

Impact of anger management training in reducing anger & aggression among medical students

Rizwana Amin, Zainab Bibi, Rabia Khawar

Department of Applied Psychology, Bahauddin Zakariya University Multan and Department of Applied Psychology, GC University, Faisalabad, Pakistan

Objective: To explore the effect of anger management training in reducing aggression among students of medical colleges.

Methodology: The study was conducted in Nishtar Medical College, Multan from January 2015 to June 2015. Quasi experimental design was used. Sample consisted of 96 students who provided consent and also acquired higher scores on both measures of both anger and aggression. After assigning equal number of participants ($n = 48$) to experimental and control groups, anger management training was provided to the experimental group. Level of aggression was

measured before and after anger the training.

Results: Results demonstrated that there was significant difference in anger and aggression scores of the participants in experimental group than control group after receiving the intervention

Conclusion: Anger management training had a great impact on student's life to lessen their anger and aggression. It enables the students to manage their negative emotion and its' expression in a more acceptable manner. (Rawal Med J 201;43:151-155).

Keywords: Anger, aggression, anger management training, students.

INTRODUCTION

Anger is a strong emotional response to deprivation and provocation. It is an emotion that is often created by the discrepancy between our expectations and reality.¹ When an individual combats anger and unable to handle appropriately, it can create physical, mental, social and academic problems. Several diseases have been linked to the long term experience of angry emotions such as blood pressure, heart diseases, asthma, headache, and negative social behaviors like bullying and conduct problems.^{2,3}

Aggression is an expression of anger (a primary emotion). It has been considered harmful to one's life.⁴ It can cause emotional, psychological and physical harm to others such as beating, spreading unpleasant rumors about a person and scorning others' behavior and actions. It may be 'hostile' and 'instrumental'. The hostile aggression has been regarded as the intentional infliction of harm to another individual. While, instrumental aggression is means of getting some objective other than injuring the victim and being proactive rather than reactive.^{5,6} Stress is inevitable in this modern competitive era.⁷ Students are the same to this marvel and medical students are no exception to this phenomenon and experience substantial stress at different levels of

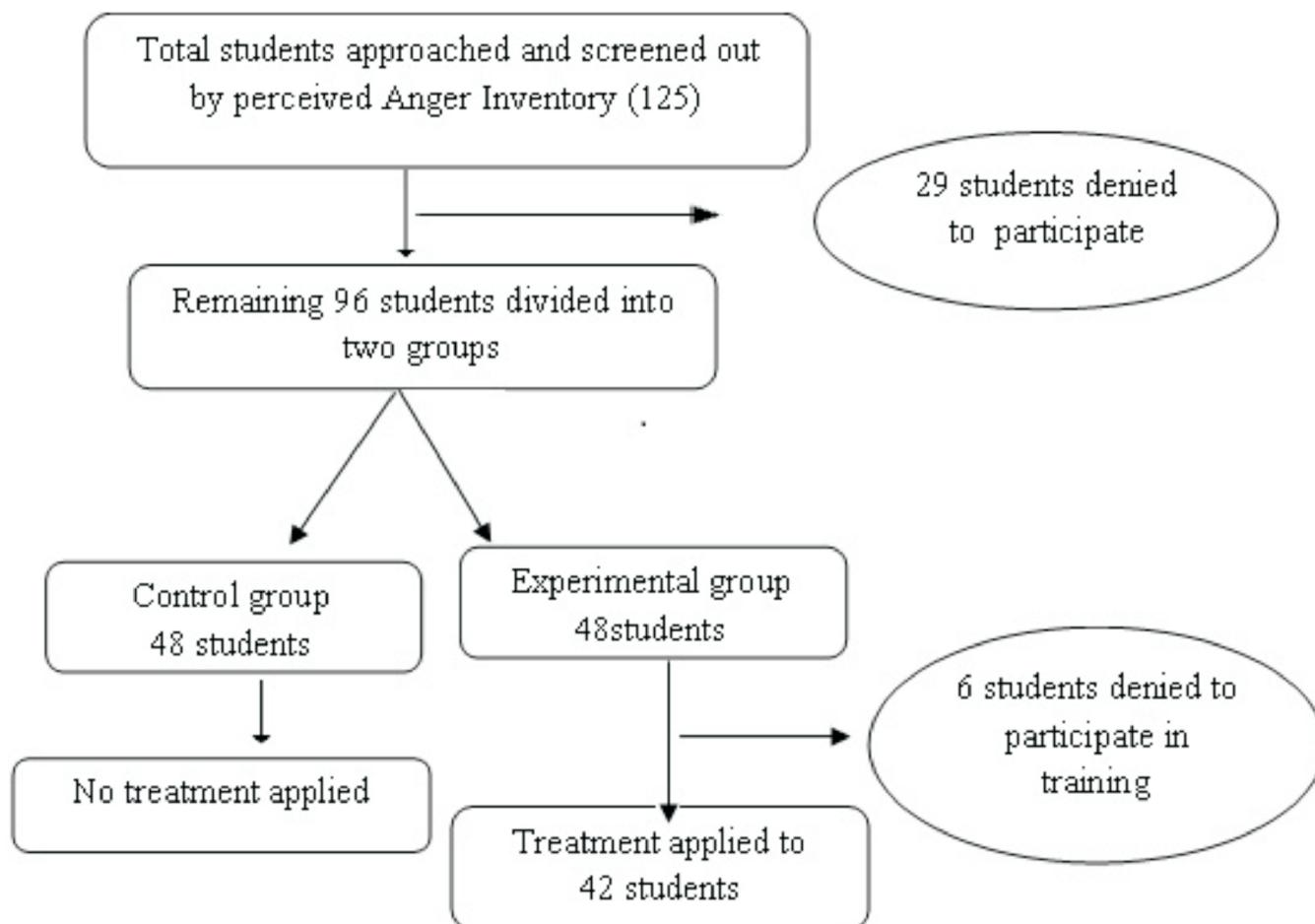
their training and patient care process. Consequently, they may experience emotional problems like anger.^{8,9}

Anger management training refers to an organized psychoeducational intervention that enhances skills to control ones' anger.¹⁰ Education about anger management skills had reduced verbal and non-verbal manifestation of negative anger, enhanced anger regulation, and significantly reduced the chances of aggressive behaviors.¹¹ Cognition has a fundamental role in response to an anger experience, and free discussion (useful debate) in critical events (trouble, irritation) shapes social appearance and strengthens social relations.¹²⁻¹⁴ Moreover, anger management training should be better in students to cope with the environmental demands.¹⁵ The current study aimed to explore the effect of anger management strategies in reducing anger and aggression among medical students.

METHODOLOGY

Data were collected from 125 medical students of Nishtar Medical College, Multan, Pakistan through convenient sampling technique. The final sample was 96 because of an absence of response from a few students (Figure).

Figure. Selection of study subjects.



INSTRUMENTS: Participants were asked to respond twice on valid and reliable self-report measures i.e. Aggression Questionnaire¹⁶ and Novaco Anger Scale¹⁷ before and after receiving anger management training. Cronbach's alpha for Aggression Questionnaire was 0.89¹⁸ while for Novaco anger scale was 0.92.¹⁹

STRESS MANAGEMENT TRAINING: Eight individual sessions (1 hour/week) of training were implemented to disciples in intervention group, subjected to the DeFoore protocol.²⁰ It is a kind of re-educative program where participants were taught to understand, manage and express their anger as a healthy emotion. Simultaneously the participants of control group were engaged in their routine life. At program completion, post- testing has been done for both groups.

Session 1: A clinical psychologist provided pre-requisite information with regard to the training and

its effectiveness to the participants and assent was made after setting the goals concerned to anger control.

Session 2: Participants were encouraged to think more divergently to express their anger in a healthier manner e.g. one can inscribe ones' ambience on paper; count to ten while being angry etc.

Session 3: Misinterpretation related to anger causing event discernible to participants in order to make it more effective for altering the negative thoughts related to self and others (e.g. an enraged person might think that he/she is being ignored by others, may be enquired to rethink with an altered perspective)

Session 4: Negative thoughts, healthy and non-healthy anger related behaviors were recognized in this session. Thought provoking questions (e.g. what can be the worst possible outcome of this

situation?) were raised to make them realize about the positive and negative nature of their actions.

Session 5: The purpose was enabling participants to differentiate their subjective feelings and reactions. Moreover, they were solicited to make a written record of anger causing situations and the feelings associated with them.

Session 6: To get participants' feedback regarding anger releasing physical exercise (such as smash the pillow).

Session 7: To teach and practice participant's different imagery techniques. (e.g. participants were asked to imagine something that completely demonstrate one's rage without showing violence towards living organism.)

Session 8: Participants were asked to practice communication skills such as reflective listening (repeating what other person is saying) and expressing empathy (understands others feelings) in order to reduce the intensity of rage. Feedback of the program was collected before adjourning it.

PROCEDURE The study was approved from the Departmental Board of Studies. Total 125 first and second year medical students were approached who consulted the clinical psychologist after distribution of informative flyers. 96 students were willing to participate while 25 students denied. These 96 participants were further equally divided into experimental (48) and control (48) groups. Both groups' participants were matched for gender, age, education and socioeconomic back ground. The demographic information was obtained on structured form. Before providing the intervention, participants were given a booklet consisting of Novaco Anger Scale, and Aggression Questionnaire. At the start of intervention, 6 students from experimental group denied to take anger management training. The remaining 42 students were provided anger management training individually. One to one sessions were provided to the participants in experimental group. This training program comprised on 8 sessions (1 hours/session) in which disciples carved out to deal with negative emotions and behavior. Meanwhile, the participants of control group were executing their routine activities. After two weeks of the

completion of the intervention, both groups were assessed again. Data were analyzed through SPSS version 20.

RESULTS

There was significant reduction in the score of anger and aggression from time 1 (Before intervention) to time 2 (after intervention) in experimental group. The mean decreased for anger (1.214) with a 95% confidence interval ranging from 1.028 to 1.385 with large effect size (.82). Similarly, mean decrease for aggression (0.552) with a 95% confidence interval ranging from .206 to .898 with large effect size (.20) (Table 1).

Table 1. Outcome measures on experimental and control group before and after intervention.

Variables	Groups	Before intervention	After intervention	t	Effect size
		M±SD	M±SD		
Anger	Experimental (42)	3.18±0.45	1.97±0.44	13.68***	.82
	Control (48)	2.68±0.60	2.69±0.57	-.11	.002
Aggression	Experimental (42)	2.94±0.68	2.38±0.74	3.22*	.20
	Control (48)	2.64±0.57	2.66±0.63	-.16	.005

*p < .05; ***p < .001.

Table 2. Scores on anger and aggression after intervention in experimental and control group.

Variable	Group	M±SD	t	p	Effect size
Anger	Experimental group	2.13±0.41	-3.39	0.001	-0.73
	Control group	2.44±0.46			
Aggression	Experimental group	2.34±0.74	-1.19	0.02	-0.25
	Control group	2.66±0.63			

There were significant differences in anger and aggression in experimental and control group. The magnitude of the differences in mean scores for anger (mean differences = .31, 95% CI = .132 to .552) with large effect size (.72). In the same way, for aggression magnitude of the differences in mean scores (mean differences = .32, 95% CI = .253 to .452) with large effect size (.25) (Table 2).

DISCUSSION

Present research was conducted to investigate the effect of anger management training on students' level of anger and aggression. Results found significant differences on anger and aggression of the medical students in the experimental and control group after intervention.

There was significant effect of anger management training in students' anger level in experimental and control group for time 1 and 2, ($p < 0.05$). Results of various previous studies also showed the same and had indicated that learning anger control abilities reduce angry expressions, create abilities for anger control and regulation, and essentially lessen the propensity to influential practices.¹⁵

As showed in table 2, there was significant impact of stress management training on students' aggression in treatment and control group ($p < 0.05$). Another study²¹ showed that anger control exercises has an enduring and note-worthy impact on reducing levels of aggression.

Although anger is one of the primary emotions and everyone experience it. When it is suppressed and not let it out then it may affect an individual's physical as well as psychological wellbeing. Researchers identified that experiencing feel of anger is a risk factor that is often associated with negative health outcomes for an individual. It can also alarm the indication of development of certain health disorders such as hypertension and cardiovascular diseases and could also lead to headache and asthma.^{3,22} These negative outcomes particularly affect the social skills of the students and their academic proficiency.

CONCLUSIONS

After anger management training, anger and aggression of the students differentiated across experimental and control group. The main focus was to enable them to identify their emotions, to control anger and manage emotions by expressing them in a more acceptable manner. Besides adapting the anger management strategies, students can learn to control their negative emotion, enhance their emotional intelligence and avoid aggressive behavior.

Author Contributions:

Conception and design: Rizwana Amin
 Collection and assembly of data: Zainab Bibi
 Analysis and interpretation of the data: Rizwana Amin, Zainab Bibi, Rabia Khawar
 Drafting of the article: Rizwana Amin, Zainab Bibi, Rabia Khawar
 Critical revision of the article for important intellectual content: Rizwana Amin, Zainab Bibi, Rabia Khawar
 Statistical expertise: Rizwana Amin, Rabia Khawar
 Final approval and guarantor of the article: Rizwana Amin, Zainab Bibi, Rabia Khawar
Corresponding author email: Rabia Khawar: rabiakhawar@gcuf.edu.pk
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