SHORT REPORT

Relationship between clinical anger and suicidal ideation among people with physical disabilities

Naila Andleeb, Sadaf Ahsan, Sadaf Zaheer, Farhana Sajjad

Abstract

The present research was intended to examine the association between suicidal ideation and clinical anger among people with physical disabilities. The purposive study was conducted at the Artificial Limbs Centre, Fauji Foundation Hospital, Rawalpindi, from February 2016 to November 2016. The modified scale for suicidal ideation and clinical anger scale were used for data collection. The sample comprised 150 people with physical disabilities including 87 (56%) males and 63 (42%) females. The findings revealed that suicidal ideation had a significant relationship with clinical anger; it was also noted that clinical anger and suicidal ideation were significantly higher in females as compared to males. Furthermore, the results revealed that participants with spinal cord problems had higher mean scores, 26.10±9.25 on clinical anger, while suicidal ideation is higher in people with polio, 15.87±9.41, as compared to other physical disabilities.The study highlighted the need to develop and enhance mental and physical health.

Keywords: Clinical anger, education, female, male, physical disabilities, Suicidal ideation,

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Introduction

Physical disability is known as the inability to perform basic tasks of self-care in daily life, which affect an individual's association with both physical and social surroundings.[1]

The UN specialists group on disabilities that met in July 2014 to look at the various problems collectively and measure the knowledge on disability determined that more than a thousand million people or 15% of the world's population are living with some sort of disability.[2] In Pakistan, in the absence of standard census, the approximate or projected numbers estimate that about 5.035 million people suffer from different types of disabilities.[3]

The relationship between physical health problems and thoughts of death has been pragmatic and prevalent in Canadian scientific literature.[4] Experiences from Sweden and Italy, questions related to suicidal feelings also included existence exhaustion and wish to die.[5] Another study showed significant association of suicidal thoughts with physical ailment.[6] Studies have shown significant association between aggression and suicide attempt.[7]

Puskar et.al. concluded from their study[8] that anger was a reaction to stress that pertains to the ecological condition. The anger that could not be controlled due to various issues result in despair, suicidal ideation, drug addiction, resentment, and severe vicious activities. There are two types of anger. First, state anger that motivates passionate reactions to several occasion, second, trait anger that was extra powerful to yield an emotional reaction.[9] Anger influences our social conducts and psychological interventions.[10]

Previous studies have reported that people with physical disabilities may have high suicidal ideation categorised by indicators of anger. However, no study has been conducted to establish the link between clinical anger and suicidal ideation among people with physical disabilities in Pakistan. So, the current study aimed to investigate the previously established literature on psychological issues in people with physical disability, to study the relationship between clinical anger and suicidal ideation among people with physical disabilities, as well as to explore the demographic variables among people with physical disabilities.

Subjects and Methods

This purposive study was conducted at the Artificial Limbs Centre, Fauji Foundation Hospital, Rawalpindi, from February 2016 to November 2016. The sample consisted of 150 physically disabled people between the age of 15 to 35 years. The participants' informed consent was obtained before the beginning of the study. The sample comprised 87 (56%) men and 63 (42%) women. The sample size was estimated according to Analyzing multivariate data.[11] The education level of the respondents was at least matriculation. All the respondents had different types of physical disabilities, e.g. spina bifida, traumatic/accidental, polio, spinal cord and muscular dystrophy. In addition to a

Department of Psychology, Foundation University Islamabad, Rawalpind, Pakistan.

Correspondence: Naila Andleeb. Email: andleebsyeda@gmail.com

demographic sheet, two instruments were used: the modified Suicidal ideation and Clinical anger scales.

Modified Scale for Suicidal Ideation (MSSI)[12] is an 18 items scale that is a modified version of Scale for Suicidal Ideation.[13] Every MSSI item is rated on a scale ranging from 0 to 3; overall measured scores may thus range from 0 to 54. All items are keyed in a way that higher scores represent more inclination towards suicide. The reliability coefficients were (α = .94) and MSSI M = 23.48, SD = 10.23, α = 0.88.

Clinical Anger scale[14] contained 21 questions in which the emotional state is noted about their surroundings. Sensation inventory was established by the author to measure clinical anger. The participants were asked to read all the 21 group of questions (4 statements per group) and choose the one statement that best defined how they felt. Each cluster of statement was scored on a 4-point Likert scale, with A=0, B=1, C=2, and D=3. The subject`s replies on the CAS were summed in a way that greater score paralleled to greater clinical anger (21 items ranged 0-63). The coefficient 0.95 (male only), and validity statistics was .61 while the test re-test reliability was 0.78.

Data was analysed using SPSS 21. Preliminary statistical analysis mainly involved reliability coefficient approximation for each scale using Cronbach's alpha. ANOVA (Analysis of variance) was used to find the statistically significant differences between the means of five different independent types of physical disabilities. An alpha level of 0.05 was established for significant testing.

Results

The study group comprised 150 people with physical disabilities, of which 87 (56%) were males and 63 (42%) females. Some important demographic variables were gender, age, education, and type of disability, while the age of the participants was between 15 to 35 years. In the present study, a large number of the participants were not well educated, with 12 (8%) having a higher education degree, 63(42%) of them were matriculates, 17(11.33%) had an intermediate level education, and only 31(20%) were graduates. Overall mean age was 28.92±5.21 years, and education means level was 2.39±1.38. Results also show that clinical anger and suicidal ideation have satisfactory reliability (i.e., α > .70). The correlation between suicidal ideation and clinical anger was carried out to determine the nature and direction of the relationship among the variables. It was revealed that suicidal ideation had a positive correlation with clinical anger (Table-1). The study shows that females scored higher on both suicidal ideation,15.22±8.16 and clinical anger 22.20±10.23 as compared to males (Table-2). Results show higher mean scores, 26.10±9.25 of clinical anger in participants with spinal cord problems. Furthermore, it demonstrated that suicidal ideation is higher in people with polio, 15.87±9.41 as compared to other physical disabilities. ANOVA with post-hoc was carried out on five different types of disabilities {spina bifida 44 (29.3%), traumata 41 (27.3%), polio 39 (26%), spinal cord 10 (6.4%), and muscular 16 (10.7)}, computed for clinical anger and suicidal ideation (Table-3).

Table-1: Correlation between Clinical anger and Suicidal ideation among people with physical disabilities (n=150).

				Range				
Variables	**No. of items**	**α**	**Mean±SD**	**Potential**	**Actual**	**Skew**	**I**	**II**
1. Clinical anger	22	0.74	19.88±11.26	0-66	0-49	0.29	--	0.44**
2. Suicidal ideation	18	0.78	13.44±8.08	0-54	0-39	0.55	--	--

*p< .05; **p< .01; SD: Standard Deviation.

Table-2: Gender differences in clinical anger and suicidal ideation among people with physical disabilities (n=150).

	Male	**Female**	***t* (148)**		**95%CI**		
	(n =87)	(n = 63)		***p*-value**	**LL**	**UL**	**Cohen's d**
Variables	**Mean±SD**	**Mean±SD**					
Clinical anger	18.19±11.72	22.20±10.23	2.18	0.03	-7.64	-0.37	0.36
Suicidal ideation	12.14±7.82	15.22±8.16	2.33	0.02	-5.67	-0.46	0.38

Table-3: Mean differences between clinical anger and suicidal ideation among types of physical disabilities (n=150).

	Spina bifida	**Traumatic**	**Polio**	**Spinal cord**	**Muscular**	**F**	**Turkry's**
	(n = 44)	(n = 41)	(n = 39)	(n =10)	(n = 16)		
Variables	**Mean±SD**	**Mean±SD)**	**Mean±SD**	**Mean±SD**	**Mean±SD)**		**Post hoc**
Clinical anger	19.40±12.08	19.82±10.84	17.94±10.44	26.10±9.25	22.12±12.57	1.23	4>5,2>1>3
Suicidal ideation	11.65±7.36	12.78±7.26	15.87±9.41	14.20±7.81	13.62±8.10	1.53	3>4>5,2>1

Discussion

A causal association between the two variables was investigated through the mean of the correlation and ANOVA in the study. A significant relationship was found between suicidal ideation and clinical anger as shown in table 1.8 The study showed that anger was a response to stress that pertains to the the persons surroundings. The anger that could not be controlled also lead to larger issues that resulted in despair, suicidal ideation, drug addiction, aggression and severe vicious wrongdoings. There were two varieties of anger; first, condition of anger that purposes emotional responses to any occasion, and second, peculiarity anger that was extra powerful to produce an emotional reaction.[15] Anger influences societal conduct and psychological responsis.[10]

Gender differences were measured for the two study variables and it was found that

women, as compared to men, scored higher on both clinical anger and suicidal ideation (Table-2). This hypothesis had been rejected in the previous studies; an earlier study connecting suicide attempts also presented minor impulsivity scores in females.[7] While non-impulsive aggression might be peculiar to female suicidal actions, adult men appear to have equal phases of impulsive and non-impulsive aggression as revealed by Dulca et al that the results of this research is as good as earlier studies.[16]

Only youth with minimum education were enrolled, due to this reason the sample was limited (disabled individuals are not much educated). The reason for males being more than females was that females with physical disabilities are not provided education. The study was conducted with partial quantity of demographic variables, i.e. gender, age, and education. The social factor was missing in the study due to time restraints.

Conclusion

Disability is a human condition that affects the psychological well being of the individuals in different societies. Physical disability is the most neglected area of research in Pakistan. Results also revealed that clinical anger is also a risk factor of suicidal ideation. It was found that people with physical disabilities are not much educated. Results also showed a higher ratio of suicidal ideation and clinical anger in females as compared to males.

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Conflict of interest: None

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