

Relationship Between Loneliness, Psychiatric Disorders and Physical Health ? A Review on the Psychological Aspects of Loneliness

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ABSTRACT

Human beings are social species which require safe and secure social surroundings to survive. Satisfying social relationships are essential for mental and physical well beings. Impaired social relationship can lead to loneliness. Since the time of dawn, loneliness is perceived as a global human phenomenon. Loneliness can lead to various psychiatric disorders like depression, alcohol abuse, child abuse, sleep problems, personality disorders and Alzheimer's disease. It also leads to various physical disorders like diabetes, autoimmune disorders like rheumatoid arthritis, lupus and cardiovascular diseases like coronary heart disease, hypertension (HTN), obesity, physiological aging, cancer, poor hearing and poor health. Left untended, loneliness can have serious consequences for mental and physical health of people. Therefore it is important to intervene at the right time to prevent loneliness, so that physical and mental health of patients is maintained.

INTRODUCTION

Loneliness is a painful universal phenomenon that has an evolutionary basis. Loneliness reminds us of the pain and warns us of the threat of becoming isolated. Loneliness is the absence of imperative social relations and lack of affection in current social relationships [1]. Loneliness is one of the main indicators of social well-being. Loneliness is caused not by being alone, but by being without some definite needed relationship or set of relationships. Research addressing loneliness has increased dramatically over the past 2 decades; however, despite the mental health risks associated with being lonely, the relationship between loneliness and psychiatric disorders has not been sufficiently explored [2]. In India very little research has been done on psychological and physical affects of loneliness. There are just a few studies in India, in which relationship of loneliness with other psychiatric disorders has been studied. However most of these studies were done in elderly patients only [3-5].

Loneliness is a common experience with 80% of population below 18 years of age and 40% of population above 65 years of age report loneliness at least sometimes in their life [2,6-8]. Loneliness is generally reported more among adolescents and young children, contrary to the myth that it occurs more in elderly. The reason for this is that elder people have definite coping skills and can adjust accordingly to solitude, while as adolescents lack definite coping skills and adolescent period is the time of life when being accepted and loved is of such major importance to the formation of one's identity. However elderly who have physical illness and disability report higher prevalence of loneliness, compared to elderly without physical illness and disability [1,9,10]. In India elderly patient population is increasing and their psychological problems are on a rise. India is destined to become the second largest population of elderly people in the coming years. Therefore it is necessary to intervene at the right time to prevent the psychological problems and physical disorders arising due to affects of loneliness in elderly population [3]. Further loneliness gradually diminishes through the middle adult years, and then again increases in old age (i.e., ≥70 years) [7].

Keywords: Loneliness, Mental health, Physical health

Risk factors: The risk factors associated with loneliness include being female, being widowed, living alone, being aged, health factors, material resources and a limited number of 'social' resources [11].

Scales for measuring loneliness

Loneliness is measured by various scales like UCLA (University of California, Los Angeles) Loneliness Scale [12], Three-Item Loneliness Scale [12] and De Jong Gierveld Loneliness scale [13].

Types of loneliness

There are 3 types of loneliness i.e. situational loneliness, developmental loneliness and internal loneliness [14].

1. **Situational Loneliness:** The various factors associated with situational loneliness are environmental factors (unpleasant experiences, discrepancy between the levels of his/her needs), migration of people, inter personal conflicts, accidents and disasters, etc [14].
2. **Developmental Loneliness:** The various factors associated with developmental loneliness are personal inadequacies, developmental deficits, significant separations, poverty, living arrangements, and physical/psychological disabilities [14].
3. **Internal Loneliness:** The various factors associated with internal loneliness are personality factors, locus of control, mental distress, low self-esteem, guilt feeling, and poor coping strategies with situations [14].

Further Weiss et al., reported 2 types of loneliness i.e. emotional and social loneliness. Emotional loneliness defined by the absence of an attachment figure and social isolation, characterized by the absence of a social network [15].

Psychiatric Disorders and Loneliness

1. **Depression :** Lonely people suffer from more depressive symptoms, as they have than been reported to be less happy, less satisfied and more pessimistic [16]. Further loneliness and depression share common symptoms like helplessness and pain. There is so much similarity in between loneliness and depression that many authors consider it a subset of

- depression. However the distinction can be made by the fact that loneliness is characterized by the hope that all would be fine, if the lonely person could be united with another longed for person [2]. In patients, who are both lonely and depressed, loneliness is positively correlated with negative feelings and negative judgment of personality attributes and negatively correlated with it. It has been seen that there is an association between insecure attachment styles and depression. Several studies further suggest insecure attachment styles increases vulnerability to depression. The vulnerability to depression can be due to the fact that insecurely attached have tendency to develop low self esteem, difficulty or inability in developing and maintaining relationships with others, poor problem solving skills, and an unstable self- concept [17]. In a study done by Singh A et al., of 55 elder persons in the age group of 60-80 in Delhi (India) based regions (living in various housing societies), found out an increase in level of depression with increase in level of loneliness. However no gender difference in elder males and females was found between loneliness and depression. The absence of significant gender difference is in contrast to the belief, as well as what has been reported in the literature that older females are more vulnerable to depression. The reason for this could be that all elderly females were not working women before 60 years of age. The transition in their lifestyle in their old age included breaking ties with their colleagues, friends and loss of status. However the transition in their lifestyle was slow, which could have prevented any change in mood [4]. In a study done by Bhatia SPS et al., found higher mean loneliness score in elderly women, compared to elderly males. He further concluded that older people, who were living alone were experiencing higher loneliness, compared to who were living with their spouses or their families [5].
2. **Alzheimer's disease :** Loneliness is associated with more than two fold risk of dementia, as loneliness is associated with loss of cognition in old age. In fact some authors signal it as prodromal stage of dementia [18]. In loneliness, there is more rapid decline in global cognition, semantic memory, perceptual speed, and visuospatial ability. The basis of association of loneliness with Alzheimer's disease (AD) can be attributed to two possibilities. First possibility is that loneliness is a consequence of dementia, perhaps as a behavioral reaction to diminished cognition or as a direct result of the pathology contributing to dementia. Second possibility is that loneliness might somehow compromise neural systems underlying cognition and memory, thereby making lonely individuals more vulnerable to the deleterious effects of age-related neuropathology and thereby decreasing neural reserves [19]. In one study, the incidence of AD was predicted by degree of baseline loneliness, after adjusting for age, sex, and education. It was found that those in the top deciles of loneliness scores were 2.1 times more likely to develop AD than those in the bottom deciles of loneliness scores. The prevalence of AD is lower in India compared to other countries. There are wide variations in the incidence rates in community based as well as urban based studies in India. Various risk factors have been identified in the causation of AD in India. However, to the best of the knowledge of the author, there are no studies which assesses relationship of loneliness with AD [20].
 3. **Alcoholism:** Loneliness is recognized as a contributing, maintaining and poor prognostic factor in the development of alcohol abuse. Further it is recognized as an essential risk factor in all the stages of alcoholism [21-24]. Various studies have demonstrated lonely people with heavy drinking are more vulnerable to alcohol related problems. The reasons attributed to this are due to lack of social support, and distinct perceptions of community pressure [22-24]. However presently in India as well as in the world, there are no studies which compares loneliness in alcoholics with loneliness in nonalcoholic [22-24].
 4. **Child abuse :** Loneliness is more prevalent among child abusers and those who disregard than who take good care of their children. Women abused in the past were noted to be more lonely and had more negative network orientation, compared to women, who were not abused. Further in whom abuse lasted for a longer duration period and involving multiple incidents were more loneliness and had lower network orientation [8,25,26]. In a study conducted by Dhal A et al., of 110 adolescents of Delhi (India) found that two third of children reported higher level of loneliness and one third of children reported lower level of loneliness. Further low self esteem in the adolescents was associated with loneliness. The adolescents with low self esteem develop loneliness, as they feel rejected. They also lacked confidence and skills in initiating and maintaining relationships. Psychological intervention like copying skills, talking with friends and maintaining relationships can benefit adolescents in dealing with psychological affects of loneliness [27].
 5. **Bereavement:** Loneliness is expected when people grieve the loss of someone to whom they were closely attached. Widows express loneliness usually with the absence of a spouse or a social support. Various studies report 86% of widows experience loneliness, however the proportion decreases with increasing number of children and with the support system. It must be noted that loneliness in grief is associated with acute absence of an attachment figure, rather than absence of a social support. Further loneliness in bereavement is in itself a risk factor for the development of depression [2].
 6. **Stress, Immune system:** Loneliness is not only a source of acute stress, but also chronic stress. Recently, there has been extensive research on psychosocial effects of stress on neuroendocrine and immune systems. Whether loneliness qualifies as stress may be debatable [2,20,28]. However there is ample data, which gives evidence of immune system getting involved in loneliness. Loneliness has been associated with impaired cellular immunity, as reflected by lower natural killer (NK) cell activity and higher antibody titers. In addition, loneliness among middle-age adults has been found associated with smaller increase in NK cell numbers, in response to acute stress associated with various tasks [2,28].
 7. **Suicide:** Research on suicide has revealed that there is a strong association between suicide ideation, parasuicide and loneliness. The prevalence of suicide ideation and parasuicide rises with the degree of loneliness. Further the peak season for loneliness has been reported to be winter and spring, the same season for which peak incidence of suicide has been reported [29]. However there is minimal differences in suicide between men and women related to loneliness [30]. SC Tiwari attributes loneliness as an important factor in etiology of suicide and parasuicide. He also considers loneliness as a disease and wants its place in classification of psychiatric disorders [14].
 8. **Personality disorder :** The various personality disorders associated with loneliness include borderline personality disorder and schizoid personality disorder [31,32] Intolerance of aloneness is considered a core feature of borderline personality disorder (BPD). Loneliness also potentiates other symptoms associated with BPD. The various Theories of Aloneness in BPD are The Need for Time Alone, Signaling the Need, Development of the Capacity to be Alone, The Holding Environment and Internal Representation [31,32]. Several

psychoanalytic theorists have suggested that emotional deprivation plays a critical role in the development of schizoid personality disorder. As a result of emotional deprivation and lack of ability to gain security, a lack of contentedness in interpersonal relationships has been observed as components in attachment distortion. Further contributing to the development of schizoid personality disorder is the maladaptive schema's and attached cognitive behavior associated with emotional deprivation [32]. In India, there are no studies which assess relationship of personality disorders with loneliness. In future, research should be done in India, which focuses on psychological affects of loneliness on various personality disorders.

9. **Sleep:** Loneliness has been associated with poor sleep quality with daytime dysfunction like low energy, fatigue. However loneliness has no relationship with sleep duration. As greater daytime dysfunction is a marker of poor sleep quality, loneliness has been found associated with greater day time dysfunction. Numerous studies have demonstrated greater daytime dysfunction accompanied by more nightly micro-awakenings with loneliness, thus demonstrating a role of loneliness with poor sleep quality [20].

Physical illness and Loneliness: Loneliness related chronic stress can cause low- grade peripheral inflammation. The low- grade peripheral inflammation in turn has been linked to inflammatory diseases .The inflammatory diseases include diabetes ,autoimmune disorders like rheumatoid arthritis, lupus and cardiovascular diseases like coronary heart disease, hypertension (HTN) [30]. In a study conducted by Hawkey et al., of young adults, loneliness was found associated with elevated levels of total peripheral resistance (TPR).TPR is the primary determinant of SBP, which suggests that loneliness- related elevations in TPR may lead to higher blood pressure [17]. Loneliness related chronic stress can also cause low- grade peripheral inflammation. The low- grade peripheral inflammation in turn has been linked to cardiovascular disease like atherosclerosis etc [17,24]. There have been various studies, showing relationship of loneliness with obesity, physiological aging,cancer, poor hearing and poor health [17,24]. In a study by SK Mishra et al., in 380 HIV (Human immunodeficiency virus) patients of Andhra Pradesh (India) found that 66.57% of patients were found to be lonely and loneliness was associated with depression (71.84%) in them. He also concluded that in physical illnesses like HIV infection, the mental health indicators like loneliness and depression needs more stress in the continuum of care of patients [33].

Interventions for loneliness: Left untended, loneliness has serious consequences mental and physical well being of people. Therefore it is important to intervene at the right time to prevent loneliness. There are broadly 4 types of interventions. The four main types of interventions: (1) Developing social skills, (2) Giving social support, (3) Developing opportunities for social interaction, and (4) Recognizing maladaptive social cognition [17].

CONCLUSION

Loneliness is one of the main indicators of social well-being. Loneliness can lead to various psychiatric disorders and various physical disorders. Left untended, loneliness can have serious consequences for mental and physical health. In India, there are very few studies which assess relationship of psychiatric and physical disorders with loneliness. However most of these studies were done in elderly patients. In the near future, research should be done in India, which focuses on psychological and physical affects associated with loneliness. Therefore it is important to intervene at the right time to prevent loneliness, so that physical and mental health of patients is maintained.

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