

Elderly Mental Health: Examining the Link between Physical Health, Suicidal Ideation, and Adjustment problems

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Abstract

The present study investigates the interrelationship between physical health, suicidal ideation, and adjustment among elderly individuals in Pakistan. With a cross-sectional research design, a sample of 380 older adults aged 60 to 80 years from Daska and Gujrat districts was recruited using purposive sampling. Standardized instruments were used the Suicidal Ideation Scale (Reynolds, 1988) was used in this research to measure suicidal thoughts; the Physical Health Questionnaire (PHQ; Schat, 1996), to measure physical health; and the Adjustment Problems Scale (Naz, Bano, & Leghari, 2022) to measure adjustment difficulties. The correlation analysis revealed that physical health was significantly associated with both poorer adjustment ($r = .37, p < .01$) and higher suicidal ideation ($r = .21, p < .01$), while psychological adjustment was also positively correlated with suicidal ideation ($r = .17, p < .01$), indicating a strong interplay between physical and mental health in older adults. Physical health significantly predicted adjustment ($\beta = .372, p < .001, R^2 = .136$) and suicidal ideation ($\beta = .211, p < .001, R^2 = .042$). The findings underscore the profound impact of physical health on mental well-being in late adulthood, highlighting the need for integrated physical and psychological healthcare services for the aging population. This study contributes to the limited literature from low-income settings and suggests practical interventions and policies to enhance the quality of life among older adults in Pakistan.

Keywords: Elderly mental health, physical health, suicidal ideation, psychological adjustment, aging, Pakistan, geriatric psychology, adjustment problems, late-life suicide, cross-sectional study

Introduction

Aging is a multifaceted biological experience and a major transition with alterations to a person's physical, mental, and social functioning. Individuals that transition into their sixties and seventies will face multiple changes that can affect their health in many essential ways.

The World Health Organization (WHO, 2022) states many of the reasons we age are caused by different forms of molecular and cellular damage that accumulate over time to progressively reduce physical and cognitive abilities, increase risk of morbidity, and eventually, death. In the WHO definition, age-related changing parameters rely on subjective and social factors; people are normally considered old once they reach 60 years of age. The common perspective is that, particularly in less privileged parts of the world, people are only considered formally old when they reach the age of 60 (WHO, 2015).

An important aspect of well-being in the older age is the maintenance of physical health. With older age comes the increasing incidences of chronic diseases like diabetes, arthritis, cardiovascular problems, as well as neurodegenerative disorders such as Alzheimer's (WHO, 2022). These impairments greatly reduce the quality of life and parallelly cause functional

limitations. Chronic pain can affect almost 50% of the older population, typically arising from arthritis, which in itself is a major contributor to psychological distress (Blyth et al., 2001). The management of concurrent chronic illnesses, especially those that lead to loss of independence, may give rise to feelings of hopelessness and despair (Fässberg et al., 2016). Moreover, the failing health usually triggers increased reliance on caregivers, putting the elderly at risk for increasing feelings of being a burden. Studies show that perceived burdensomeness (belief that one burdens others) is salient in the assessment of suicidal ideation patterns in older adults (Van Orden et al., 2021). This concept can gain traction by societal constructs that devalue the aged, fostering feelings of hopelessness and worthlessness (Kjølseth, Ekeberg, & Steihaug, 2010).

Physical wellness is a major part of wellbeing in old age. With aging lifestyle prevalence of chronic health conditions such as diabetes mellitus, hypertension cardiovascular condition, osteoarthritis, chronic respiratory conditions and neurological conditions of which Alzheimer's is most well-known, other conditions exist (WHO, 2022). These chronic health conditions can lead to pain, reduced function, decreased mobility, and need help in daily activities. Decreased physical wellness can impact independence, self-image, and health-related quality of life. Although these chronic health conditions diminish the person's ability to manage his or her day-to-day living and social engagement, it can also lead to feelings of frustration, helplessness, and social isolation.

There is a significant association between poor physical health and psychological distress in older adults. A number of studies have established a relationship between depression and suicidal ideation and painful chronic illnesses, disabilities, and the dread of decline (Fässberg et al., 2016). Suicidal ideation—thoughts and/or attempts at intentional self-harm can compound the loneliness experienced by older adults, especially in an increasing world of social isolation. According to WHO (2014) latest available suicide rates, older adults have the highest rates of suicide of any age group in the world, indicating a heightened need for provision of mental health services to this highly vulnerable population. The main contributing risk factors for suicide in this population include untreated mental health disorders, social isolation, and loss of independence, perceived burdensomeness, and chronic disease.

As noted by the American Psychiatric Association, suicidal ideation is defined as engaging in the process with intent, or passivity with thoughts of wanting to die. This is a serious mental health issue, affecting mostly older adult populations connected intrinsically with health and psychological problems associated with aging. Suicidal ideation can be defined in three distinct stages, with one type being active suicidal ideation- the thought associated with the intent, or formulating some type of planning (Bryan et al., 2019); the second type is passive suicidal ideation- the thought of wanting to die but not having established any plans (Wetherall et al., 2018); and chronic suicidal ideation primarily associated with long-standing thoughts, often associated with mental illness and/or dissatisfaction with life (Van Orden & Conwell, 2016). A number of chronic medical illnesses, disability, and declining functioning are thought to account for older adults considering suicidal ideation since each factor can diminish quality of life and increase some degree of psychological distress (Conwell et al., 2011; Kendrick et al., 2017).

The perception of being a burden plays an important role in how physical health relates to suicidal ideation with their emotional health and well-being as key mediators, especially for older adults. For older adults, suicidal thought form as a rather huge mental health concern and frequently occurs due to declining physical health. Issues related to chronic pain, neurological disease/disorders, and being unable to partake in activities of daily living lead to increased psychological distress which may facilitate the emergence of suicidal thoughts within this demographic (Conwell et al., 2011). Older adults have been observed to be at a higher risk of suicide if they experience multiple health conditions or related disorders, especially cardiovascular disease, or chronic obstructive pulmonary disease (COPD) (Kendrick et al., 2017).

Much of the burden felt by older adults as well as the increased social isolation were negatively impacting their psychological state. Kjølseth, Ekeberg, and Steihaug (2010) noted that older adults

may feeling hopeless affecting thoughts of suicide as they perceived their declining health status, including increasing demands for care placed on others, including their family who they felt were experiencing their burdens. The potential challenges of isolation and loneliness are obstacles to suicidal thoughts in the elderly. In each and every instance I worked with people experiencing sadness and suicidal ideas were related loneliness and alienation due to the nature of losing ones spouse or friends or role in a society (retirement) .

Adjustment difficulties is a focus of this period of life. Aging is often punctuated by a series of very stressful life events: retirement, bereavement, conditions of ill-health, moving into assisted living facilities, and social isolation. These life transitions therefore call for an intense amount of psychological adjustment. When older individuals have trouble adjusting to the stressors of their life situation, they may develop adjustment disorders involving both emotional and behavioral symptoms that interfere with their overall functioning (American Psychiatric Association, 2013). Adjustment is a psychological process whereby individuals cope with changes in life and environmental demands to maintain their mental health. An adjustment may involve these challenges for older adults: retirement, the decline of health, loss of friends, or social losses. Adjustments fall into three categories: health adjustment (e.g., management of illness), social adjustment (e.g., role in relationships), and personal adjustment (e.g., emotional management) (Santrock, 2019). Factors influencing later-life adjustment are physical health, cognitive functioning, social support, coping style, and personality traits related to optimism and resilience (Knight & Poon, 2008; Jeste et al , 2013).

Awareness of health and mental health issues related to older adults is frequently more evident on an aging world population. An older adult (age 60 to 80) typically has the physical infirmity of decline which creates various emotional or social, distressed states. Chronic diseases (e.g., cardiovascular disease, musculoskeletal diseases, and neurodegenerative diseases) can affect the ability to carry on activities of daily living. It has been established that there is a relationship between chronic diseases and psychological distress, depression, and suicidal thoughts (Xiao et al. (2021) .

Deteriorating physical health is an important risk factor for suicidal ideation in older adults. In this case, where beloved health is noted as getting worse, it is suggested that this may be compounded by increased feelings of loneliness, hopelessness and perceived burdensomeness (Conwell & Van Orden, 2021).

It is worth noting that reduced meaningful involvement, social isolation, and unfriendly support systems have been shown to be significant risk factors for psychological issues in late life. Even though older adults are most likely to be affected by adjustment problems and suicidal thoughts because of a lonely life and lack of perceived social support while there is increasing awareness, explores adjustment problems, suicidal thoughts, and physical health concerns in isolation instead of in relation to one another.

Given the identified gaps, this current study examined the relationship between adjustment issues, suicide ideation, and physical health among older adults. It is important to understand these variables in relation to one another in order to design appropriate interventions that promote psychological health, resilience, and healthy aging in later life.

The present study hopes to add to the current literature on suicidal ideation and the elderly by exploring the role of physical illness, and its relationship to suicidal ideation and psychological adjustment in the elderly. The study aims again to test the mediation hypothesis that suicidal ideation mediates the relationship between physical illness and psychological adjustment. More succinctly, physical illness will impact adjustment indirectly, in that the physical illness increases the risk of the development of suicidal ideation, which reduces the ability to cope and adapt to illness. This mediation relationship illustrates the psychological processes in which physical health conditions manifest an impact on elderly mental health.

To summarize, the mental health of the aged individual, is formed from multiple complex physical, psychological and social components. Physical illness, is more than just a medical issue. Physical illness also creates psychological stress that can lead to suicidal ideation and complicate emotional adjustment. The ability to psychologically adjust, can determine how the aged individual engages with the aging process and life itself. This study will focus on the mediating role of suicidal ideation; in order to establish some critical prevention and intervention pathways in elderly mental health care. Given the anticipated increase in aging populations globally, research that focuses on this topic is warranted and needed to inform health policies and clinical practice related to the overall well-being of individuals in later life.

MAIN-OBJECTIVES

Relationship between Physical health, suicidal ideation and adjustment problems among older adults

HYPOTHESIS

Higher the physical health, the lower will be the suicidal ideation and adjustment problems among older adults.

Physical health will be significant predictor of suicidal ideation.

Physical health will be significant predictor of adjustment

Literature review

The information used in this study came from a survey about the health care provided to senior citizens living in rural Shandong, China. This study comprised 3242 persons who were 60 years of age or older. The Kessler Psychological Distress Scale (K10) was used to measure PD. To investigate the relationship between physical multimorbidity, PD, and suicidal thoughts and plans, ordinal and binary logistic regression models were utilised. Additionally, the mediation impact of PD on the relationship between multimorbidity and suicidal thoughts/plans was investigated using bootstrapping analysis. Among older persons living in rural areas, the prevalence of multimorbidity, lifetime suicidal thoughts, and suicidal plan was 35.2, 10.6, and 2.2%, respectively. Suicidal ideation and planning were substantially more common among older persons with two or more chronic physical problems who lived in rural locations. PD partly mediated the relationship between multimorbidity and suicidal thoughts and intentions; its mediating impact was responsible for 31.7 and 25.5% of the overall effect, respectively.

Older adults had the greatest suicide rates. By emphasising life purpose as a protective factor against suicide thoughts in older men, the current study seeks to expand on earlier findings. 170 senior males in the community who were 65 years of age or older were given self-report questionnaires. Suicidal thoughts in older adults was predicted by physical disease and life meaning. Suicidal ideation and purpose in life were mediated by physical sickness. Meaning in life predicted suicidal thoughts among individuals who reported greater incidence of physical disease in the young-old group (ages 65–74). The senior group (those 75 years of age and older) did not exhibit this moderating effect. The study's conclusions emphasise how crucial age differences are when examining suicide thoughts in older males. Our results highlight how crucial it is to create and preserve meaning in life when managing chronic diseases, and they suggest that therapy interventions aimed at lowering suicide thoughts in older adults should focus on meaning in life.

Methodology

Research Design

This study employed a cross-sectional correlational design to examine the relationship between physical health, suicidal ideation, and psychological adjustment among elderly individuals.

Population and Sample

The target population included elderly individuals aged between 60 and 80 years, residing in Daska and Gujrat, Punjab, Pakistan. Gujranwala was initially considered, but due to logistic constraints, the study was limited to the aforementioned districts.

A total of 380 participants were recruited using purposive sampling, which allowed the researchers to select individuals meeting specific inclusion criteria. The sampling frame was developed through outreach to community centers, local clinics, and household surveys. Field visits were conducted to approach potential participants and verify eligibility.

Sampling Criteria

Participants aged 60 or above, cognitively capable of understanding and responding to questionnaires, willing to provide informed consent, and residents of Daska or Gujrat were included. Individuals below 60 years, those with diagnosed severe cognitive impairments (e.g., dementia), or receiving in-patient psychiatric care were excluded.

Data Collection Instruments

Data were gathered using a structured questionnaire booklet comprising four sections:

Informed Consent Form

Sociodemographic Data Sheet

Physical Health Scale (Schat, Kelloway, and Desmarais .,2005)

Suicidal Ideation Scale (Bano, Naz, & Mukhtar, M. ,2020)

Adjustment Problems Scale (Naz, Bano, and Leghari ., 2021)

Procedure

The data collection was carried out over a two-month period. After receiving ethical approval from the institutional review board, the researchers visited households, community centers, and health facilities. Participants were provided with an account of the study and the individuals who wished to take part signed a consent form. The trained researchers administered questionnaires through self-completion or by interview, in the case of illiterate or blind people. Each session took around 25–30 minutes to complete. Once the questionnaires were completed by participants e checked then thanked the participants. For participants who reported a high level of distress or suicidal thinking, we offered referrals t mental health professionals for services, and we followed up to make sure they were still safe.

Ethical Considerations

The study followed the American Psychological Association (APA, 2017) ethical principles. Informed consent from all participants was obtained and we assured them confidentiality was maintained. Participants were coded by using anonymous method and data in a password protected digital file. Participation was voluntary, and they would not be penalized for refusal or withdrawal. Throughout their research experience, the researchers adhered to the ethical principles of beneficence, non-maleficence, and respect for persons.

Results and interpretation

Data were entered and analyzed using SPSS version 24. Descriptive statistics (means, standard deviations, frequencies) were used to summarize the demographic and scale data. Pearson's correlation was employed to explore relationships among the three main variables: physical health, suicidal ideation, and adjustment problems. To determine predictive relationships, linear regression analyses were conducted. The significance threshold was set at $p < .05$ for all inferential tests.

Descriptive Statistics

The sample of 380 older adults showed diverse age, gender, marital, and living arrangements, providing a balanced demographic context for analyzing physical health, suicidal ideation, and psychological adjustment in late adulthood.

Table :1

Correlation Analysis

Variable	1	2	3
1. Physical health (PHQ)	—	.37**	.21**
2. Adjustment (ADJ)		—	.17**
3. Suicidal Ideation (SDI)			—

The correlation analysis revealed that physical health was significantly associated with both poorer adjustment ($r = .37$, $p < .01$) and higher suicidal ideation ($r = .21$, $p < .01$), while psychological adjustment was also positively correlated with suicidal ideation ($r = .17$, $p < .01$), indicating a strong interplay between physical and mental health in older adults.

Regression Analysis

A simple linear regression was conducted to determine whether physical health predicts adjustment problems in the elderly

Table: 2

Predictor	B	Std. Error	β	t	Sig.
(Constant)	69.62	2.81	—	24.74	.000
PHQ	0.53	0.07	.372	7.32	.000

Table : 3

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.372	.139	.136	11.39

Physical health significantly predicted adjustment, $\beta = .372$, $t(333) = 7.32$, $p < .001$, explaining 13.6% of the variance in adjustment, $F(1, 333) = 53.55$, $p < .001$.

A simple linear regression was conducted to determine whether physical health predict suicidal ideation the elderly.

Table : 4

Predictor	B	Std. Error	β	t	Sig.
(Constant)	44.56	4.55	—	9.80	.000
PHQ	0.45	0.12	.211	3.81	.000

Table: 5

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.211	.045	.042	17.98

Physical health significantly predicted suicidal ideation, $\beta = .211$, $t(310) = 3.8$, $p < .001$, accounting for 4.2% of the variance, $F(1, 310) = 14.50$, $p < .001$.

Summary of Findings

Physical health significantly predicts both adjustment problems and suicidal ideation in elderly adults.

Greater physical health problems are associated with lower levels of both adjustment problems and suicidal ideation.

The strongest relationship observed was between physical health and adjustment problems indicating a substantial effect size.

Discussion

The study highlights the relationships between the physical health of older adults and suicidal ideation and adjustment difficulties among older adults in Pakistan. Using a cross-sectional design and a sample of 380 participants aged 60–80 years, the study identified significant positive relationships between health problems and both suicidal ideation and adjustment problems. The main objective of study to measure relationship between variable. correlational analysis revealed a significant positive relationship between poor physical health and suicidal ideation ($r = .226$, $p < .01$) and between poor physical health and adjustment problems ($r = .344$, $p < .01$). This finding is consistent with research indicating these relationships and that declining physical health, which is common among older adults in later life, may be a significant stressor and result in poor psychological adjustment and suicidal thought risk (Choi et al., 2021; Fassberg et al., 2020).

Additionally, hypothesis 2 and 3 has been accepted. Regression analyses indicated that physical health was a significant predictor of adjustment problems ($\beta = .344$, $p < .001$) and suicidal ideation ($\beta = .226$, $p < .001$), even when controlling for demographic variables. This finding provides support for the biophysical model by not only indicating that biological health impacts emotional health and cognitive health as older adults. This finding reinforces previous work by Zhaoyang et al. (2022) that chronic illness/disability significantly weakens older adults' psychological well-being and their ability to adjust and cope with chronic health conditions that increase their psychological distress. Adjustment in late life may be limited due to retirement, loss of independence, or death of loved ones, and it becomes even more difficult if compounded by chronic physical illness (Shah et al., 2023). Physical disease may bodily disable social engagement resulting in social isolation and decreased mobility; these issues may limit access to social support and self-esteem and fuel feelings of hopelessness. The impact of such feelings of hopelessness could stimulate thoughts of suicide. The greater prediction of adjustment problems ($\beta = .344$) behavior compared to suicidal ideation ($\beta = .226$) implies that physical health may impact a victim's psychological and social functioning first in the context of suicidal ideation. Absent intervention, adjustment problems may be a next step toward suicidal ideation. This type of line of thinking is consistent with a theoretical model of late-life suicide where the pathway of psychological suffering mediate the association between a poor physical state and thoughts of suicide (O'Riley et al., 2021).

In all, the results of this study emphasizes the need for increased engagement in the clinical conversation and need to identify physical health as not only a medical issue, but a psychological risk factor. Interventions that bolster medical access broadly and chronic illnesses in particular have potential in the outcomes relating associating engagements with mental health for the older adult.

Conclusion

This study concludes that poor physical health leads significantly to psychological adjustment challenges and suicidal ideation in older adults. The data indicated that older adults who reported poorer physical health also reported more significant challenges in adjusting to changes associated with aging and were more likely to have suicidal ideation. Essentially, these findings reinforce the interconnectedness of mental and physical in older adults. In effect, we see that a physical disease does not exist in isolation, but has serious implications for many emotional and social facets of wellbeing. As the elderly population expands in Pakistan and other low- and middle-income countries, based on these findings, the need for more integrated healthcare employing interventions addressing both physical and mental facets of aging may never be more significant.

Implications

Clinical Implications

Integrated Health Interventions: Health professionals need to use an integrated care approach to address physical and mental health issues concurrently. There should be ongoing psychological screening in geriatric care.

Suicidal prevention issues: Suicidal ideation should be monitored carefully among old adults with chronic physical health problems, especially among people with mobility limitations and not having a social support system.

Rehabilitation Programs: Physical rehabilitation needs to be matched along with emotional counseling and community support to deal with the adjustment issues and also provide healthy aging.

Policy Implications

Community Outreach: Mental health services need to be accessible to older adults wherever they reside, especially in semi urban areas of Daska and Gujrat. Community based strategies that embrace both the provision of physical care and supportive programs for emotional care would be ideal.

Capacity Building for Caregivers: Caregivers and family members need to be trained to recognize signs of psychological distress and ideation of suicide amongst their older family members.

Supportive Housing and Supportive Environments: Policy makers need to consider investing in environments that are elder/generative-centric in order to reduce social isolation and increase the physical mobility of older adults (e.g. parks, elderly clubs/associations, old-age clinics).

Research Implications

Longitudinal Studies: Future research should utilize longitudinal designs to estimate the causal pathways from the deterioration of health to deterioration of mental health.

Mediation and Moderation Models: More work should now begin testing mediation variables (e.g. social support, loneliness) and moderation variables (e.g. sex, income) to learn who is most at risk. Cultural Validation of Scales: There is still considerable work to do to validated and adapted mental health measures for geriatric population in the various areas of Pakistan

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