Determinants of depression among elderly population in Pakistan

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By

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Declaration:

Where other people's work has been used (from either a printed or virtual source, or any other source), this has been carefully acknowledged and referenced in accordance with academic requirements.

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Signature: 

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Executive Summary:

Background:

Depression is a significant mental health problem in developing countries, increasing among the elderly population because of fast-paced lifestyles and higher life expectancy. Depression among the elderly is considered normal with ageing, but it remained underdiagnosed and undertreated, particularly in developing countries like Pakistan for a wide range of factors.

Objective:

The primary objective of this study is to explore the determinants of depression among the elderly population in Pakistan and identify individual, interpersonal, social, cultural, and systemic gaps which exacerbate the problem and make some policy recommendations to improve mental health and psychosocial programs.

Method:

This paper is a review of existing literature around depression among the elderly population in Pakistan. Determinants of depression, summarized in this paper, are obtained from the available academic databases like PsycINFO, PubMed, Google Scholar and ScienceDirect. The Socio-Ecological Model is used in this study to break down the determinants of depression because it provides holistic picture of the problem at various levels.

Results:

This literature review revealed that depression in the elderly population is interlinked with different risk factors such as abandoned family structure, social restrictions, maltreatment, death of spouse, unemployment, physical health and so on. Moreover, chronic diseases, low self-esteem and financial problems are contributing to depression among the elderly. All these determinants of depression are worsening the life of elderly population; depression also worsens the outcomes and prognosis of illnesses that increase the health care expenditures and decrease life expectancy.

Conclusion:

This paper concluded that ageing is associated with mental and psychosocial health problems; elderly people face isolation, maltreatment, and economic dependency, which make them vulnerable to depression. Pakistani government did not introduce government annuities or social security schemes for all the elderly; however, only 3 million elderly people out of 15 million is receiving government annuities which are also meagre in amount.

Key Words:

“Elderly Population”, “Mental Health”, “Depression”, “Social Isolation”, “Psychosocial Programs”, “Pakistan”.

Word Count: 11,512

Definitions of Terms:

Elderly:

Ageing refers to the old age; according to the World Health Organization, any individual who belongs to 65 years or above 65 years is considered as elderly [1] [2].

Chronological Age:

Chronological age implies the actual amount of time that an individual has passed since birth, expressed in the form of years, months, and days.

Biological Age:

Biological age refers to the gradual accumulation of changes in the various body systems, cells and tissues within the body, which also affects the mental and social functioning of the elderly population**.**

Psychological Age:

Psychological age deals with individual capabilities and different mental and cognitive functioning components to adapt to environmental changes. It also includes the sensory and emotional capabilities of how a person feels, behaves, and act intellectually.

Social Isolation:

Social isolation is a state of disconnectedness due to a shortfall of social association with family or friends, with neighbours at an individual level, and with “society at large” on a broader level. It can comprehensively be defined as the lack of social interactions and support that can be provided by others. It is a situation that various people experience eventually in their lives, with potential implications for their prosperity and wellbeing success [3] [4].

Depression:

Depression is a common serious mental illness that negatively influences how an individual feels, the way he thinks and acts. Depression triggers feelings of sadness and individual loss interest in all the activities, and it may lead to a number of emotional, psychological and physical problems, which reduced the ability of an individual to perform duties at home or work [5].

Self-esteem:

Self-esteem is a concept that refers to "people's evaluations of themselves". It comprises self-concept and self-identity, which are derived from personal worth and values. "Self-esteem is related to personal beliefs about skills, abilities, and social relationships". High self-esteem is related to well-being, adapting abilities and coping with environmental challenges [6] [7].

Elderly Maltreatment/Abuse:

The intentional use of power and force to harm or threaten the elderly for a particular act is called elderly maltreatment. There are many forms of elderly maltreatment, such as physical, psychological, emotional, financial, and so on [8].

Physical Abuse:

Using physical force against a person deliberately to harm him, including hitting, slapping, pushing, burning, and choking, results in injury and impairments [9].

Psychological Abuse:

Verbal and non-verbal behaviour to manipulate or hurt the other person mentally in form of abusive words, humiliation and disrespect [10] [8].

Financial Abuse:

Financial exploitation of the elderly by depriving them of money or property which smash their independence [8].

Nuclear Family System:

“A group of people who are united by ties of partnership and parenthood and consisting of a pair of adults and their socially recognized children” [11].

Joint Family System

Joint family system also called extended family system which consists of assortment of more than one family, ties in close relations and generally lived under one roof. "Joint family composed of parents, their children, and the children's spouses and offspring in one household" [12].

Acronym List:

BHU: Basic Health Unit

DHQ: District Headquarter Hospitals

DALYs: Disability Adjusted Life Years

GDP: Gross Domestic Product

LMICs: Lower Middle-Income Countries

NPHCE: National Program for the Health Care for the Elderly NPHCE

NCDs: Non-Communicable Diseases

PHC: Primary Health Care

PSDP: Public Sector Development Program

SDGs: Sustainable Development Goals

SWD: Social Welfare Department

SCWC: Senior Citizens Welfare Council

SEM: Social Ecological Model

THQ: Tehsil Headquarter Hospitals

UN: United Nation

WHO: World Health Organization

CHAPTER 1

Introduction and Background

1.1 Introduction:

The world is experiencing a steady increase in the ageing population due to declining mortality rates and increasing life expectancy. As more diseases become chronic, health problems of the elderly population are also growing rapidly [13]. According to the United Nations (UN) report of 2019, the worldwide population is 703 million people above 60 years. As indicated by the UN estimate, the global population increased by 6% to 9% from 1990 to 2019. This proportion is expected to a 16% increase, and the planet will have 1.5 billion aged people in 2050. Approximately two-third of the aged population is living in underdeveloped countries [14]. In Pakistan, the elderly population is estimated at around 15 million people, which is 7% of the total population. It is projected that in 2050 this proportion will increase twofold 12% with 40 million elderly population [15].

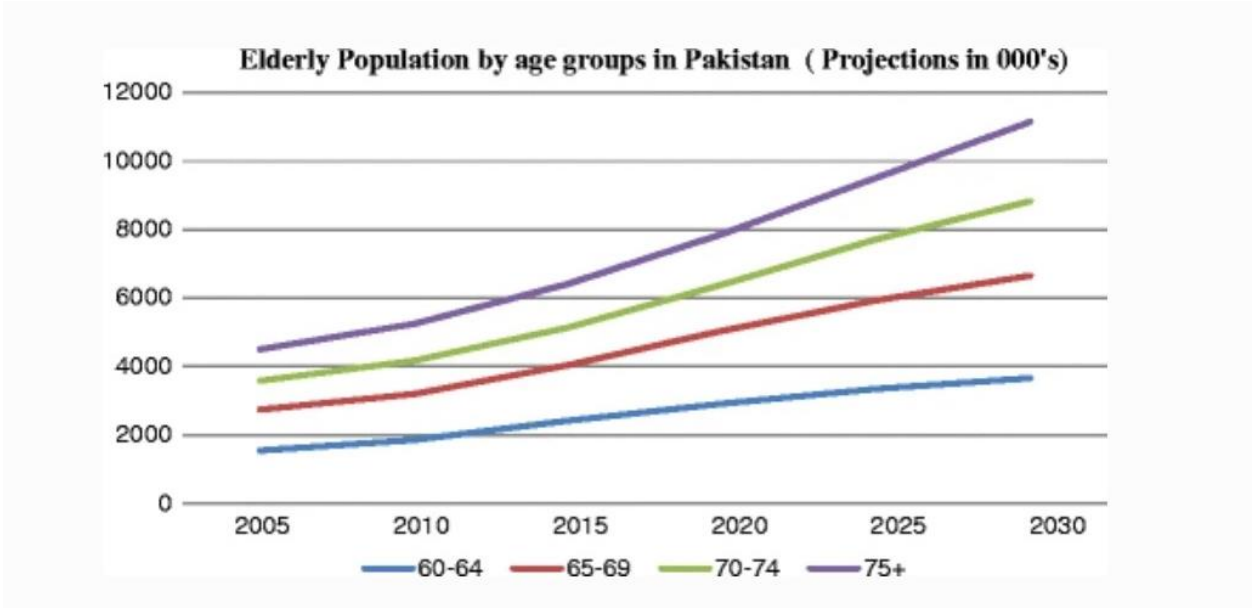

Figure 1: Source: Aging and Elderly in Pakistan

Ageing has been characterized in at least three aspects other than the chronological age, such as biological, psychological, and social, that transpire in the last period of life. Old age is a chain of metamorphosis that is correlated with these three aspects. Chronological age implies the actual amount of time that an individual has passed since birth, expressed in the form of years, months, and days. Biological age refers to the gradual accumulation of changes in the various body systems, cells and tissues within the body, which also affects the mental and social functioning of the elderly population [16][17]. In contrast, psychological age deals with individual capabilities and different mental and cognitive functioning components to adapt to environmental changes. It also includes the sensory and emotional capabilities of how a person feels, behaves, and act intellectually [18]. Social age is defined as changes in the

individual's roles and social connections with the passage of time within the family, companions, relatives, and workplace. It also incorporates with the ability to relate and connects with others [19].

Pakistan is an underdeveloped country and going through several difficulties. The demographic transaction is one of the significant challenges among all of them, and the proportion of the old population is increasing day by day. The burden of chronic diseases, psychological instability and other comorbidities are increasing due to the elderly population [20][21]. Mental and neurological disorders of elderly people are contributing almost 6.6% of all Disability Adjusted Life Years (DALYs) [22][23]. Mental health is also interconnected with other non-communicable diseases (NCDs), like chronic respiratory diseases, cancers, cardiovascular diseases, and diabetes [24][25]. One of the most common yet concerning problems among elderly individuals is depression [23] which might arise from a wide range of social, cultural and economic factors [26]. Therefore, it is creating a massive burden in both high and lower middle-income countries (LMICs).

Depression is a significant public health problem among the elderly population [20][27]. Depression generally coexists with anxiety and other medical conditions, for instance, HIV, multiple sclerosis, Parkinson's disease, heart disease, Alzheimer's disease and stroke [28]. Recent studies have shown that 5% to 7% worldwide elderly population is suffering from depression, and the prevalence of depression in Pakistan is 20% to 30% [22][29]. Globally, females had a significantly higher likelihood of depression as compared to males [30]. In the perspective of Pakistan, a local cross-sectional analytical study indicated that the overall prevalence of depression is 29%, and the ratio of depression is higher in females than the males [31].

Age related disabilities and incapacities are increasing because of considerable changes in family structure. Older family members are not being supported and face numerous difficulties in getting social, psychological, or physical care [32]. The elderly population is sometimes not appropriately treated by their family members; instead, they are persecuted mentally and physically. However, they have contributed a lot to the well-being of the family during their productive time. Due to weak physical and mental health, their economic status is also low. They are not permitted to participate in decision making. These hardships and terrible conditions have driven them to be dependent, [33][34] and they become depressed and isolated.

Therefore, all these critical issues remain practically ignored and neglected in Pakistan. There is an intense need to assess the magnitude of the problem by focusing on the determinants of depression among the elderly population. It is also necessary to identify the needs of the elderly and explore the existing interventions to address the problems and improve the socialization of the elderly people.

1.2 Background:

Pakistan is located in the northwest part of the South Asian subcontinent. Pakistan shares its west border with Iran and Afghanistan, north with China, east with India and south with the Arabian Sea. From south to north, Pakistan comprises four provinces Punjab, Sindh, Baluchistan, and Khyber Pakhtunkhwa [35]. Pakistan contains an approximate 803,940 square kilometres geographical area with a 220 million population. Pakistan is the 6th most populated country worldwide, and it is projected that it will become fourth biggest country by 2050 [36].

Map of Pakistan

Figure 2: Map of Pakistan (Source- Encyclopædia Britannica-Pakistan)

1.2.1 Cultural and Political Aspects:

Pakistan is a multi-ethnic country that came into being in Southeast Asia in 1947, majority of the population is Muslim, but members of other religions also live there including, Hindus, Christians, Parsis, Sikhs, and Buddhists. There is immense cultural diversity in Pakistan, such as Sindhi, Balochi, Pathan and Punjabi; they have different customs, values and languages. Punjabis are the largest ethnic group in Pakistan, and they are dominant in bureaucracy and armed forces; there is enough development in agriculture and education. Punjabi culture is deeply influenced by Sufism, and most of the literature, music and poetry in Pakistan is inspired by Sufism [37] [38].

Pakistan is rich in terms of natural resources; nevertheless, historic political instability has seriously damaged the growth of the country. Since its existence, Pakistan has not achieved political stability because of problems in feudalism, political internal strife and animosity among the political activists. It is detrimentally impacting the economic growth of the country because of weak governance and short horizon of government [39]. Political instability certainly lowered productivity and influenced economic development, which raised unemployment and poverty, which is also increasing the problems of elderly population. It is creating hindrance in development in every sphere of life; unemployment, inflation, and taxes are significant problems for the common people, and approximately one-third of the population lives below the poverty line. In addition, the condition of law and orders of Pakistan is badly affected, and common people cannot take justice because there is no fair accountability [39].

1.2.2 Social Issues:

Pakistan is suffering from many social issues including, poverty, illiteracy, poor health facilities, population growth, gender discrimination and insufficient educational facilities. Illiteracy is a considerable problem in Pakistan as 25 million children is not attending school. People living in rural areas have no access to educational institutions because the educational system is not treated as a priority, and the government is not investing in literacy. At the societal level, low income, unemployment and poverty are fundamental obstacles in education [40]. Population growth is also a root cause of many problems, and it is increasing rapidly, as it is predicted that Pakistan will be the fourth-largest country in the coming couple of years. Over growing population contributes to the poverty rate, shortage of health facilities, shortage of water and food [41].

Gender inequality is deeply entrenched in Pakistan because it is a male-dominated society and most of the decision is taken by the male community; therefore, in many fields of life women remain behind such as education. Women are restricted to perform their duties as a mother or wife within the home. Male dominance is manipulating the rights of women, specifically those living in rural areas, most of them face physical and psychological violence, but they are forced to stay in abusive relationships with their spouses. However, in urban

areas situation is getting better since the last few years females education has been encouraged, and they are allowed to participate in every profession [42].

1.2.3 Health System in Pakistan:

Pakistan has a blended health care system that includes public, private and non-governmental organizations (NGOs). The public health care system comprises three levels; Basic Health Unit (BHU), Tehsil Headquarter Hospitals (THQs) and District Headquarter Hospitals (DHQs), which is mainly responsible for preventive, promotive, curative and rehabilitation services. Preventive and curative services are provided by Primary Health Care (PHC) and outreach activities. However, secondary and tertiary facilities are primarily responsible for rehabilitative and curative services [43]. With the growing population, private facilities such as hospitals, clinics and diagnostic laboratories also increase considerably; 70% of the population prefer to visit private sectors with better trained health workers [44] because in public hospital population cannot get better services with adequate care and facilities. Most health services are delivered by lady health workers and community midwives at the community level [45].

Health Care System in Pakistan

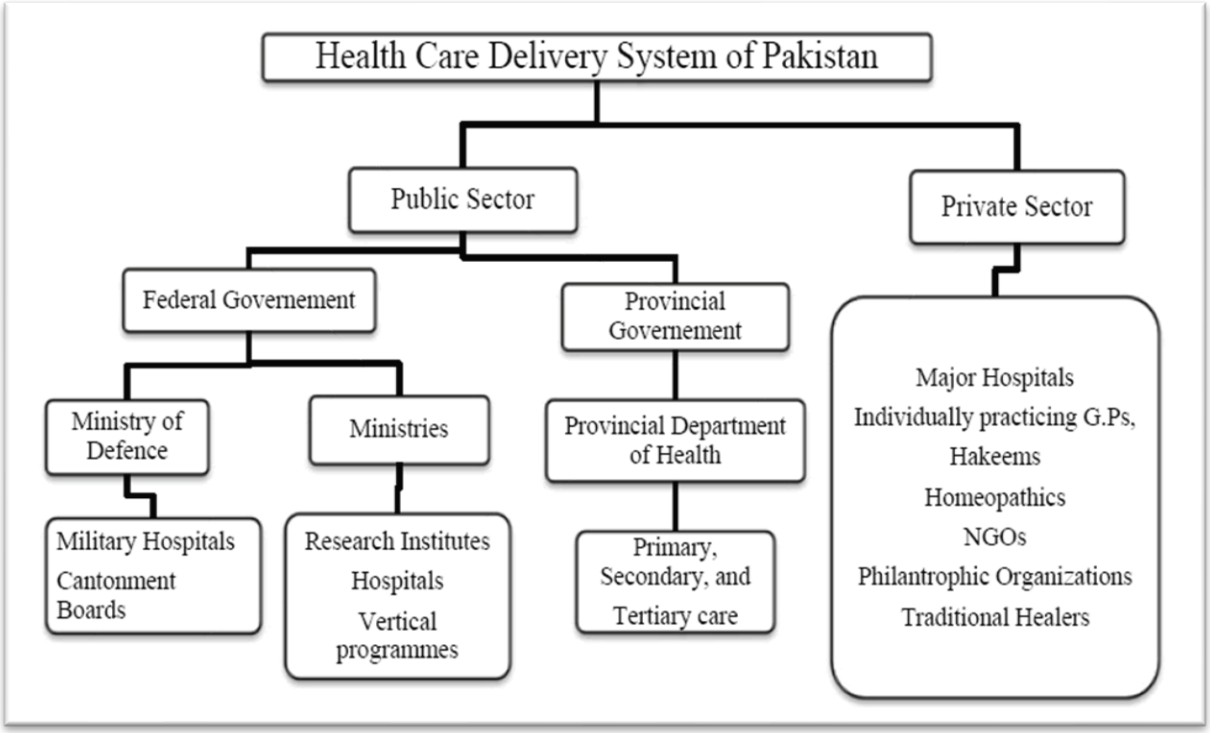

Figure 3: Source: Comparison and Analysis of Health Care Delivery Systems: Pakistan versus Bangladesh

The health care system of Pakistan is going through many problems because of inadequate resources such as dearth of assets, lack of human resources, for example, trained medical staff and operational mismanagement. The fundamental problem with the health care system is that only government officials without medical experts designed the framework of the

medical system, while healthcare professionals are implementing it at the ground level [46]. Health services for the rural population are a considerable issue due to the severe shortage of health workers and insufficient funds for primary health care level [47]. According to the National Health Accounts, the annual per capita expenditure on health in 2018 is 42.8 million USD, and the share of Gross Domestic Product (GDP) is only 3%. The population of Pakistan spending 56% of current health expenditure out of pocket [48]. The health management system is not reliable to cater for the health needs of the population, specifically in rural areas and improve services because of a lack of technology and research at the national level [46].

Global health care systems for elderly people face significant challenges in improving the overall health and quality of life [49][24]. Like many other developing countries, the healthcare system for the elderly is not working appropriately in Pakistan. Usually, general practitioners or other specialists treat the old people, and they are not trained adequately to manage special health care issues confronting by the old patients. The care for the elderly population is often fragmented, and there are no independent residential and rehabilitation facilities for old people. The healthcare system is lacking to provide comprehensive care to the elderly; medical and psychosocial needs of the elderly are unmet and neglected [50][51][52].

1.2.4 Mental Health:

Mental health is a significant problem; reports and studies have shown that almost 34% of the general population is suffering from mental health problems like depression and anxiety [53]. Approximately three million people are drug addicts, and in a couple of years, the rate of suicide has been increased rapidly. The estimated crude rate of suicide is 7.5 per 100,000 population; [54] 2% population is experiencing severe mental health disorders like Mania, schizophrenia, psychosis, and bipolar; 15% children and adolescent suffers from mental health problems [55]. During the crisis of Covid-19, the psychological well-being of the people is severely affected; this pandemic raised depression, anxiety and suicide due to poverty [56].

People are reluctant because of the taboo and stigma attached to mental illness; they do not seek appropriate mental health treatment; they prefer to visit traditional healers [57]. Some people consider that mental illness like depression is the accusation of witchcraft assault, evil eye or sorcery, while others believe that it is a punishment from God as a consequent of some sins or forbidden acts. People assume that spiritual healers can only cure such mental illness [58].

Mental ailments is not a priority of the public health agenda in Pakistan. According to the Mental Health Atlas, Pakistan does not have an independent body to evaluate the compliance of mental health with international human rights under the section of mental health legislation [59]. However, mental health ordinance was declared in Pakistan in 2001, [60] which was a significant improvement in psychiatrist law and further pathway to promote mental health by providing better treatment and management [61] but not appropriately implemented as developed. Because there is less than 1% sharing of GDP for mental illness

and mental illnesses do not have a separate budget [62]. Health care departments spend a small amount of budget 0.4% on mental health. There are no social, public or private health insurance policies to cover the expenditures of mental illness [62]. Due to the scarcity of human resources, mental health is being ignored.

Mental Health Expenditures

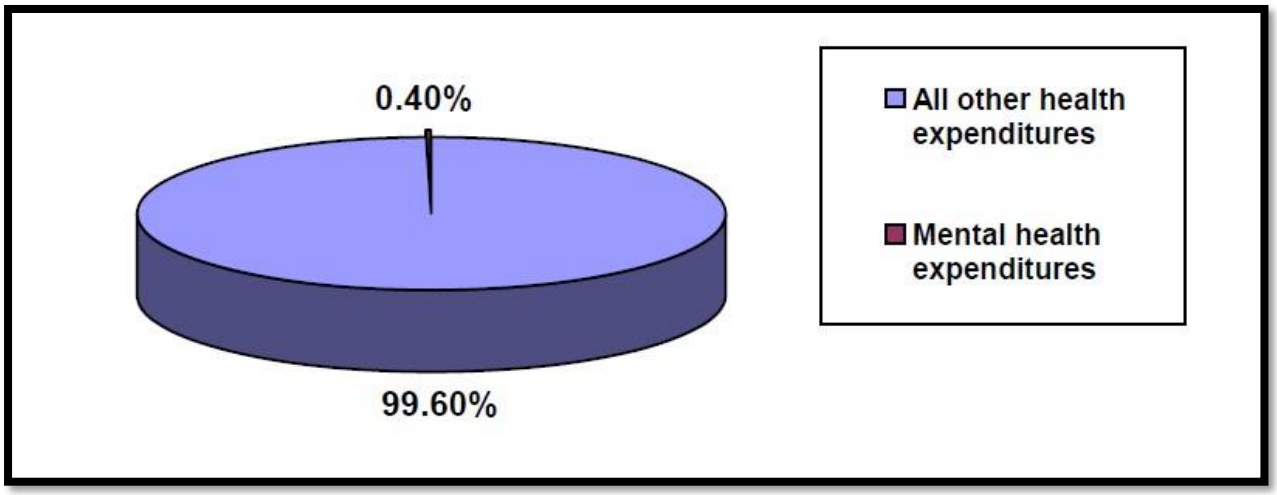

Figure 4: Source: WHO Amis Report on Mental Health System in Pakistan

Mental health services are mainly provided in secondary and tertiary hospitals, and rural communities rely on poorly managed primary health care (PHC). Due to the acute shortage of services, the dissemination of mental health resources in urban and rural areas is skewed because only 342 psychiatrists serve millions of the population, [62] and most of them are based in urban areas, whereas 60% of the population belong to rural communities [63]. There are only five mental health hospitals in Pakistan that serve children, adolescents, adults, [62] and the elderly population are being neglected. However, the basic obstacles to the allocation

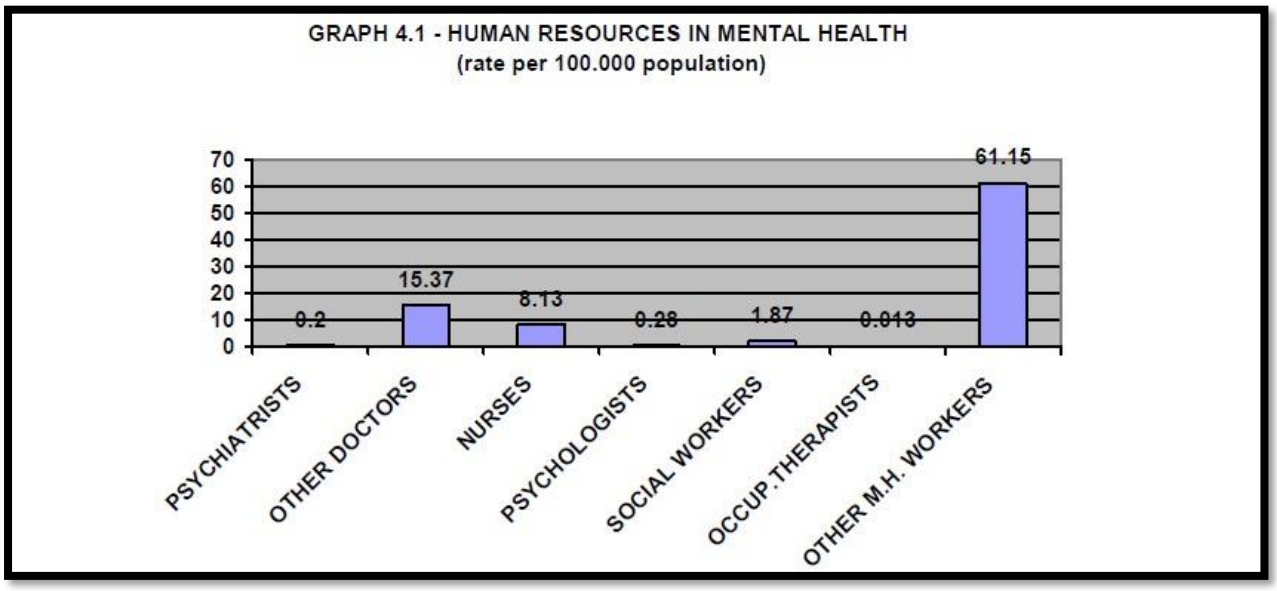

Figure 5 Source- WHO Amis Report on Mental Health System in Pakistan

of mental health services for the elderly are insufficient human resources, lack of political will and a small amount of budget [64].

Mental health disorders are increasing worldwide, and there is still a gap in providing mental health services. However, the integration of mental health services at the primary care level is the best way to provide services to the community as defined in WHO guidelines. Most people cannot access mental health services until the services are integrated at the primary care level. Integration of mental health at the first line is easily accessible, efficient, and cost-effective; some under-developed countries produce good health outcomes with this integration [65].

Mental Health Services Integration at PHC Level

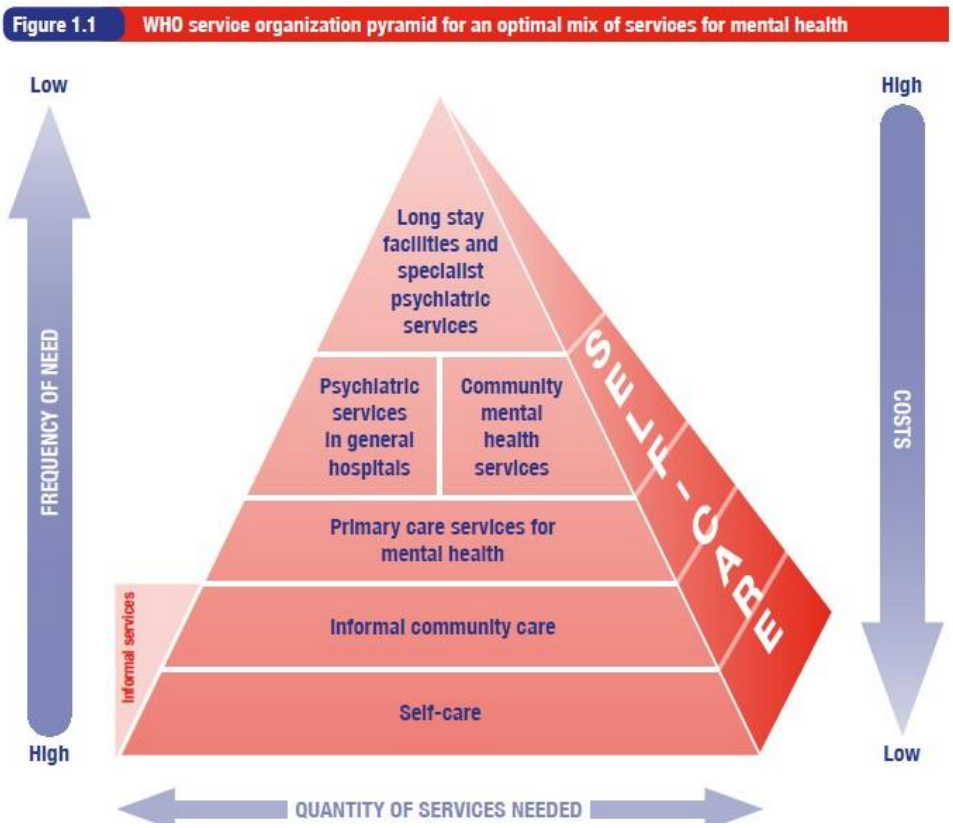

Figure 6: Source- Integrating mental health into primary care: a global perspective

CHAPTER 2

Problem Statement, Justification, Objectives, Methodology

2.1 Problem Statement:

In Pakistan, there is instant growth in complicated and interconnected problems of the elderly population, including social, cultural, financial, physical and psychological due to demographic transactions [66]. Old age brings various issues for older people in all domains of life at the individual level, interpersonal level, community level and organizational level. For example, ageing has a potential impact on financial instability due to loss of employment and decline the status of elderly in society. In addition, the loss of a life partner may lead to the loss of home. In a study, a few reasons specified that why old age is insecure. First and foremost, it weakens and drains the body; second, retirement from employment. Moreover, physical activity and pleasure of life are reduced, which creates isolation [33].

Family is considered a fundamental part of Asian culture, and any change in the family structure presumably influences the harmony and support available in the joint family system [67]. From the perspective of Pakistan, a joint family system is breaking down into nuclear due to rapid urbanization and western influences. Consequently, the care and support of elderly population are neglected, [68] which makes them socially isolated, hopeless and helpless. Besides, after retirement, the elderly population is being deprived of financial resources; they become dependent on their kin, and a majority of the family members scolded and beat them when they refused to give pension or property. Psychological abuse is subjected to the elderly population in the form of harsh words and humiliation [69].

Depressive disorders are the most common psychiatric condition that can be seen in older people, which leads to the functional impairment, decreased quality of life and personal satisfaction and increased mortality. Depression is associated with adverse events and conflicts, and it increases the risk of suicide and death and decreases the capacity of resilience [70] [71]. A large proportion of the elderly population faced maltreatment in different ways, including physical, mental, emotional, loss of dignity, and respect. Maltreatment leads to physical injuries and prolonged psychological issues like depression and anxiety. Due to cultural values and self-respect, older people are terrified and incapable to report; eventually, this abuse can prompt actual wounds [68]. Thus, the intensity of depression among the old population is increasing rapidly, and it varies in rural and urban areas [72] [34].

Depression is usually an under-diagnosed and under-treated condition; older people are more vulnerable to depression [73]. In the depressed elderly population, the prognosis of chronic diseases becomes worse, leading to physical frailty and psychological impairment and affecting life expectancy [29]. Depression is a very intensive problem of Pakistan that cannot be neglected, but it is not a priority of the public health agenda [74]. In addition, there is no appropriate measures and arrangements for the health care of elderly people in public institutions. Consequently, elderly people face discrimination and feel isolated, rejected and

dejected [33]. However, few voluntary private institutions are working for the mental and psychosocial health of the elderly population, [75] but this issue is still unaddressed at the government level and requires more attention and intervention.

2.2 Justification:

The values and family frameworks are dominated by overwhelmed industrialization, westernization, and contracting family structures and socialization. Subsequently, family members are acted like caretakers for older people, but they considered them dependent and problematic. It indicates that the elderly population need care and protection to maintain quality of life [32]. However, this problem is being ignored at both government and private levels [33]. A complete package of interventions is needed to cater to the physical, financial, mental health and psychosocial needs of the elderly population in the future [33]. In the proposed study, the researcher would like to analyse key determinants associated with depression at different levels such as individual level, interpersonal level, organizational level, and community level among the elderly population in the context of Pakistan.

Different governments introduced social policies in Pakistan to solve the problems of the elderly population, but unfortunately, these approaches have not been implemented yet, which is exacerbating the issues of old people. This study will emphasize the issues of the elderly population of Pakistan and highlight the importance of social support. Thus, the study's findings will facilitate the needs of the elderly population to resolve the issues by making recommendations, which will open the door for new strategies and interventions.

This literature-based study will also facilitate to fill the knowledge and achieving the third Sustainable Development Goals (SDG) agenda towards 2030, which ensures healthy lives and prosperity at all ages. To cater to the social and economic requirements associated with the elderly population is important to ensure progress towards the accomplishment of SDGs [14].

2.3 Research Question:

What are the determinants of depression among the elderly population of Pakistan and existing interventions for the mental and psychosocial health of elderly population?

2.4 General objective:

To explore the determinants of depression among the elderly population in Pakistan and identify social, cultural and systemic gaps which exacerbate the problem to give recommendations to improve mental health and psychosocial programs.

2.4.1 Specific Objectives:

1. To identify and describe the individual and interpersonal factors that are contributing to depression in the elderly population of Pakistan.
2. To explore the role of community and organizations and their influences on the prevalence of depression in elderly people.

3. To identify existing effective psychosocial intervention programs addressing the mental health and psychosocial problems of the elderly population in Pakistan.
4. To provide policy recommendations for the improvement of mental health and psychosocial support.

2.5 Methodology:

The researcher's purpose is to conduct this study through a review of academic literature published around the stated problem. Academic publications are obtained from research databases such as VU Online Library, PsycINFO, Google Scholar, ScienceDirect, PubMed and Embase. Other applicable articles are searched from the reference list using the snowball method. Relevant Grey literature reports will be distracted from National Newspapers, The United Nations and the World Health Organization (WHO) website. Most recent twenty years' time frame has been utilized to find the data and articles which were published in the English language.

2.5.1 Search Strategy:

Sr.	Specific Objectives	Country
01	**To identify and describe the individual and interpersonal factors that are contributing to depression in the elderly population of Pakistan.**	**Pakistan**
	"Elderly Population" OR "Older People" OR "Aging" OR "Older Adults" OR "Senior Citizens"	
	AND	
	"Mental Health" OR "Mental Disorder" OR "Stress" OR "Depression" OR "Individual" OR "Interpersonal" OR "Self-esteem" OR "Knowledge", "Family" OR "Friends" OR "Social Network" OR "Attitude" OR "Behaviour" OR "Socialization"	
	AND	
	"Determinants" OR "Factors" OR "Causes" OR "Elements" OR "Components"	
02	**To explore the role of community and organizations and their influences on the prevalence of depression in elderly people.**	**Pakistan**
	"Elderly Population" OR "Older People" OR "Aging" OR "Older Adults" OR "Senior Citizens"	
	AND	
	"Organizations" OR "Institutions" OR "Community" OR "Attitude" OR "Behaviour" OR "Social institutions"	
	AND	
	"Role" OR "Influences" OR "Power" OR "Impact" OR "Effect" OR "Responsibility" OR "Program"	
03	**To identify existing effective psychosocial intervention programs addressing the mental health and psychosocial problems of the elderly population in Pakistan**	**Pakistan**
	"Elderly Population" OR "Older People" OR "Aging" OR "Older Adults" OR "Senior Citizens"	
	AND	
	"Programs" OR "Intervention" OR "Psychosocial" Or "Psychological" OR "Prosperity"	
	AND	
	"Welfare" OR "NGOs" OR "Institution" OR "Old homes" OR "Policy"	

Exclusion criteria are based upon the following: publications and articles published in Urdu and other languages and do not contain the mental health of the elderly population and other publications outside Pakistan. In addition, other studies that were not available in full text and many studies from India, Bangladesh, China, and Vietnam were also excluded. All the studies from Pakistan published in the English language within the provided timeframe have been included. Research articles were not adequate to meet the objectives of this study; therefore, relevant grey literature from different national newspapers, journals and websites were used to analyse the problem, particularly at community, organizational and policy levels. Furthermore, applicable data from private foundations, local governmental and non-governmental organizations have also been included, which is available on the internet.

2.5.2 Framework:

Various conceptual frameworks have been developed to understand the dynamic interrelatedness among different determinants that can contribute to depression. The researcher examined different existing frameworks to describe the determinants of depression among the elderly population in Pakistan. Three conceptual frameworks have been used to analyse the determinants related to depression: “Socio Ecological Model”, “Conceptual framework of Individual stress vulnerability, depression, and health outcomes in women”, and “Protective factors and resilience in older adults”. During analysis, the researcher concluded that the last two models were not suitable according to the study objectives. Because “conceptual framework of individual stress vulnerability, depression and health outcomes” is related to recurrent stress and shows how stress vulnerabilities can cause depression. It focused only on biological and behavioural factors that have an impact on health and were specially designed for women [76]. Moreover, the other framework, “Protective factors and resilience in older adults”, concentrated on personal strength to bounce back from adversity and provide a pathway towards protective factors in the personal capacity rather than interpersonal, community and organizational level [77]. However, depression is a universal health problem, and there is a need to identify and break down the determinants of depression in the elderly population. Socio Ecological Model (SEM) provides a comprehensive approach to understand the determinants of depression at the individual level, interpersonal level, community level and organizational level [78]. This review paper tends to favour SEM because the application of this framework is relevant as it provides the holistic picture of the problem at the Micro, Mezzo, Exo, Macro and Chrono levels. It is also beneficial for the treatment and rehabilitation of depression [79].

The micro level contains the intimate and immediate world of the individual that include parents, life partner, companions, children, and siblings. Mezzo-level consists of formal and informal institutions with close contacts, such as Office, Church, Mosque, Club, Unions, School and so on. Exo level incorporates with social structures which have an immediate impact on microsystem. Macro level covers the larger part of the culture and society, which include socio economic status and ethnicity. Lastly, chrono level covers the cumulative experience and

significant transitions of life that include policies, rules and regulations that has an impact on individual life [78].

Figure 7: SEM Source: https://www.thinglink.com/scene/873255747264184322

Thus, multiple determinants are correlated with SEM, which is an essential part of this study and has the ultimate impact on the mental health of the elderly population. From the perspective of organizations, barriers and enablers will be identified and how various intervention programs would cater to the psychosocial and psychological needs of the elderly population.

CHAPTER 3

Results and Findings

This chapter deals with the results and findings. The results are described according to the determinants of depression in line with specific objectives and framework. The determinants of depression among the elderly have been analysed at various levels as provided in the conceptual framework by describing the situation of the elderly in Pakistan to get a better understanding of the key challenges which have an ultimate impact on the mental and psychosocial health of the elderly population. Existing psychosocial interventions and policies will also be analysed in this chapter.

3.1 Specific Objective: 1

Under this specific objective, results related to the individual and interpersonal levels will be explained that contribute to depression in the elderly population. Individual-level deals with the life span of a person, including personal attitude, abilities, health, and values and it is directly linked with the interpersonal level as a process of socialization. Interpersonal level deals with the interaction of the immediate environment of the individual such as spouse, family, friends and relatives that can provide social support to improve mental health or create problems that increased the level of depression.

3.1.1 Individual Factors:

At the individual level, various determinants are responsible that contribute to depression among the elderly such as decision making, unemployment and economic dependency, chronic diseases, isolation, low self-esteem, and confidence. High self-esteem certainly reflects the high level of functioning and psychological health of old people. With high self-esteem, the elderly population can grapple with the problems caused by health issues, mobility and so on [80]. Elderly people often play a dynamic role in the decision-making process, and decision-making power gives them a sense of strength and self-respect. It escalated self-esteem and facilitate to live a better life, but the elderly population is not being involved in decision making process, [66] which reduced their self-esteem and made them depressed. As some of the results demonstrated that older men and women are not permitted to participate in the decision making process; [66] [81] they are even not allowed to intervene in family affairs. Although, if some of them get involved in making decisions, their opinions are not being regarded, but they were asked to share their views [81].

The inactivity of old age worsens the physical condition of the elderly in various aspects. The employment status of an individual upgrades personal satisfaction as it keeps the person healthy mentally and physically; it also makes them economically independent. As ageing and employment have an inverse relationship, unemployment is a significant trigger of depressive symptoms that reduce hope and create financial problems which make them dependent [31]. It has been illustrated that the working elderly population is living their lives in a better way

than the non-working elderly community [66] because non workers rely on others economically. Economic reliance is also a major trigger of depression in the elderly because financial dependency provoked abuse and deprived them of fundamental necessities of life. As Dildar and Fatima indicated in their researches that elderly people do not get food or other basic needs, and most of them see themselves as a burden due to the harsh attitudes of their families [69][82]. Some elderly who served in the public or formal sector received pensions after retirement [83], which reduced their economic dependency; other determinants related to government gratuity are discussed under in organizational factors.

Individual Factors of Depression

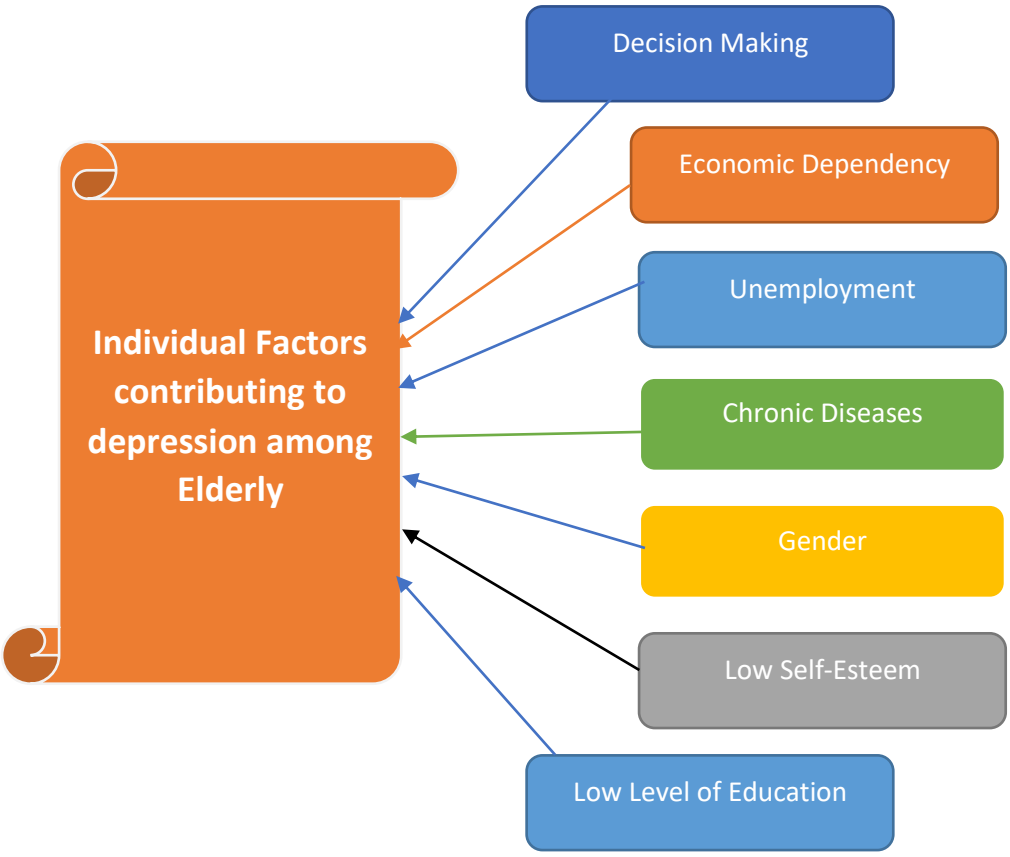

Figure 8 Individual Factors of depression among elderly population

Ageing leads to physical fragility, and the presence of chronic diseases can worsen the level of physical activity. Chronic diseases and physical frailty are directly associated with a higher level of symptoms of depression in the elderly [84][85] because it decreases the level of activities, and they become dependent on others. In addition, their social interactions and networks become restricted. It has been demonstrated that there is a strong association between physical inactivity and depression [86]. Evidence from a local study which has been

conducted with approximately 400 participants, illustrated that 72% of elderly individuals who suffer from chronic diseases such as hypertension, urinary incontinence, visual impairment, diabetes and arthritis were suffered from persistent symptoms of depression [29] [87].

Growing age increases the risk of abuse, such as, emotional abuse, financial exploitation, physical abuse, and verbal abuse. The abusive behaviour subjected upon the elderly significantly raise the likelihood of depression [88] [69] [81]. Usually, sons subjected the violence to the elderly for some hidden intentions; interestingly, it seems a more common practice with the elderly who have property or retirement gratuity [88]. In a study, 90% of respondents pointed out that they confronted financial abuse in the form of robbery and grabbing of property mercilessly; 85% of participants indicated verbal abuse in form of harsh words or humiliation. Whereas 60% of elderly people highlighted physical abuse as slapping, hitting, pushing, burning and injuries [69].

Some studies indicated that a low level of education is a strong predictor of depression among the elderly population [73] [86] [89] because old individuals with less education cannot complete specific tasks. For instance, they cannot make appointments to consult with doctors, cannot fill the forms of English language, and cannot manage household financial matters. Therefore, illiterate or less educated elderly people are commonly reliant on their family members even for a very simple task, such as filling in a form; if elderly individuals do not have family members to help them, it will contribute to make them depressed. Some studies illustrated that; the uneducated elderly population staying in the nuclear family system are more depressed than those living with joint families because they are more likely to get help in a joint system than the nuclear one [34] [73] [31] [29]. Other determinants related to the family system is mentioned below in interpersonal factors.

Gender is a significant determinant of depression among the elderly population; a large proportion of studies indicated a strong association between female gender and depression [90] [34] [73] [31]. Depressive symptoms vary gender wise because women have a higher life expectancy than males [91] [92] and women seek treatment for depression [93] [94] [95]; however, males are reluctant toward the treatment because they are inclined to confront the harsh realities and feel more sham to seek help. It is also indicated that the elderly with a previous history of depression developed the depressive symptoms relatively early than the others [73]. Furthermore, it has also been illustrated that family history of mental illnesses is a major determinant of depression in the elderly population [73].

Older populations are more susceptible to depression in different ways, but it also depends on cognitive abilities. As evidence shows, the elderly with strong capabilities and good self-esteem have reduced the level of depression. Therefore, it is recognized that the elderly who have strong faith in their abilities can overcome depression in adverse situations [96].

3.1.2 Interpersonal Factors:

Social support assumes an essential part in the lives of the elderly population because social assistance is directly associated with mental and psychosocial health, which can decrease the impacts of morbidities and mortality and enhance well-being in later life. Mental health and psychosocial issues like anxiety, depression and isolation escalate without social support and associations, particularly after retirement and living away from home [97]. Support of friends and family is considered an important source of pleasure and mental prosperity for the elderly because social connections provide them emotional support by sharing thoughts, grief, experiences and ideas [98]. Social circles embedded with spouse, family and friends provide a strong sense of security, and elderly people do not feel isolated with them [99].

One of the basic needs of elderly people is the care and support of their spouses. Therefore, the death of the spouse is an important determinant that contributes to depression in the elderly because it reduced their ability to cope with challenges. It also affects their psychosocial health and survival as some of them cannot share their issues and sorrows with others. In addition, in some cultures, remarriage is considered taboo; consequently, a higher proportion of older people face social deprivation and experience loneliness which makes them dependent and depressed [100] [34] [101]. Due to social isolation, their social contact gets reduced, whereas negativity increases [102]. As some results showed that feeling of despair and social isolation is an immediate consequence of the spouse's death because some participants indicated that they suffered from psychological issues such as fear, anxiety, distress and trauma after losing their spouse [103] [82]. The average life expectancy of men and women are different; Pakistani women live approximately three years longer than men [104].

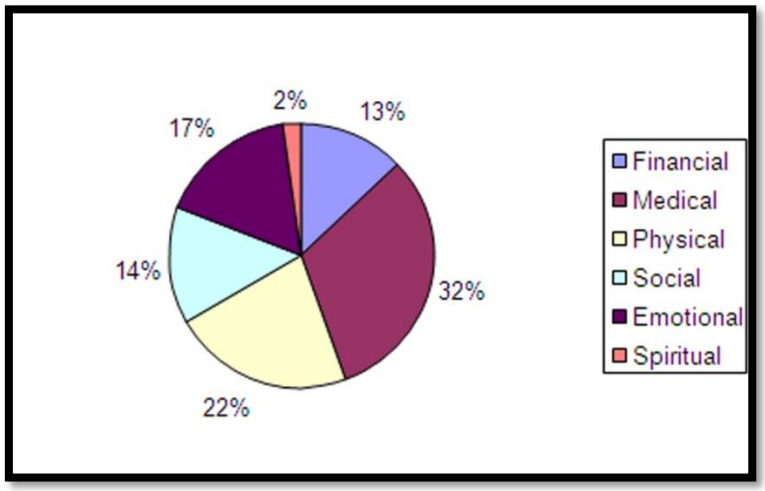

Figure 9: Source: doi: https://doi.org/10.1371/journal.pone.0025873.g001

On the other side, all the elderly are not happy with their marriage life as a study conducted in Rawalpindi, Pakistan, explained that spousal death is not linked with depression because they might not get adequate support from their spouse [105]. Moreover, some people who are not happy with their married life are more likely to be depressed as compared to live without a spouse [106]. Therefore, the death of spouse is not specifically interlinked with depression but also depends on the relationship and attachment with each other.

Support of family is seen as a symbol of relief, strength and protection, associated with the well-being of the elderly population. The results, therefore, demonstrated that elderly people who do not live with their families show higher levels of depression [105]. Loneliness and isolation are strong predictors of depression, as outcomes of the studies identified persistent symptoms of depression in the elderly who are living away from their homes [107] [108].

Most family systems in Asia and Pakistan have joint family systems, which are traditionally considered patriarchal, [109] but now the majority of the family systems are divided into the nuclear family system [109]. The nuclear family system is strongly associated with depression because advancement towards the nuclear system has a major detrimental impact on the physical and psychological well-being of elderly people. The results demonstrated that elderly individuals reported a higher level of depression who were living in a separate family rather than a joint system [110] [34] [111]. In the joint family system, elderly individuals received better care and have more social interactions, which is not possible in a separate system. Moreover, elderly people feel isolated in the nuclear system because they have insufficient physical, emotional and psychosocial support, specifically if they suffer from any chronic illnesses. Some findings indicated that the nuclear family system is a significant contributing factor in depression among the elderly [34] [82] [112].

According to the cultural norms of Pakistan, parents expect to stay with their children, and it is considered obligatory for kin to look after their elderly. It is commonly observed that rural civilization takes care of their elderly in a better way than the urban residents. Subsequently, family assistance provides greater satisfaction to the elderly in terms of emotional, psychological and physical support [66]. Shireen indicated in her paper that children generally leave their elderly individuals when they suffer from long term chronic diseases because it increases the economic burden on them [113]. Several other studies have also shown that the elderly population is mistreated and devalued by their kin; they have experienced ignorance, harsh attitudes, anger, and criticism on unimportant issues and their family members considered them as a burden [103] [69] [88]. After retirement, elderly people anticipate that their families will be looked after them. Old individuals also expect to receive emotional, economic and physical support from their families, but lack of family support creates uncertainty that raises their vulnerability to depression [34] [101].

Social interaction is a major source of pleasure for old people because it provides them a feeling of kindness, social support and protection from isolation. Social activities usually involved interactions with friends, family functions and social gatherings [81]. Companions are considered a significant source of happiness and emotional support [98]. Social relations provide satisfaction and enhance the mental and psychosocial well-being of the elderly population regardless of their socio-economic status. However, a lack of social interactions creates frustration and can turn into distress [32]. In a study by Mushtaq, participants revealed that they become unhappy, isolated and depressed because of the limited social circle, and also they are being neglected by their families [81] [114]. Other a few studies demonstrated that the elderly population, specifically females, were not allowed to visit

friends or relatives and were threatened by their children. Female respondents indicated they feel isolated, helpless and become depressed under intimidation [69] [34].

The growing challenge of poverty exposes the elderly to adversities of life because the old values and traditions of providing care and respect to the old individuals are being ignored due to rapid modernism and fast-paced lifestyle [66]. Lower social status is also considered the cause of depression in the elderly because, in the past, they were financially strong, influential and enjoyed high status [100]. However, due to declining in age, the elderly have been replaced for the sake of customs that deprived them of their status and autonomy. Therefore, after losing their economic status, they become dependent, fragile and isolated, factors contributing to depression [68] [111].

The elderly population has been affected badly during covid-19 because this global pandemic has a huge impact on mobility, and the ageing population is unable to maintain their social ties and are supposed to stay within the home that contribute to depression [115]. In addition, reports and studies indicated that COVID-19 negatively influence the mental well-being of elderly because of different stressors such as extensive lockdown, social disconnectedness and quarantine [116] [117]. There are several risk factors interlinked with the mental health of the ageing population that leads towards depression, for instance, less social support, living alone, restricted social circle, fear of exposure and increasing death rate due to COVID-19 [117]. Mumtaz at all. indicated that the elderly population is more likely to suffer from depression when they face any stressful event related to the pandemic [96].

3.2 Specific Objective: 2 & 3

Under these specific objectives, the researcher will determine the role of community and organizations that how they are contributing to depression in the elderly population. Which policies and organizational programs, including the public and private sector, contribute to improving the mental and psychosocial health of the elderly population. Moreover, existing psychosocial interventions that are working for the elderly to enhance mental and psychosocial health will also be analysed.

3.2.1 Organizational Factors:

Formal assistance and support from the government for the elderly population in Pakistan is destitute due to the drained organizational structure. Health care services are inadequate for elderly people due to fragile planning and insufficient budget. Institutionalized Long term services are required to provide adequate care to the elderly population, but it is not feasible in the current scenario. Although, on a smaller scale, non-governmental organizations (NGOs) and private foundations are providing public education and awareness on mental health issues of children, women, adolescents, ethnic groups and trauma survivors [62]. Some of them are also working for elderly people but still lacking to provide comprehensive care to the elderly [50].

Mental and psychosocial health services gap can be ensured by integrating services at the primary care level. Pakistan's PHC system contains 5,000 basic health units, 600 rural health units, and 7,500 other primary health care institutions [118]. Currently, at the PHC level, mental and psychosocial services are not being provided; however, the integration of mental health services at the PHC level will improve the mental health of elderly people [119]. Due to inadequate resources, it is necessary to ensure the integration of services at PHC, specifically in rural areas, because most elderly people do not have access to services from rural areas. Besides, the government does not necessarily have to deal with the issues of the elderly alone, but it is the government's responsibility to ensure the other appropriate resources like NGOs, private foundations, and social welfare organizations. There is a need to streamline the stakeholders for the betterment of the elderly population because it is necessary to reduce financial pressure on the public treasury. Apart from government health facilities, numerous private foundations and NGOs are providing mental and psychosocial health services [120]; therefore, public-private partnership is also essential to improve the situation of elderly people.

Like other developing countries, Pakistan also has a fragile system of pensions for elderly people. The pension scheme is developed for the elderly who are public sector employees and lose the abilities to earn in old age. Most of the deserving elderly population entitled to government annuity plans do not receive pensions [68]. A large proportion of elderly who do not get their gratuity rely on their kin and family who always considered them burden [121]. In addition, inflation is rising drastically, but the patterns of pension for elderly people are stagnant, making them financially handicapped, and the elderly cannot access health facilities which is a significant predictor of depression [122].

The government of Pakistan does not subsidize specific health services for the elderly population. Although in public hospitals elderly population can receive free healthcare, but the quality is poor with extra-long waiting hours due to the heavy burden of patients. Moreover, there are no proper separate physical rehabilitation centres for elderly people [122]. The growing poverty trends in Pakistan are creating difficulties for the elderly population to obtain formal medical and psychosocial support. Several elderly people have been found depressed because they are incapable of paying for private services [86]. It is a very alarming situation that at the organizational level, Pakistan lacks to provide essential physical, financial and psychosocial care to the elderly [52]. These problems exist in Pakistan are due to inadequate social security schemes in the public and private sectors. A small proportion of elderly population is getting benefits from social security, but a huge number of older people have been deprived of these welfare programs and remain vulnerable [114].

Psychosocial Programs and Interventions

Psychosocial programs by the government and private sector are developed to provide support to the elderly population. The Public Sector Development Program (PSDP) is an initiative designed to cater the basic needs of poor elderly people by establishing old homes and rehabilitation centres [100]. First old age home named “Aafiat” (Comfort and Security)

was created by Social Welfare Department (SWD) in 1975. Since then, five more old homes have been created in different regions of Punjab province. They provide shelter and basic facilities to the vulnerable elderly population along with recreational activities to reduce their level of stress and anxiety. Aafiat also arranged various psychosocial programs for the elderly so that they can stay away from depression. There are separate wings of the buildings for men and women [108] [123][124].

However, SWD is working on the limited economic capacity that causes many other problems such as lack of standard care, inadequate psychological and medical services for the elderly because there is no separate budget scheme for the elderly population in old age homes [125]. A comprehensive government project of mental health care for less privileged sections of the society is working in different sockets of Pakistan called fountain house. This institute provides psychiatric treatment and psychosocial rehabilitation facilities to restore the potential and self-esteem of the elderly population. Different group therapies and individual counselling sessions are also provided to reduce the level of depression [126].

Apart from the public sector, a few private foundations, and NGOs such as Edhi Trust, Al Mustafa foundation, Agha khan foundation are working for the abandoned elderly population who are shunned away by their family; by providing shelter, health facilities and psychosocial services. Recreational programs and psychosocial interventions are being arranged inside and outside the shelters homes to reduce the stress level of the elderly [122] [127] [128]. In addition, Karwan-e-Hayat, Senior Citizen Primary Care Unit, JDC Foundation and Chhipa are struggling to improve psychological well-being by providing health care and organizing different social programs and recreational activities to revitalize the mental health of elderly people [129][130][131][132]. Moreover, some nursing homes are mainly operated by religious organizations; some of them are working in Karachi, the largest city in Pakistan. These organizations are working on religious and community donations, and they provide valuable services to the needy and vulnerable elderly population. Some private facilities have also been developed for elderly medical care and social activities to reduce loneliness and isolation. They are trying to provide care like home to reduce the stress of elderly people [50].

3.2.2 Community Factors:

Ageing brings various problems not only to the elderly but also to the entire society. This economic crisis and insufficient social welfare budget for the elderly is triggering social issues such as begging and crimes. A huge segment of the elderly population is not covered by any public or private social security schemes, and they remained unprotected from the economic crisis that ultimately contributes to depression [33]. Old age homes are like a protected palace for a number of elderly people who are shunned away by their family members, relatives and have no one to look after them [133]. An optimal environment of the old age homes can accelerate the elderly to adjust better. The favourable atmosphere of the institution refers to the freedom and independence that can be established through rules and regulations and a good relationship among the employees and residents. A study demonstrated that an optimal environment also includes flexibility, frequent visits of family and friends, and participation in

group activities [133]. Rizvi explained in his paper that SWD also has orphan centres; different combined activities with the elderly and children improve socialization [75] because these two desolate populations provide good companionship and emotional support to each other in a productive way.

In Pakistan, according to cultural standards and traditions, family members and relatives are obligated to take care of elderly individuals as described in interpersonal factors. Therefore, it is considered wrong to send elderly individuals into old age homes even under unfavourable circumstances. It is considered taboo to allow or send old people outside of the home [75]; thus, family members are bound to support the elderly. The concept of old age home is not traditional in Pakistan, but in this era, it would be a protective factor for that elderly people who are homeless, living alone, [134] and forced to stay in the abusive environment as mentioned in the individual and interpersonal level.

Most of the respondents living in old homes stated that they are satisfied; receiving appropriate supervision and care because they did not receive this kind of care in their families. On the other hand, some respondents expressed their preference to stay with their families because they do not feel secure in old homes with strangers [135]. A news report indicated that some people living in old age homes suffer from depression because their social relationships are impaired, and they cannot participate in community activities. Moreover, staying away from a family is also a reason that contributes to depression, leading to dissatisfaction and adjustment problems [136]. Another important determinant of depression is stigmatization attached to the old homes. Nevertheless, old age homes in Pakistan have become a necessary requirement because of urbanization and migration as well [137].

A survey of a private trust indicated that 98% of the elderly prefer to be with their families and grandchildren because the desolate atmosphere of old homes cannot replace the emotional satisfaction of their loved ones [113]. Recent research was conducted with 180 respondents on the psychological problems perceived by the institutionalized and non-institutionalized elderly population. This study revealed that institutionalized elderly have a moderate and higher level of anxiety, depression and loneliness, which is 53.5, 53.1 and 51.8, respectively [138]. Elderly people living in old homes have a higher level of depression and loneliness because they are being neglected by their families and friends [138].

Another study is conducted in six different old homes that explored various reasons for depression among the elderly population at community level [75]. Different respondent portrayed the stressors of the depression; for instance, a couple of individuals indicated that, at present, in the age of social media, whoever visit the old age home take pictures with us while doing different activities such as giving money, foodstuffs and dresses. They used these images as a big demonstration for their promotion which humiliates and disgrace us. Moreover, they added that we are unable to get food three times a day because the government allocates a small amount of budget, which is not sufficient as the number of residents is increasing, but the amount of the allowance is static. The budget for excursion and frivolous activities has been abrogated, which contribute to depression as well. Some of

the respondents also complained about the congested place, and rooms are overloaded rather than the provided capacity. Due to over crowdedness, they face hygiene problems that create illnesses and make them depressed [103] [75].

The researcher did not find any other appropriate evidence and academic publications related to other community and civil society initiatives that contribute to or reduce the level of depression among the elderly such as community discussion forums, common places for reading books, group conversations, and playing common games together. As it is prevalent in rural areas of Pakistan, the elderly people spend time together called (Bathak); they talk with each other on social issues, share their food and play some games with cards that reduce their social isolation.

3.3 Public Policy Factors:

The government of Pakistan formulated a national policy in 1999 to improve the physical and psychosocial well-being of the elderly population. It was a blend of physical, social, and psychological geriatric care at the primary level, including physiotherapists and social workers. “Green Slips” free of charge for prescription has also been introduced for geriatric psychosocial and medical care, but all these provided plans were not implemented at the grassroots level [121]. In August 2004, another Prime Minister endorsed an aid plan to meet the essential social and medical needs of the elderly population [139]. The basic purpose of this package was to protect the elderly people from awful circumstances by providing them special consideration at different public places such as banks, hospitals, airports and railway stations. It was also incorporated with legitimate facilitations to the elderly in all the matters of courts and relevant departments. In addition, this program was also responsible for educating the young people morally on how they should treat their elderly individuals to improve their mental health, but it was also not executed as expected [139].

In 2014, the Senior Citizens Welfare Council (SCWC) was formed under the Senior Citizen Act, that is primarily liable to protect the elderly population in terms of financial and healthcare resources. SCWC approach is also responsible for the old homes and senior citizen cards, which provide financial support, psychosocial assistance, free access to public places, separate access to medical care. As well as the Senior Citizen Act 2014 is accountable to raise awareness about a healthy lifestyle for elderly people to enhance socialization for the elderly. Moreover, the Ministry of health developed The National Program for the Health Care for the Elderly (NPHCE) to promote curative, preventive, and rehabilitative services for the elderly population within the country [15].

The current government introduced “Islamabad Capital Territory Senior Citizens Welfare Bill 2019” for the elderly people; aimed to protect the fundamental rights of senior citizens by providing them essential facilities regarding healthcare, financial resources and by developing separate counters for them at different public places. Furthermore, this program is apt to strengthen the existing old homes by providing them resources and will establish new old age homes at easily accessible places [140].

It is the obligation of the state to take care of the needs of elderly people by providing all essential facilities such as food, shelter, health, but unfortunately, the government has failed miserably to implement all of these policies [141]. Due to political instability, Pakistan is facing problems from the beginning and issues of the elderly becoming more intense with the increasing number of elderly people that made their lives miserable [66]. The shortfall of the state and societal support for the elderly population can be generally remunerated by strong and unconditional family support [85].

Chapter 4

Discussion, Limitation, Conclusion and Recommendation

4.1 Discussion:

This chapter focuses on the main results found during the literature review about determinants of depression among the elderly population in Pakistan. Mental health is essential for all people regardless of age, gender, ethnicity, and cast. The elderly people in Pakistan face numerous challenges as mentioned in the result part; every determinant provided in the layers of framework is important, but below the researcher will describe from each of those rings some most important determinants that contribute to depression, specifically at organizational and policy level because many issues can be solved by addressing the problem at these levels. The researcher will further explain in the discussion part that how the determinants are interlinked with each other and contributing to depression.

4.1.1 Individual and Interpersonal Level:

At the individual and interpersonal level, many issues have been identified; however, Non-Communicable Diseases (NCDs), Covid-19, family and social support, economic dependency and maltreatment are more significant determinants to highlight. Old age brings various health issues, including (NCDs) such as hypertension, diabetes, and coronary diseases. These persistent diseases have their own side effects and consequences, which influences social functioning, physical and psychological health. Results of our literature review suggested that elderly with chronic diseases reported higher level of depression which is consistent with the other findings in developing and developed countries [142][143][144][145][146]. The cumulative effect of multiple diseases reduced the quality of life and daily activities, and elderly become dependent on others that contribute to depression.

Covid-19 affected the socialization of the elderly because of restrictions and lock down. It has also been found that Covid-19 is a significant predictor of depression among the elderly that is similar to the other findings [147] [148] [149]. However, family and social support are considered a protective factor for the elderly; more in general, family support is perceived to reduce the level of depression because attention and care are considered significant to prevent stress in elderly. Sufficient literature enlightened that family support is necessary to reduce depression in the elderly [150][151][152] because love and care provide them with a source of happiness. A Turkish study conducted with 102 elderly people showed that higher family and social support reduce the level of depression [153]. In the researcher's opinion, the support of family and kin for the elderly can be ensured and restored by raising awareness through social sector among the community that elderly people also have the right to live with respect and dignity.

Elderly maltreatment is an important issue worldwide; the WHO report revealed that 52 studies from different developed and underdeveloped indicated elderly maltreatment [154].

Studies throughout the world validate the link between depression and elderly maltreatment in terms of physical, financial, emotional, verbal and psychological [155] [156] [157]. A number of studies conducted in Ireland, South Carolina and America also endorsing the findings of maltreatment with elderly people [158] [159] [160]. In Pakistan, reliable data related to elderly maltreatment is not available because it has not been appropriately reported. However, the limited available evidence does suggest that abuse actually exists within the homes and institutions [103]. Maltreatment has been recognized in some population based surveys, academic publications and mass media reports [161][69]. Our results showed that usually, sons subject violence on the elderly because they want to grab the property or money when the elderly refuse to do so; they beat them.

Taking resources from the elderly is not only maltreatment, but it also affects their economic independence. There is an extensive need to work on elderly maltreatment; there should be a specific "Association for the old People" where the elderly can report their problems and maltreatment. As mentioned in this thesis, economic reliance creates many problems for the elderly, which is similar to the Indian study [162]. However, in European countries like Germany, Sweden and Netherlands, elderly people do not depend economically on their families because they have different sources of income from social security systems and investments [163]. All the developed countries provide sufficient support to their elderly in terms of physical, mental and psychosocial health, which eventually made them independent. In Pakistan, the solution to economic dependence can be ensured by introducing social security schemes and gratuity, which is explained in the organizational and policy level.

4.1.2 Community and Organizational Level:

The layers of community and organization cover a larger part of the society, such as mental and psychosocial health service gap, social security schemes, social welfare organizations and old age homes. However, there was no information on other community factors that relate to depression. The integration of mental and psychosocial health services at the PHC level will facilitate to fill the gap of services, as many PHCs are working in Pakistan, as mentioned in organizational factors. Therefore, it will be helpful to provide services more easily to the elderly population, especially the rural elderly population. Moreover, the public and private partnership is also important as the private sector has grown remarkably compared to the government and is firmly entrenched and highly innovative. It should be recognized that public-private partnership will significantly facilitate improving psychosocial services for the betterment of the elderly population.

Although earlier the concept of old age home was not common in Pakistan, now it is considered a protective factor for the elderly who are bearing different harsh realities as mentioned in individual, interpersonal and community factors. A survey conducted in Sweden, Germany, the United Kingdom and Hungary indicated that elderly individuals accept that old age homes are a safe place to stay [164]. The organization, environment and quality of elderly homes differ between countries, and their influence on depression is dependent on the environment. The environment of the old age homes upholds dignity, self-worth, self-

esteem and determination; but, the improper environment in such settings can create trouble in adjustment, which affected the mental and physical health of the elderly people [165] [166]. The chance of proper adaptation is reduced when the new environment is not congruent with the previous one, as Richard explained that an appropriate old age home environment with the number of visitors, including family and children, is a significant factor for the adjustment [167]. Therefore, intergenerational activities in old homes with orphans and elderly could be arranged, and it will be helpful for emotional support and adjustment, as SWD also has orphan centres, as mentioned in the result part.

Indeed, old age home is a protecting factor for the homeless and neglected elderly community as mentioned in some studies; however, addressing this determinant may negatively impact the interpersonal level because elderly living in nursing homes feel lonely without their families that contribute to depression. Nevertheless, some families who send their elderly to old homes because of financial problems can be solved by giving social annuities. Entitled social security schemes should provide to the deserving elderly population as this factor lies at the organization level but can be solved at the policy level.

4.1.3 Policy Level:

The issues of elderly care have been under-served or almost neglected by the public and private authorities because no tangible endeavours and plans are being made for the old population. It is a common phenomenon in Pakistan that most elderly people live below the poverty lines with inadequate basic amenities such as food, medical services, and psychosocial benefits [100]. The elderly people of Pakistan do not get sufficient support from the government; according to a report, only 15.9 % elderly population (from 15 million, only three million) are getting public annuities, which is a very meagre amount [29]. Also in other developing countries like Nepal, the greater number of elderly inhabitants do not receive a pension or social security from the government, and they rely upon domestic help and individual reserve funds, or may keep on working [168].

However, in the developed countries elderly population after retirement obtained social security or government annuity that is adequate to fulfil basic needs [169] [170]. Social protection of the elderly population can be ensured when old people can get representation in state bodies as they did not get representation yet. Moreover, strong leadership is required to ensure the formulation and execution of policies at all levels because all the provided policies are just on paper which is not working on the ground level.

The absence of social security is mainly felt by the vulnerable and helpless elderly people. There are other options to address the issues. The outcomes of the current investigation propose that depression among elderly people can be alleviated by providing consistent family and social support because it will facilitate to improve the well-being of elderly people. Another potential protective factor is the improvement and provision of elderly mental and psychosocial health, which can be ensured by integrating basic psychosocial services at the primary care level particularly, in rural areas. Moreover, screening forms to report or detect

that elderly maltreatment should be introduced at the primary level, which will be easily accessible for the elderly.

The state is also accountable for providing the necessities of life to the elderly population like food, shelter, and health, but unfortunately, the Government of Pakistan is incapable due to the lack of resources and political instability. Many policies have been introduced in recent times, but no one from them is implemented. Current government introduced a well-planned policy for the rights, social security, mental and psychosocial health of the elderly population. It is hoped that present government officials will implement it.

Enough research, surveys and reports have been done to access and analyse the determinants of depression among the elderly in the urban rather than the rural population in Pakistan. However, there is still a gap in social security schemes, elderly maltreatment, and psychosocial interventions. There is a need to work to improve the mental and psychosocial health of the elderly by improving existing psychosocial interventions and introducing new social security schemes to improve the status of the elderly. This study, despite its constraints, gives significant starter proof of arranging psychosocial benefits as expected for the older in Pakistan.

4.2 Limitations:

This research has been derived from the evaluation and analysis of various published and unpublished literature. The researcher did not find recent data related to all determinants of depression among the elderly population in Pakistan; that is why the last 20 years timeframe has been utilized. There is no adequate research data on elderly maltreatment, social security schemes and psychosocial intervention, and it needs primary data collection. In addition, most of the research paper has been done on urban population, and the rural aspect has been ignored, which is also very important; therefore, this study does not depict all significant determinants of depression and protective factors. Data related to policies and organizations working on the psychosocial health of elderly people was hard to obtain, but by contacting some relevant organizations, this problem has been resolved. A huge gap in intervention programs has been found during this study which needs to be addressed at a priority level.

4.3 Conclusion:

Depression among elderly people of Pakistan is a significant public health problem, but it is considered a normal process that is interlinked with age. Although depression is a health problem, its determinants lie mostly outside the health sector and also addressing this problem will need action from social sectors rather than the health sector alone.

This literature review illustrated the determinants of depression in old people range from individual, interpersonal, community and organization. Depression worsens the lives of the elderly in various ways, but NCDs, family support, maltreatment, and economic dependence are more important determinants contributing to depression among the elderly. As NCD reduce the quality of life and physical activity, lack of family support creates social isolation

that contributes to depression. The elderly in Pakistan are confronting physical, psychological and financial maltreatment by their family members; eventually, they lose their self-esteem and dignity, which contribute to depression. However, old age home is a protective factor for the elderly who are homeless and facing abusive behaviour. In the current situation, the exposure of Covid-19 intensified the symptoms of depression among elderly individuals because of restrictions and extensive lockdown.

Likely to address depression among the elderly, the government will have to integrate mental and psychosocial services at the PHC level. Public private partnership is also necessary, which will facilitate to enhance the mental and psychosocial health services on a broader level. Elderly people face intensive issues due to economic dependency because only 3 million elderly people out of 15 million are getting social security schemes; the allowances for 3 million people are also small in amount, which cannot fulfil the basic needs of the elderly. Since 1999, various policies have been introduced to address the issues of elderly people, but no one has been implemented yet. There is an urge to create the appropriate environment for the elderly at community and organizational level by filling the gap in mental and psychosocial health interventions and implementing policies.

4.4 Recommendations:

Present study explicitly supports all the reforms in favour of the elderly population because it is incredible need to rejuvenate and revitalize the old people by providing them basic facilities and allow them to spend their lives with confidence, respect, and dignity. The current circumstances require a rigorous and holistic approach to resolve challenges the elderly face on a large scale through cost-effective and innovative strategies at various levels. The recommendations at different levels can be summarized as follows:

4.4.1 Government Level:

- Representation of elderly in state bodies at the federal and provincial levels.
- Explicit leadership to ensure the formulation and execution of policies at the national and provincial levels.
- Public Private partnership should be ensured with those who are working for the welfare of elderly.
- Ensure adequate budget for social welfare departments.
- Formation of a council for the elderly population to receive social security or pension.
- Introduce social security schemes for those who were not public employees.
- Enhance the quality of care and access to healthcare services for the elderly through the implementation of the WHO initiatives on health and ageing
- Mental and psychosocial health services should be integrated at the primary care level for elderly.
- Develop “Association for the old People” to report their abuse and maltreatment.
- More research should be conducted on elderly maltreatment.

4.4.2 Community Level:

There is a need to disseminate education that the elderly population also have the right to live their lives with respect and dignity. Therefore, NGOs and social welfare organizations should be encouraged to overhaul their work toward the services of elderly people. To support the reforms, different approaches at the community level and organizational level should be developed because public awareness and organizational commitment are essential to improve the mental health of old people. Different measures should take at the community level, such as:

- Advocacy campaigns using social media, radio, and television to raise awareness among the community.
- Seminars and symposiums should be conducted at the college and university level.
- Family education should provide at the individual level.
- Community programs focusing on the mental health and psychosocial needs of elderly people should be conducted to educate the family.

There is a need to run old age homes smoothly to accommodate the elderly people in better way who are homeless and bearing abuses; specific things need to be considered for the improvement and development of old age homes.

- Intergenerational learning activities should be conducted with orphans and abandoned children who are also part of social welfare departments.
- Counselling services should be provided to improve adjustment and reduce depression.
- Group sessions and therapies should be arranged to enhance communication, social support and catharsis among the residents.

4.4.3 Family Support:

Nuclear family system deleteriously affected the physical, psychological and psychosocial health of old people because in a joint family system elderly receive better care and attention and the lack of family support stimulates depressive symptoms among the elderly. Therefore, to improve the mental wellbeing of elderly people, social and emotional support is essential; it can give them a perception of happiness; thus, a comprehensive approach of social support is needed at the interpersonal level to resolve the psychological issues of elderly people.

- The family foundation should be strengthened by providing economic independence through social security schemes.
- Family counselling should be done to inform the family that elderly people can get better care at home instead of admitting to rehabilitation centres.
- Impart a sense of care and respect for elderly people to the young generation through arranging in-school sessions.

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