How often have you visited disabled friends in their homes?
13. How often have you met a disabled person that you like?
14. How often have you met a disabled person that you dislike?
15. How often have you met a disabled person that you admire?
16. How often have you met a disabled person for whom you feel sorry?
17. How often have you been annoyed or disturbed by the behavior of a person with a disability?
18. How often have you been pleased by the behavior of a disabled person?
19. How often have you had pleasant experiences interacting with disabled persons?
20. How often have you had unpleasant experiences interacting with disabled persons?