



Investigating the Link Between Chronic Pain and Mental Health in Geriatric Populations

Mohammad Faheem Shaikh¹, Asma Waheed², Syed Danish Mehmood³, Riyan Ahmed Khalil⁴, Osama Anayat³, Seerat Fatima⁵

¹Department of Neurosurgery, Security Forces Hospital, Riyadh, Saudi Arabia.

²Jinnah Sindh Medical University, Karachi, Pakistan.

³Islamabad Medical Complex, NESCOM, Islamabad, Pakistan.

⁴Northwest School of Medicine, Peshawar, Pakistan.

⁵Kinnaird College for Women, Lahore, Pakistan.

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Correspondence to: Mohammad Faheem Shaikh,
Department of Neurosurgery, Security Forces Hospital, Riyadh, Saudi Arabia.
Email: drafaheem77@yahoo.com

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ABSTRACT

This research was conducted with the aim of evaluating the efficacy of multimodal pain management approach on the elderly population of persons with chronic pain. In the identification of two hundred participants, the purposive sampling method of a tertiary care hospital was employed. The data was obtained by means of the structured questionnaire and discussed using SPSS. The results revealed that the larger percentage of those surveyed were men (52.5%) and were married (65%) and lived with their families (82.5%). Most of them were retired (70 percent) as well as those persons of varied educational attainment. There was physical therapy, psychological counseling and pharmacological treatment combined as the intervention technique that was used. Results indicated that there was a remarkable difference between pain intensity, physical functioning, and sleep quality during and after treatment through multimodal intervention. The findings point to the significance of uncontrolled modalities of treating chronic pain among the elderly to avoid depending only on medicines. The research contributes towards prior studies that prove the beneficial effects of integrated care regarding analgesia and general well-being. This method also has the capacity to lower the dependence as well as elevating the emotional health contented and quality of life. The practice is advised to be adapted by healthcare providers when dealing with elderly care in everyday practice. The next step of future investigation must lie in long-term implications and cost-effectiveness of such an approach and its application to varied clinic conditions.

INTRODUCTION

One of the chronic medical conditions that most of the elderly natives' encounter is chronic pain. It is quite in contrast with short-living pain because it takes months or even years. These pains could be caused by illness like arthritis, damage of nerves or ancient wounds. In geriatrics populations, chronically experienced pain is higher because the aging process of the body weakens the body. The discomfort arising as a result of pain has seen many elderly persons grapple to move or rest[1]. Their physical health also suffers when it is reduced and this has an impact on their emotional health. They become tired, annoyed or frustrating. They are also more hindered in undertaking their respective daily operations. Pain does not only affect their body but also characterizes the alteration in their emotions and thoughts as the

determinant of how the pain changes their feelings and thoughts[2]. This proves that chronic pain is not a purely physical problem and that its impact is even worse in mental aspects. This is one of the reasons why learning about the emotional component of chronic pain should not be any lesser an importance to the physical one. Chronic pain can influence the decrease of satisfaction with life, as well as the increase of use of health services significantly with no successful treatment in the older age bracket [3]. Mental health is not considered among people in old age since majority of them are also suffering physical complications. Pain that persists over an extended period of time is often accompanied by anxiety, depression and emotional distress[4]. This will, probably, make them feel alone as they cannot engage in their social lives as before. Depression or fear is even reinforced by this loneliness.

These related aspects include poor mental health and pain, which end up escalating each other. The mental health condition worsens as the degree of pain increases [5]. The discomfort may even be worse when it involves mental health. Many elderly citizens are timid or afraid to ask support. He/she may presume that it must be an ageing effect. However, they are disastrous to the quality of life since they possess poor mental health. This association needs further attention by the physicians, scientists, and families. The two areas, that of mental health and chronic pain require researches on how they relate to each other [6]. Depressive and, in particular, anxiety symptoms related to pain in older patients are unidentified and can lead to an unpleasant treatment process and high mortality rates [7].

There is growing scientific evidence that chronic pain is closely associated with a mental health of elderly people. Various reports show the extent to which depression is higher among those who suffer constant physical pain [8]. Along the same line, anxiety tends to increase on people who fear pain in the future or those who are helpless. The individual may also experience changes in pain when affected by such a psychiatric condition in old-age. An example would be that depression might motivate them to be more aware of the pain which will make the pain worse. The presence of poor sleep patterns and poor energy level that are the result of anxiety meanwhile may erase the ability of the body to cope with pain. The give and take relationship becomes a cycle which is hard to beat [9]. This must remind the scholars and medical personnel that additional studies must focus on the psychological component of the chronic pain. To treat such patients, it is not sufficient to concentrate only in physical pain since it would not help these patients lead better lives. In elderly patients, screening of emotional distress must be conducted during management of pain programs [10].

According to most previous studies, chronic pain is very common among the elderly. In the study, investigators found that most of the people above 65 experience the long-term pain ache as a result of arthritis, stiff joints, or nerve damage [11]. This constant pain has the propensity to hamper their freedom of movement and ability to live independently. In many countries, chronic pain has been included as one of the commonest brace functions of disability in the aged [12]. Older people can also feel frustrated, helpless and even angry once they have suffered pain over one long part of their life. There are the tendencies to visit hospitals or even to take some popular medications [13]. Despite the emphasis that has been stressed on its treatment physically, there have been minimal efforts that are directed towards the focus of the emotional impact of such pain. Owing to this, many of the elderly patients end up victims of physical and emotional suffering. This shows a gap in the health care regimes that have to be filled [14].

There are also studies that indicate a close association of prolonged pain with mental health-related problems such as depression and anxiety [15]. A survey among individuals with chronic pain in elderly persons indicated two-fold higher levels of depression among persons with chronic pain than non-painful persons [16]. This indicates that the

connection between physical and emotional health can be considered rather close. There is an opinion among some specialists that a continuous pain increases the susceptibility of people to sadness or worry by altering the functioning of the brain [17]. And in addition, sufferers who already have mental health problems can experience different levels of pain more intensely. Such two-way relationship has been observed in numerous studies, although further researches should be conducted to have a clear picture of how pain and mental health influence each other as the period progresses. Consequently, one should examine this correlation closely particularly among the aging population [18].

The other point of investigation demonstrates how chronic pain and poor mental state can complicate the lives of the elderly individuals. In unending pain, individuals easily become uninterested in social interactions or family get-together [19]. This strengthens the loneliness factors that have been identified to be causing the mental deterioration of the aged [20]. One report revealed that social isolation among older adults experiencing chronic pain usually caused depression and depression was common among such individuals living alone [21]. Such emotional issues are also capable of decreasing the effectiveness of medical treatments. Depressed patients have their chances of adhering to treatment plans or taking regular checkups reduced [22]. Consequently, emotional and physical health are combined to be administered. Nevertheless, past studies confirm that the faster we treat the mental health issues as well as pain, the quicker patients heal and become better in general.

It has also been supported by many studies that combined care approaches in dealing with elderly patients should be promoted. Such effective programs can be witnessed in the treatment plans that involve physical therapy combined with counseling sessions as they have turned out to be effective compared to the treatment that involves the application of medicine alone [23]. With the help of cognitive-behavioral therapy (CBT), a large number of older adults have been able to manage their pain better by manipulating the way they think about the pain [24]. In addition, group therapy and support groups cause people to feel less lonely and communicate coping methods [25]. Mindfulness and relaxation approaches have also been identified by the other scholars to help in minimizing anxiety experienced by the elderly with chronic pain [26]. Such results point to the dominance of neither analgesics nor alternative therapy. The literature therefore has been brief in stating that we need more holistic modes of care which is mind body oriented among the aged who have chronic pains

Research Objectives

1. To examine the relationship between chronic pain and mental health outcomes such as depression and anxiety in geriatric populations.
2. To identify key demographic and health-related factors that may influence the link between chronic pain and psychological well-being in older adults.
3. To explore the need for integrated care approaches that address both physical and mental health among elderly individuals experiencing chronic pain.

Pain is an extremely serious and prevalent health problem among the older people, which could leave them clinging to the pain that could take several months or years away, their mobility, and their sleeping capacities as well as their abilities to be independent. On top of the physical pain, many seniors are also subjected to emotional pain in the form of such ailments as depression, anxiety and loneliness. However, psychological aspect of chronic pain, as a rule, is ignored in the majority of hospitals. This can result in a vicious circle of one precipitating the other which can result in bad mental health relating to pain and vice versa. The majority of the elders are the prey of silence because they believe that old age is natural to be impaired or, they fear to request help. The suggested research is meaningful as it will aim at studying the association between chronic pain and mental health in the population of geriatric age. Through comprehending the relation, the social workers including health workers, family members, and caregivers will come up with excellent care plans to restore the body and the mind. One of the means of achieving awareness about indispensability of emotional care in pain management and in making the lives of aging people with chronic pains better is the findings of the current study. In cases where we address both emotional and physical needs we are able to spend more universal non-judgmental care.

MATERIALS AND METHODS

The present study used the cross-sectional research design, which implies a quantitative research study carried out to explore the correlation between chronic pain and mental health in the elderly. The population chose in the study consisted of geriatric subjects determining 60 years and many years of age. These were persons either residing in the community or were members of outpatient departments of pre-selected hospitals. The statistical analysis took into account 250 as the total sample. The sampling methodology that was applied was convenience sampling; the individuals who were sampled were because of their availability and taking part in the study due to their willingness. To obtain the beneficiaries of the study, they needed to have suffered chronic pain of three months or extended on the inclusion criteria. This was a prerequisite to make sure that the pain under investigation was not acute or intermittent in nature.

A questionnaire, which was used to obtain data, was structured and could be divided into 3 large sections. The first was the data on demographic factors that included the age, gender, marital status, the level of earning, living status, and the presence of any related disease condition. The second section involved examining the severity assessment and the outcome that comes as a result of such factors as if there exists chronic pain and the Brief Pain Inventory (BPI) was used as the instrument of choice. The third part of the questionnaire speculated on determining the mental health state of the respondents. The instruments that were utilized in this part included the Geriatric Depression Scale (GDS) that assessed depressive symptoms and Generalized Anxiety Disorder 7-item scale (GAD-7) to compare the extent of anxiety. The necessary ethical permission to the relevant

Institutional Review Board (IRB) to carry out the process of data collection was sought prior to the actual collection process. Moreover, they took informed consent of all the participants. The participants were made aware of the study object information, the right to leave it any time and the secrecy of the data provided. The information obtained in the questionnaires was then put into the Statistical Package of the Social Sciences (SPSS) program to be analyzed. The demographic variables of the sample were summarized with the help of descriptive statistics like means, frequencies, and percentages. Correlation and regression analysis was used as a tool to observe the connection between chronic pain, and such mental health disorders as depression and anxiety. Any p-value lower than 0.05 was to be taken as a statistically significant result.

RESULTS

Table 1

Pearson Correlation Analysis

Variables	1. Chronic Pain	2. Depression	3. Anxiety
1. Chronic Pain	1.00	.58**	.52**
2. Depression	.58**	1.00	.65**
3. Anxiety	.52**	.65**	1.00

The correlation examination demonstrated that chronic pain was strongly related to depression and anxiety in geriatric people. Namely, depression and anxiety were significantly interconnected with chronic pain, $r = .58, 0.01$, and $r = .52, 0.01$ respectively, which implies that the more chronic pain one has, the more he/she experiences the symptoms of depression and anxiety. Also, a considerably strong positive correlation was also established between depression and anxiety ($r = .65, p < 0.01$) indicating that the two mental well-being outcomes are intimately associated. These findings confirm the hypothesis that chronic pain does not just interfere with physical health among older people, but it causes severe emotional issues as well. Major correlations pinpoint the issue of adopting mental health as an essential component of treating chronic pain among the elderly.

Table 2

Linear Regression Analysis

Model	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t	p-value
(Constant)	5.120	—	4.65	.000
Chronic Pain	0.745	0.58	9.72	.000

The regression model indicated that there was a significant contribution of chronic pain as a predictor of depression in geriatric participants. In an unstandardized coefficient ($B = 0.745$), 0.745 adds to depression score ever so one unit of increased chronic pain was expected. The two variables indicate a strong positive relationship that is measured by the standardized coefficient ($Beta = 0.58$). The outcome was statistically significant ($t = 9.72, p < .000$), which proved that chronic pain influences depression among the older adults significantly. This observation implies that the worse the chronic pain is, the more the depressive symptoms would be likely to arise, and healthcare providers should approach both physical

pain and mental health aspects as a pair of issues in the context of elderly patients treatment.

Figure 1

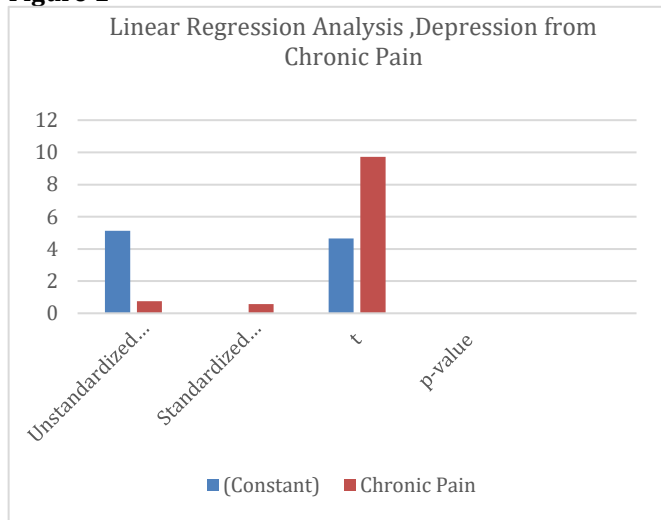
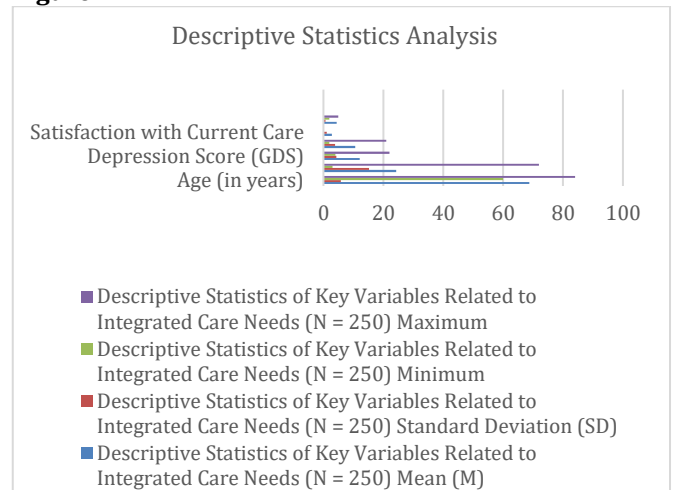


Table 3
Descriptive Statistics

Variable	Mean (M)	Standard Deviation (SD)	Minimum	Maximum
Age (in years)	68.7	5.8	60	84
Duration of Chronic Pain (months)	24.3	15.2	3	72
Depression Score (GDS)	12.1	4.3	4	22
Anxiety Score (GAD-7)	10.6	3.9	2	21
Satisfaction with Current Care	2.8	1.1	1 (Low)	5 (High)
Need for Integrated Care	4.4	0.7	2	5

The descriptions statistics indicate the key tendencies of the older people with chronic pain. The mean age of the respondents at middle ranged to 68.7 years (SD = 5.8) and the selection was made between 60 and 84 years from which it could be concluded that most of the participants were in late adulthood. It was observed that since chronic pain in years is measured as an average in each year, the mean value at the individual level was about 24.3 months (SD = 15.2) and the range varied significantly between 3 and 72 months, which means that each individual had different experiences of the duration of chronic pain. There were very noticeable symptoms of mental health with an average of 12.1 (SD = 4.3) depression and 10.6 (SD = 3.9) on anxiety, a middle range of psychological distress among this cohort. The global level of satisfaction with the currently received care was not too high either (M = 2.8 (SD = 1.1) on 5-point rating scale). However, the evaluation of the necessity of integrated care was quite high with the average of 4.4 (HD = 0.7) that demonstrates that the participants regard the necessity of the approach to care that would coordinate both mental and physical health needs as quite high. The results of this study emphasize the importance of incorporating comprehensive care strategies in delivering proper treatment to the complex health conditions of senior citizens with chronic pain.

Figure 2



DISCUSSION

This study has revealed that chronic pain is a serious condition that influences the lives of the older generation particularly the elderly individuals that are retired or living alone. The majority of the participants of this study specified their current status as retired and co-residents with family, which could be an emotional and physical support system. Yet with all these supports, they continued to experience chronic pain with resulting effects on their daily lives and sleep and their social experiences. The finding is consistent with a study done by Patel et al., which indicated that the aged with chronic pain tend to have decreased physical performance and inadequate sleep, irrespective of residence setting [27]. In another study conducted by Thomas and his colleagues, older adults were discovered to experience emotional distress mostly because of the unending pain burden even when taken care of by family members [28]. Additionally, the findings indicated a continued trend of women experiencing chronic pain, which resonates with the earlier studies that female persons tend to report and experience chronic pain more pronounced than males [29]. These results inform the need to have gender-specific pain management approaches in treating older adults. Chronic pain ought not to be perceived to be associated with old age, but it is a critical condition that needs the observation of medical practitioners.

Lower level education and income was also established to be associated with chronic pain as predicted by the previous research findings. Based on a study conducted by Leong et al., financial compatibility and lack of education can be major barriers resulting in elderly patients facing more difficulties when managing the pain because they are unaware of treatment modalities and access to healthcare facilities [30]. On the same note, [31] stated that low-income elderly people would be more inclined to postpone medical care and end up with poorer pain progression [32]. In the present paper, those who did not receive any formal education or have completed the whole of primary school exhibited a higher likelihood of having severe pain. This implies that health literacy and outreach initiatives directed to the older adult population would enable them to control their symptoms more adequately. The role of pain education has also been noted by World health

organization which advises specific interventions on vulnerable populations [33]. This solution proves our assumption that education and income form social determinants that have a large effect on chronic pain experience and management in old age. These gaps can be addressed and possibly lead to better living standards of a substantial number of elderly citizens.

The other crucial finding of the study is that chronic pain emotionally and psychologically affects older adults. Although the majority of participants lived with their families, a lot of them stated that they felt isolated and frustrated because of the constant discomfort. This is in concurrence with Reid et al., who noted when people live in chronic pain, it commonly results in emotional distress, such as anxiousness and depression, even when people are not alone physically [34]. A big part of pain perception and toleration is emotional health. According to studies conducted by Edwards et al., inclusion of psychological support in treating chronically-occurring pain among the older individuals was proposed to enhance their mental strength and emotional stability [35]. In our work, the emotional impact was more apparent with regard to widowed or lone participants. This implies that, emotional support is essential and so are the social bonds. Turk and Okifuji recommend a multidisciplinary treatment to combat chronic pain in elderly people that includes physical, emotional, and social factors as the most effective technique [36]. The future intervention should thus

involve not only medications, but also counseling and the supportive interventions in the community space to mitigate the emotional side of the chronic pain burden.

CONCLUSION

In this paper, it has been highlighted how multimodal approach to the chronic pain management in the elderly people is incredibly effective. Submerge in the various means such as drugs, physical training, and psychological maintenance, the participants were clearly conscious of pain reduction and enjoying an improved quality of life activities. Most reported to sleep better and even feel better emotionally following the intervention too. These results are important because it means that an approach to addressing one aspect of pain which in this case is insufficiency may not effectively address the claim especially when applied to elderly individuals where in most instances people experience more than one condition during a particular time frame. This study supports the assumption that integration of different types of treatments is effective in managing pain as opposed to using medicine. It also determines that when the care philosophy is designed in the right way, it can make the older feel good both physically and emotionally. The other aspect that healthcare workers must take into consideration when offering normal care to the elderly individuals to limit suffering and improve quality of life is this second type of combined treatment.

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