Journal of Clinical Research and Clinical Case Reports

Open Access Research Article

Relationship Between Kyphosis, and Anxiety, Depression and Aggression of High School Boy Students

Mohammadbagher Forghani Ozrudi¹, Fatemeh Nikkhoo Amiri²

¹Young Researchers and Elite Club, Babol Branch, Islamic Azad University, Babol, Iran ²Department of corrective exercise, Physical Education and Sports Sciences, University of Tehran, Tehran

Article Info

Received: July 05, 2021 Accepted: July 14, 2021 Published: July 16, 2021

*Corresponding author: Mohammadbagher Forghani Ozrudi, Young Researchers and Elite Club, Babol Branch, Islamic Azad University, Babol, Iran.

Citation: Mohammadbagher Forghani Ozrudi, Fatemeh Nikkhoo Amiri. "Relationship Between Kyphosis, and Anxiety, Depression and Aggression of High School Boy Students". Clinical Research and Clinical Case Reports, 1(5); DOI: http://doi.org/04.2021/1.1023.

Copyright: © 2021 Mohammadbagher Forghani Ozrudi. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract:

What has been considered in this research is the study of the relationship between Kyphosis, and anxiety, depression and aggression of high school boy students in Babol city. Therefore, with the use of anxiety questionnaire, Beck Depression Inventory (BDI) and Eysenck Aggression Inventory (EAI).and Kyphosis abnormalities have been specified in 126 students out of 327. Then questionnaires were distributed among the students being tested. After that, the rate of its validity and correlation was tested in P<0/001 level based on Pearson correlation coefficient by statistical analysis of the acquired data. The Results have that there is a significant and positive relation between Kyphosis abnormality and psychological aspects such as, anxiety, depression, and aggression. Results of the study represented that there is a high reciprocal effect between body and mentality. Since the body and mind are interaction. Abnormalities created in both could effect on the others. On this base need to focus more than ever these abnormalities.

Key words: kyphosis; anxiety; depression; aggression

Introduction

Business activities, is the foundation on which is based the creation of the system is that it ensures the survival of every creature (Forghani Ozrudi & Akbarnejad Kalaei, 2019). It is a combination of physical and mental disorders linked to one another will they cause problems (Tanner, 2014). Interaction between the two is that the personality is distinguished from others in the community (Saki et al., 2017). Deficiencies in any of these aspects will undoubtedly cause deficiencies in other aspects. As an example, consider a person angry, his mental disorder but not only his heart rates an increase, his face turns red and shakes hands and feet. So we can conclude that the interaction between body and mind (Rahmani et al, 2014). Constant stress can cause changes in the body and continues to cause structural changes in the body (Tanner, 2014). Some researchers have shown that anxiety and depression with the physical status are related (Baumgratmer & Sucher, 2004; Norris et al, 2001). Mental illness and depression can affect the body in some way (Barighi Moghaddam & Rasouli, 2010). On the other hand, between certain psychological characteristics such as depression and physical problems are related (Tase & Baily, 1992). For example, all the problems related to the physical structure cannot be explained by physical causes or environmental conditions are abnormal but could be the sign of a personality or emotional. Shoulder abnormalities occurred in some adult females often have physical origin but a sign of shyness or lack of confidence in themselves so they cannot modify the exercises will help a lot (Dadfar et al., 2015). People who are shy are often in situations that are difficult for them down the stretch Studies have shown that stress is damaging factor is the intense anxiety associated with lower student achievement will be (Daneshmandi et al, 2017). It also freed up a lot of adrenaline, noradrenaline can be converted to another substance, and the work function is reduced. According to several studies that aggression is defined as behavior that is aimed to harm themselves or others. This definition is intended to Veneto person. Kyphosis is a deformity of the spine. Increase the back-arc zone called Bournemouth Hotels. Poverty of movement can be seen as a major factor in muscle analysis. Follow the erroneous patterns in how the body maintain a negative impact on the performance of individual members. For example, over-worked hands in front of the muscles of the body and is a major factor in the occurrence of Kyphosis (Rajaie Manesh et al., 2015). This condition causes the body gradually to bend forward and an



studies have been done on this topic and psychological aspects of all schools in coordination with Education officials visited the the research Tokunaga et al (2001) typically noted. In this study, patients Kyphosis in Japan examined the results show that more than 45 degrees Bourne mouths Hotels patients who have anxiety also have back pain also. Lydick et al (2004) evaluated 142 Patients with fractures of the spine can be assessed. He observed that these patients also suffered from depression in addition to bone problems so that their lives had been affected. His purpose of the questionnaire SF-36 was used with the factors such as fear, anxiety, and depression and physical activity was assessed. His results showed that the correlation between vertebral fractures and depression was significant correlation between anxieties while in the middle of the line and plummet across the chord length of Van was pointless. Kyphosis and scoliosis deformity Boninger et the intervals are 5 cm from each other. These tools are used to al (2001) in a study on people with quadriplegia did McGill identify and detect physical abnormalities. No physical questionnaire to determine the relationship between pain and abnormality that the patient is suspected to be behind the cover of depression and life satisfaction for use. His research shows that the upper limb and started frontal and posterior and lateral there is a link between depression and anxiety and Kyphosis. Samadi (2008) result show that, analysis of data by Pearson the plummet line is called. In view of the anterior and posterior correlation coefficient showed that there was no significant deformities such as scoliosis shoulder drop visible in the side view relationship between the degree of kyphosis and hypochandria (r= 0.51; P=0.12), depression (r=0.56; P=0.56) and anxiety (r=-0.36; be determined. P= 0.30). Conclusion: The result of this study shows that the existing kyphosis in male students by itself may not indicate anxiety, depression, and hypochandria in them. In a study titled Evaluation of Rezazade (1996) postural disorders and depression in male doctor Chamran hospital in Tehran made clear that the 46 depressed patients, 69% pelvicobliguity turns were also and 30% had lateral pelvic rotation in the hospital increases the incidence of lordosis. Only 37% of patients did exercise. Data from this study showed that there was an association between postural disorders. The Spearman correlation coefficient of 0.68 indicates an increase in depressive disorders increases. Moosburger & Egel (2000) the study of psychological characteristics associated with kyphosis, resulting in pay between kyphosis and depression. Norris et al. (2001) study of congenital kyphosis and its relationship with some mental illness in middle school male students did. His research showed that there is a positive In this study were used to measure chattel anxiety questionnaire relationship between aggression and kyphosis. Yasrebi (2018) was shown in a study conducted by Gold Women who have congenital kyphosis due to osteoporosis are also suffering from anxiety, pain in the back too. Gold (1996) argues that there is a direct correlation between the increased range of kyphosis and anxiety. The research was conducted by the Lonstein et al. (1998) on women with kyphosis were observed between aggression and anxiety associated with kyphosis and there is significant scope. Diseases like hysteria and malingering are the factors affecting spinal pain. Such statements are necessary to document the various books of the various forms referred to the need for research in this area reveals that. Also, for the treatment of various disorders by physical phenomena associated with these disorders is no longer required. This study sought to answer the scientific question of whether the abnormal kyphosis is associated with anxiety, depression and aggression?

Methodology

This descriptive study from correlation. The study population consisted of all students in Babol city boy schools with congenital kyphosis respectively. Total number of students with kyphosis secondary schools was 126, of whom 327 patients with kyphosis

abnormal curvature of the human will (Karimi, 2016). Several method is simple random sampling. To select research subjects in school. All the students in each classroom observation and evaluation of a pilot who has been suspected of symptoms and abnormal postures of Injuries to the examination room, and help them use the raster of screen and they found abnormal kyphosis. In fact, checker board screening tool for identifying patients with kyphosis in normal individuals after the abnormalities students to transform qualitative data into quantitative the flexible ruler was

> Chessboard: Framework with dimensions 1.25×2 meters is placed Tuesday Hog observed to him. It passes through the center line of of the break-up abnormalities such as kyphosis and lordosis can

> The Flexible ruler is made of special steel is approximately 60 cm long and covered with plastic. Midfielder plans to register the device can be used in various forms such as pastes come in and play his new position to maintain a somewhat. In essence this means for processing engineering drawings curve is used. To use a flexible ruler to measure kyphosis put on the spine so that the spine is fully in touch. For measuring thoracic kyphosis vertebrae 4 and 12 mark on the paper, then put a ruler to draw the curve. 4 and 12 points on the curve are determined by drawing a straight line connecting them to the curve length to be determined. Measuring the abdominal contour curve with a straight line across the curve obtained. The curvature of the spine angle is obtained (Farahani & Ibrahim, 2013).

> containing 40 questions has three options. Anxiety scores of the first 20 questions and score 20 second question defines anxiety. To determine the validity of this questionnaire total scores compared with Essence aggression scores were statistically significant coefficient of 0.52 was obtained. The reliability of the questionnaire, the bisection method and calculated Cronbach's alpha for the total score was 0.86 and 0.86 respectively.

The questionnaire was first introduced in 1961 by Beck and was revised in 1971 and published in 1978. Long form Beck Depression Inventory is a 21 material is a paper pencil tool. While the work of individuals are asked to carefully read each question and choose the option that best expresses the sense of his present. Grading options are 1, 2, 3 respectively (Rabie Siahkali et al., 2014), based on the correlation between the long and short forms 0.89 to 0.97 have been reported. Correlation with the Beck Depression Inventory, Hamilton Psychiatric Rating Scale for Depression Scale Depression Zung Self 0.73 and 0.76 and 0.74 for MMP is depression. Validity of the questionnaire in the current study the correlation between test scores of depression and anxiety, 0.68 and 0.001 significance level obtained in the reliability is acceptable. Rajaie Manesh et al. (2015) reliability coefficient of the questionnaire using Cronbach's alpha 0.90 and range of 38 to 45 were selected as the sample. The sampling 0.80 bisection method is calculated. Esmaeili & Sheikh Sajjadieh



(2015) internal consistency reliability coefficient of the inconsistent Yasrebi (2018). There is a general sense of anxiety as been reported. Cronbach's alpha reliability coefficient of 0.82 was obtained as well. In the present study, Cronbach's alpha reliability coefficient Depression Inventory bisection was calculated using 0.87 and 0.84, respectively, which represent the coefficients of the questionnaire is acceptable.

In this study to calculate the aggressiveness of the Year in 1963 by the Eysenck questionnaire was developed and used. Cronbach's alpha reliability coefficient of this scale (Mohammadi Hesari & Qamari, 2018). and bisection 0.51 and 0.52 respectively reported. In the present study, the reliability coefficient was used and Cronbach's alpha reliability coefficients of 0.73 and 0.75, respectively bisection method.

Results

Pearson correlation analysis was used to study the hypothesis that the results in Tables 1.

There is a significant positive relationship between anxiety as can be seen in Table 2, the correlation coefficients for anxiety (0.41) and anxiety (0.47) at the 0.001 significance level, there is a significant positive relationship between anxiety and kyphosis. As can be seen in Table 3, the correlation coefficient (0.73) at the 0.001 significance level, there is a significant positive relationship between depression and kyphosis. As can be seen in Table 4, the correlation coefficient (0.53) at the 0.001 significance level, there is a significant positive correlation between aggression and kyphosis. So, all the research hypotheses are confirmed.

Indices Variables	r	r-squared	p
Kyphosis * Anxiety	0.68	0.38	0.001
Kyphosis * Anxiety Hidden	0.41	0.21	0.001
Kyphosis * Anxiety Apparent	0.47	0.26	0.001
Kyphosis * Depression	0.73	0.53	0.001
Kyphosis * Aggression	0.53	0.40	0.001

Table 1: Correlation coefficient and coefficient of kyphosis

Discussion

At all times in search of the causes of depression. From ancient times it was believed that the origin of depression and mental disorders are physical and chemical regulatory body decay to occur. For example, black bile, Hippocrates considered the main cause of mental disorders. Although we now know that depression is associated with dysfunction of certain neurotransmitters. Psychiatric status of patients with depression and the psychological similarities between them have shown a link between depression and organic changes. The findings of this study have shown statistically significant positive correlation between anxiety and kyphosis there. These research findings Tokunaga et al. (2001), Baumgratmer & Sucher (2004), Gold (1996) and Lonstein et al. (1998) match, but the results are

questionnaire method from 0.73 to 0.92 with a mean of 0.86 has a set of physical and behavioral responses to stress is considered thoughts, feelings, and physical result of misunderstanding arising from misinterpretation of physical sensations. These thoughts occur because people assume that there are serious problems in the body. Crucial role in catastrophic thoughts that increase anxiety and the physical symptoms will get worse. Findings of this study showed that there is a correlation between depression and congenital kyphosis the results of Samadi (2008), Lydick et al. (2004), Moosburger & Egel (2000), Rezazade (1996), Baumgratmer & Sucher (2004) and Tase & Baily (1992) is consistent with research contradicts Yasrebi (2018). A person who is depressed because his decrepit mental disorder that affects to correlate with the Aggression Questionnaire total score of 0.76 how the body feels so negatively affected him. Individual circumstances and emotions on body placement and how this affects muscle movement. One of the symptoms of depression in people who suffer from lower average level of physical activity and isolation. Research suggests that reflect the evolution of the spinal defect creates often during puberty and when there are doubts about the emotional and psychological disadvantages appear. Therefore, such attributes can increase the arch in the region of the spine. Given that Yasrebi (2018) research on physical education students has been currently researching the different conditions so that agreement can be due to age or social circumstances, and the extent of the movement toward accountability. The psychological characteristics of different ages and have different rates of physical abnormalities is higher in some years. This research is also significant positive correlation between aggression and showed kyphosis. The results of the present research findings Moosburger & Egel (2000), Norris et al. (2001), Baumgratmer & Sucher (2004), Tase & Baily (1992) and Lonstein et al. (1998) fits. Psychologists believe that psychological problems can be one of the main determinants of their aggression. The violence and aggression characteristic of anxious individuals also poses even physiological symptoms of anxiety, aggressiveness has many similarities. Thus, given the similarity of the physiological symptoms of anxiety and aggression, it can be concluded that there is a correlation between these two disorders? According to studies, the results obtained in the present study we conclude that there is a significant correlation between kyphosis and some psychological aspects. Given the positive impact of physical activity and exercise on physical and mental health, and relationships with each other and with the results of previous research would be Physical activity and exercise in a way that is practical and appropriate for the prevention and treatment of physical weakness and limb abnormalities is.

Conclusion

To prevent and reduce depression and anxiety are also provided. Because the aspect of prevention and treatment of complications, it is almost safe or safer and less dangerous method is introduced. Economic terms than other therapies are much more economical. In the end, once again, the need to expand and promote the culture and the people's physical and mental health through regular and ongoing engagement in sports is emphasized.

References

Barighi Moghaddam, J., Rasouli, S. (2010). Detection, Prevention, Correction and Treatment of Corneal

Aditum Publishing -www.aditum.org Page 3 of 4

- Abnormalities, Tehran, Pouya Knowledge Publishing.
- Baumgratmer, A. & Sucher, N. (2004). Physical activity and 18. posture influence on TSH a Tyriod harmonies and depression during sleep deprivation. Psychiatry research, 12(34), 213-215
- 3. Beck, A.T., Ward, C.H., Mendelson, M., Mock, J. & 19. Erbaugh, j. (1988). An in ventory for measuring depression. Archives of General Psychiatry, 4(5), 61-571.
- 4. Boninger M.L., Saur, T., Trefler, E., Hobson D.A., Burdett, R. & Cooper, R. A. (2001). Postural changes with aging in tetraplegia: effects on life satisfaction and pain. Archives of physical medicine and rehabilitation; 79(12), 1577-1581.
- Dadfar, M., Atef Vahid, M.K., Saberi Zafarqandi, M.B. 20. (2015). Women's Depression (Biological and psychological aspects). Publisher: Iran University of Medical Sciences, Tehran, Iran.
 21.
- 6. Daneshmandi, H., Gharakhanlou, R., Alizade, H. (2017). Corrective actions (identified and recommended practice). 14ed. Samt Publishing, Tehran.
- 7. Esmaeili, A., Sheikh Sajjadieh, M. (2015), The Relationship 22. between Social Anxiety and Enlightenment Dimensions in Students, Second National Conference and First International Conference on Modern Research in Humanities, Tehran, Iran
- 8. Farahani, A., Ibrahim, K. (2013). Corrective exercises (Physical Education and Sports Science. Tehran, Payame Noor University Publishing.
- 9. Forghani Ozrudi, M.B., Akbarnejad Kalaei, H. (2019). Musculoskeletal Disorders of Rice Workers and the Effect of Breeding Movements on them. J J Ortho Rheum, 5(1), 1-7.
- Gold, D. (1996). The clinical impact of vertebral fractures: Quality of life in women with osteoporosis. Bone; 18(3), 185-189
- 11. Karimi, Y. (2016). Social Psychology (Theories, Concepts and Applications), Tehran, Publisher: Arasbaran
- 12. Lonstein, J. Simmons, D. Stern, J. (1998). Functions of the Caudal Periaqueductal Gray in Lactating Rats. Behavioral Neuroscience; 112(6), 1502-1518.
- 13. Lydick, E. Zimmerman S. I. Yawn, B. Love, B. Kleerekoper, M. Ross, P. Martin, A. Holmes, R. (2004). Development and validation of a discriminative quality of life questionnaire for osteoporosis (the OPTQOL). Journal of bone and mineral research: the official journal of the American Society for Bone and Mineral Research. 12(3), 456-63
- 14. Mohammadi Hesari, K., Qamari, M. (2018). The Effectiveness of Parent Behavioral Training in Reducing Aggression and Anxiety in Children with Hyperactivity Disorder (ADHD). The 3rd National Conference on New Studies and Researches in the field of Iranian Educational Sciences and Psychology. Qom, Iran.
- 15. Moosburger, S. & Egel, K. S. (2000). Determine of pain Exercise perceived competence, trait anxiety, trait depression and moderate effects of personality and individual differences; 12, 1261-1266.
- 16. Norris, R. Douglas, C. Cochrane, R. (2001). The effect of physical activity and exercise training on psychological stress and well-being in adolescent population. Journal of psychosomatic Research; 36, 55-65.
- 17. Rabie Siahkali, S., Avazeh, A., Eskandari, F., Ghahremani, Z., Nematikhah, M., Afshinjo, M. (2014). Association between Religious Beliefs with Anxiety and Depression in Family Members of Hospitalized Patients. zumsj. 22(90), 45-

- 52.
- Rahmani, P., Shahrokhi, H., Daneshmandi, H. (2014). The investigation of spinal abnormalities & balance and relation between them in patients with Down syndrome. mrj. 8(4), 63-69
- 19. Rajaie Manesh, R., Bahadoran, J., Kamaneinasab, M., Biniyaz, I. (2015). Comparison of Anxiety, Depression and Aggression among Students with and without the Fatherland of Yasouj, Third National Conference on Sustainable Development in Education Sciences and Psychology, Social and Cultural Studies, Tehran, Islamic Studies Soroush Mortazavi, Center for Sustainable Development,
- 20. Rezazade, A. (1996). Determine the extent of postural disorders and depression in male doctor Chamran hospital in Tehran, Iran University of Medical Sciences thesis.
- 21. Saki, F., Sedaghati, P., Baghban, M. (2017). Correlation between the cardiorespiratory endurance, dynamic postural control and thoracic kyphosis angle among the students. Feyz. 21(2), 149-156.
- 22. Samadi, H. (2008). Investigating the relationship between the degree of kyphosis and psychological factors in male students of Tehran University. Journal of Fundamentals of Mental Health, 10(37), 55-61.
- 23. Tanner, J. (2014). Beating Back Pain (practical guide to self-help to prevent and treat pain and back), 7ed, Ghoghnos Publishing, Tehran.
- 24. Tase, S. & Baily, P. M. (1992). Taichi and Postural in the well elderly, the American Journal of Occupational therapy. 46(4), 295-300.
- 25. Tokunaga, K., Endo, N., Minato, I. (2001). Thoracic kyphotic deformity impairs QOL of osteoporotic patients. Clinical calcium. 11(12, 1549-54.
- 26. Yasrebi, M. (2018). The relationship between thoracic kyphosis with the psychological aspects of physical education male students of the University of Tehran and Mashhad and offers corrective-action. The 3rd National Conference on New Studies and Researches in the field of Iranian Educational Sciences and Psychology. Qom, Iran.