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Children's psychological well-being, anxiety, depression, and stress: The role of addicted and non-addicted parents

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Summary

Background: Today, substance abuse, drug addiction and alcohol are among the most common psychiatric disorders in the general population. Therefore, consideration of what is affecting the general health of addicts and their families, especially their children, is inevitable. **Aim:** The objective of this study is to compare the influence of parents' addiction on the psychological well-being, stress, depression, and anxiety of their offspring by selecting group samples of people whose parents are with or without substance abuse. **Methods:** To achieve this goal, descriptive, correlation and causal-comparative methods were used. The statistical population of this study included 250 people; 120 of these individuals had at least one parent with drug addiction, while the remaining 130 had non-addicted parents. They were selected using the available sampling method. **Results:** The outcomes showed that there was a significant difference in psychological well-being between children with and without addicted parents (mean for addicted parents: 8.30, for non-addicted parents: 4.75, p=.000). **Conclusion:** The depression, anxiety and stress scores of children who have addicted parents were significantly higher than those of the children with non-addicted parents, which is consistent with the results of other studies in this area. Therefore, by recognizing and exploring the role of parents' addiction and other factors, such as addicted friends, proactive programmes can be implemented for those parents' children.

Key Words: Psychological well-being; Anxiety; Stress; Depression; Parental addiction

1. Introduction

Children and adolescents are among the groups that are easily exposed to mental illness and the prevalence of these disorders depends on the population under study. According to reports, diagnostic criteria have been met in percentages reaching the 10-20% range in various age groups [2]. Substance abuse is a serious concern in many societies. Since adolescents seek to discover their surroundings and express themselves, they are increasingly exposed to substance abuse; meanwhile, the children of addicted parents, compared with children who have non-addicted parents, are 2 to 9% more likely to get involved in drug abuse [21]. Substance abuse, drug addiction, and alcohol are the most common psychiatric disorders among the general population and constitute a public health issue that affects both addicts and their families, especially their own children, who are exposed to the abuse of such addictive substances. Although many risk factors are associated with the onset of drug use, there is strong evidence attesting to the impact of early maladjusted experiences. These inappropriate experiences include exposure to negligence and maltreatment in childhood, as well as the consumption and abuse of substances by parents or primary caregivers [23]. One of the common beliefs among people with substance and alcohol abuse is that they only harm themselves by engaging in these behaviours. However, the results of research and empirical

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evidence suggest, rather, that substance/alcohol consumption behaviours have an impact on all those who are in some way associated with those consumers (e. g. family, friends and co-workers). Meanwhile, the impact on the children of the person directly affected is clear, too. For example, research results have shown that there is a correlation between increased adult anxiety and growing up in a home with a substance user, that is to say, children of consuming parents have more emotional and behavioural problems than than those recorded worldwide. Also, there is a correlation between depression and anxiety in parents who consume a substance and the occurrence of conduct disorder in their offspring [10]. Since the family is the first learning centre, addiction in parents can have negative effects on the development of their children's behaviour. According to numerous studies, a safe and stable environment and a careful family are among the primary needs of a child in favouring healthy growth. The child experiences a sense of autonomy, assurance, acceptance, and security in a healthy environment. This precondition clashes with the fact that children with addicted parents often fail to experience such an environment and run a higher risk of livelihood problems. They have a relatively high level of depression and anxiety symptoms, low self-esteem, guilty feelings, problems in interpersonal relationships, besides substance abuse itself [3]. Meanwhile, childhood experiences can affect mental health in adulthood. Sexual and physical abuse and negligence in childhood have long-term negative consequences on mental health, including depression, anxiety, and anger. Studies have shown that the children of addicts have a higher risk of drug use due to parental behaviour and sense of curiosity satisfaction [38]. Psychological well-being tends to increase individual and social prosperity. This kind of well-being depends on a kind of health profile that includes all the aspects of an individual [31]. Psychological well-being, which is one of the components of quality of life, refers to how people evaluate their lives; it has two cognitive and emotional aspects. The cognitive dimension involves evaluating individuals at the level of their life satisfaction and emotional dimension, which includes receiving the maximum positive affection and the least negative affection. Psychological well-being is, in fact, one of the important components of an individual’s quality of life that is related to happiness [12]. On the other hand, one of the issues encountered by this kind of child is mood disorders, including anxiety and depression. Anxiety is an emotional and physiological response to a completely internalized perceived risk of anxiety. Primary anxiety disorders in young people usually begin in the middle of the third decade of life, with the onset of certain physical symptoms [35]. The nature of "stress" was first introduced by the Canadian endocrinologist, Hans Selye [34]. He considered stress as a generalized biological reaction that appears when the body is faced with an abnormal appetite. The source of stress can be physical illness or injury, exposure to heat and cold, mental stress, such as pressure due to unemployment or marital conflict. Stress is the result of a person's past experiences of a stressful environment. Abuse of substances in parents, ranging from a variety of drugs to drinking alcohol, is a disruptive factor when it comes to performing parental duties [25]. Substance abuse also induces effects on sustainability and responsible parenting, and makes them difficult [37]. On the other hand, in addition to the problems that parents' substance abuse inflicts on their families and children, the mistreatment of children is one of the important factors in this respect. Researchers have emphasized that a caregiver who has substance abuse may be three times more likely to mistreat his/her children [8, 33]. In fact, substance abuse in all societies has been accompanied by many problems, including mental illness, poverty, unemployment, poor social protection, stress and engagement with the judicial system of the country for committing a crime, all of which have a negative impact on effective parenting [7, 15, 27, 33, 37, 39]. In addition, the offspring of parents of drug addicts, due to family disruption and the lack of proper management of children by their parents, are in great danger of having to face various problems, including rape, theft and escape from the home, which impact their physical and psychological well-being [30]. According to a study conducted in Iran, the degree and severity of depression in adolescents with substance-consuming parents were significantly higher than that of adolescents with non-consuming parents, and depression had a positive and direct relationship to the duration of addiction in parents [4]. Another study demonstrates that the children of substance abusers, compared with normal children, had more behavioural disorders in the areas of hyperactivity, attention deficit disorder, coping disorder, and behavioural disorder [1]. Along with this study, the results of another research project showed that children with a parent that had substance abuse disorders were more at risk of, and more vulnerable to, internalizing and externalizing problems, while children with parents who received diagnoses but then recovered from their condition were only

susceptible to externalisation damage [6]. One might imagine that if only one of the two parents has an addiction, that will not have much effect on his/her children, whereas the research reported in the literature shows the opposite. For example, a survey carried out on mothers who have been drug addicts showed that they have difficulty in forming a strong attachment with their child(ren), besides which inadequate care environment has a further negative impact on children; when there is a turbulent environment, that situation has often created patterns of insecure attachment in children [29]. Research is not limited to cross-sectional studies; longitudinal studies too emphasize that alcohol abuse by one parent or both have a significant connection with the development of substance abuse in children, whether male or female. If both parents have alcohol disorder, rather than only one, one consequence is a higher risk of substance abuse disorder in their children [24]. In another longitudinal study, which was examined in a sample of 65,117 children born in Finland in 1991, and followed up to the age of 18, it was found that substance abuse in parents was an important predictor of mental disorders and drug abuse in children aged 13 to 17. Even after controlling other influential factors such as parent education and child sex, it was found that substance abuse in the mother has a greater impact on child abuse [18]. Most studies merely showed high risk or demonstrated a positive relationship with substance abuse, but some studies have reported a more tangible outcome. For example, in the study of possible correlations between substance abuse and child abnormalities, the children of addicted people, when compared with the children of those who do not take drugs or just drink alcohol, proved to be three times more likely to be exposed to substance abuse [16]. With regard to the consequences of the past, it seems that parenthood affects not only child-rearing practices but also the rearing environment itself, and disrupts the life process through its significant negative impact on the child's mental health. One question that may be worth raising is whether parenting addiction, as well as psychological well-being, can predict depression, anxiety, and/or stress in children.

Aim: In taking up this line of inquiry, the present study seeks to investigate the effect of parents' addiction on on their children's psychological well-being and depression, anxiety, and stress.

2. Methods

This descriptive research is either retrospective or causal-comparative, as well as correlational. In this study, two groups of children were compared; in one of the two groups at least one parent was drug-addicted or had a history of substance abuse, while the second group comprised children with non-addicted parents who had no history of drug abuse. The two groups were compared in terms of psychological well-being and its components (positive relations with others, autonomy, environmental mastery, personal growth, purpose in life and self-acceptance), as well as testing disorders (anxiety, depression, and stress). In the present study the history of substance abuse was monitored in the offspring participating in this research, and the questionnaires were given to people who did not have a history of drug abuse.

2.1. Sample

In this study, 120 people who had at least one of their parents during the course of their life with substance abuse, so causing discomfort in their occupational, social and family life, together with symptoms of tolerance and substance dependence, were selected by sampling and using the Krejcie and Morgan table [20]. Out of a total of 120 people who had substance abuse, 98 of them had addicted fathers, 15 had a father and mother with addiction, while only 7 had addicted mothers. Besides this first group, 130 people whose parents did not have a history of drug abuse were selected for this study by available sampling procedures. As a result, 250 volunteers participated in this research.

2.2. Assessment

In this study, we used the DASS-21 Scale to assess the level of depression, anxiety and stress among subjects and also the RSPWB-54 scale to measure the level of psychological well-being.

2.2.1. DASS-21 Scale

The Lovibond scale of depression, anxiety and stress contains 21 items, comprising 7 questions related to depression, 7 questions on anxiety and 7 inquiring into stress. In this questionnaire, each question is scored on a 4-degree Likert scale (0 = does not apply to me at all, and, at the other extreme, 3 = is true for me). The final score for each subscale is obtained by calculating the sum of scores according to the instructions given in the manual [22]. To assess the validity of DASS-21, this scale was performed on 638 people and the coefficient of validity for the subscale of de-

Table1. Demographic characteristics of all subjects

Demographic Characteristics		Addicted parentN	Addicted parent%	Non-addicted parentN	Non-addicted parent%	Overall frequency
Gender	Men	38	31. 7	45	34. 6	83
	Women	82	68. 3	85	65. 4	167
Education	Under middle School degree	12	10.0	1	. 8	13
	Middle School degree	31	25. 8	4	3. 1	35
	Diploma	44	36. 7	13	10.0	57
	Associate	10	8. 3	13	10.0	23
	BA	21	17. 5	81	62. 3	102
	MA	2	1. 7	18	13. 8	20
Age	11 to 18	44	36. 7	12	9. 2	56
	18. 1 to 30	44	36. 7	73	56. 2	117
	30.1 to 40	26	21. 7	33	25. 4	59
	40.1 to 57	6	5. 0	12	9. 2	18
Civil Status	Single	70	58. 3	54	41. 5	124
	Married	47	39. 2	75	57. 7	122
	Divorced	3	2. 5	1	. 8	4

pression was 0.81, for anxiety =0.78 and for stress = 0.80. The overall coefficient validity was 0.82, while its significance was ($p < 0.000$). In a recent study on 376 cancer patients, the Cronbach Alpha coefficient and the internal confidence coefficient indicated the internal consistency of the test in the whole sample [13]. In another study, conducted on a group of 343 Australian rehabilitation specialists, they were asked to complete the DASS-21 questionnaire. In the analysis of the main components that were used to identify the reliability and determine the internal correlation of the subscales, the results obtained indicated that the construct is appropriate and has a good degree of reliability (.73 up to .88). The percentages for the three single dimensions (depression, anxiety, stress) and all three dimensions taken together showed a variance of over 62% [40].

2.2.2. Psychological Well-being Scale (RSPWB)

Ryff's revised psychological well-being scale has 54 questions, which the researcher applied to studying the components of psychological well-being. Any person who takes the test should provide one of the possible answers set out along a 6-degree Likert scale (1= I completely disagree to 6 = I fully agree), so indicating how much he/she agrees with or opposes each of the statements. The total score of 54 phrases represents the psychological well-being score of the individual [32]. The validity of the psychological well-being scale was compared with the life satisfaction scale and showed a range from 0.26 to 0.73; when compared with the Rosenberg self-esteem scale its validity was between 0.29 to 0.62, and with the William Zung depression scale it ranged from 0.33 to 0.60. As to the intrinsic reliability of the psychological well-being test, the correlation between subscales was reported to vary between 0.31 and 0.76. The highest correlation was found between self-acceptance and environmental mastery (0.76), and the lowest correlation was shown between self-determination and positive relationships with others (0.32) [26]. Also, with the implementation of the RSPWB test on a sample of 4,960 participants in Canada, with an average age of 76, the correlation of subscales ranged between 0.03 and 0.67 [9].

3. Results

Table 1 shows the demographic characteristics of all subjects in both groups – participants with and without addicted parents. In order to investigate the mental disorders of the group with and the group without addicted parents, analysis of variance was applied, but considering that variables such as age and education were not checked, they were considered as moderating variables. For the analysis of variance analysis (MANCOVA), the assumption of the homogeneity of the regression slope was first considered; the results are presented in **Table 2**. Given the number obtained in the first row and the significant part of

Table 2. Homogeneity of regression slope for independent and moderator variables

Tests on Effects Between Subjects						
Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
group * Age * Education	Depression	17. 934	2	8. 967	. 482	. 618
	Stress	1. 232	2	. 616	. 029	. 971
	Anxiety	13. 159	2	6. 579	. 449	. 639
	General Well-being Score	2,381. 062	2	1,190.531	1. 201	. 303

the table (p= 0.618), there is no meaningful difference between the independent variable and the moderator variable. Therefore, the assumption of the homogeneity of the slope of regression is observed and there is no obstruction to using variance analysis. The default's homogeneity of variance was also examined by applying the Loon test, and the results are shown in **Table 3.** The numbers obtained in the significant part of the table (p =.169, .750, .353, .379) indicate that the default homogeneity of variances is observed. Therefore, the analysis of variance (MANCOVA) can be carried out; the results are given in **Table 4**. In pairwise comparisons of dependent variables in the group with and the group without addicted parents, it is clear that there is a meaningful difference between the two groups (p <0.05). That finding indicates that those in the group without addicted parents have significantly less depression, stress and anxiety than those in the group with addicted parents, in addition to which members of the group without addicted parents experience a high level of psychological well-being.

3.1. Investigation of correlation between research variables.

Regarding the subject of this study, and in order to reveal the positive or negative correlation between the variables, the Pearson correlation coefficient was applied to the variables for depression, anxiety, stress and also psychological well-being with its subsets, as is shown in **Table 5**. According to the numbers obtained for the Pearson correlation, plus those for the levels of significance appearing in Table 5 (p=0.000) and those for the negative correlation observed between all variables (including depression, anxiety, stress and psychological well-being, with all its subsets), there is an inverse correlation between psychological disorders and psychological well-being. This means that, for example, the more severe the depression of a person, the lower his/her psychological well-being will be, whereas the more an individual's depression is alleviated, the greater his/her psychological well-being.

4. Discussion

The present study was conducted with the aim of comparing psychological well-being, depression, anxiety, and stress in two groups of children – the first with addicted parents and the second with non-addicted parents. The findings of this study showed a significant difference between the two groups in terms of psychological well-being and its subscales – depression, anxiety, and stress. The group of children with substance-abusing parents (those with a father or mother who has a history of substance abuse) have significantly lower psychological well-being scores both in general well-being and in its subscales (positive relationship with others, autonomy, personal

Table 3: Homogeneity of variance for dependent and moderator variables

Levene's Test of Equality of Error Variances				
	F	df1	df2	Sig.
Depression	1.901	1	246	.169
Stress	.101	1	246	.750
Anxiety	.866	1	246	.353
General Wellbeing Score	.778	1	246	.379

Table 4. Pairwise Comparisons group with and without addicted parents

						95% Confidence Interval for Differenceb	
Dependent Variable	(I) Group	(J) Group	Mean Difference	Std. Error	Sig	Lower Bound	Upper Bound
Depression	Addicted parent	Non-addicted psrent	3.418*	.549	.000	2.337	4.499
	Non-addicted parent	Addicted parent	-3.418*	.549	.000	-4.499	-2.337
Stress	Addicted parent	Non-addicted parent	2.752*	.583	.000	1.603	3.900
	Non-addicted parent	Addicted parent	-2.752*	.583	.000	-3.900	-1.603
Anxiety	Addicted parent	Non-addicted parent	4.741*	.487	.000	3.780	5.701
	Non-addicted parent	Addicted parent	-4.741*	.487	.000	-5.701	-3.780
General Well-being Score	Addicted parent	Non-addicted parent	-36.842*	4.021	.000	-44.761	-28.922
	Non-addicted parent	Addicted parent	36.842*	4.021	.000	28.922	44.761

growth, admission [to society], self-control, environmental domination and purposefulness in life) than the group of children with non-addicted parents. So too, the scores for depression, anxiety and stress were significantly higher than those of offspring with non-addicted parents (those whose parents had no history of drug abuse). Regarding the control of the two groups in terms of age, gender, education, and also a drug which may be used by children (questionnaires were given to people who did not have any substance abuse history), it can be concluded that the meaningful difference between the two groups can be attributed to the issue of parents' addiction or non-addiction. These findings are consistent with the findings of a majority of studies. For example, there is a significant relationship between a high level of anxiety in adulthood and growing up at home with an addicted parent, meaning that children with addicted parents have more emotional and behavioural problems, if the criterion of international standards is applied. A further finding was that there was a correlation between depression and anxiety in a child who has addicted parents and also having a conduct disorder [10]. In this study, children with addicted parents scored higher on the DASS-21 test than those with non-addicted parents. In accounting for why there is a significant difference between the two groups, it may be stated that, according to Anda's study, a healthy baby's development requires a safe and stable environment. Conversely, given that a family is a safe place for a child, if it is harmed, it will cause irreparable harm to children; it follows that a family that can create a sense of autonomy, assurance, acceptance and security in a child can protect them from harm. In the meantime, in many cases children with a parent with substance abuse disorders have no opportunity to experience such an environment; as a result they run an increased risk of developing disorders, including relatively high levels of depression symptoms, anxiety, low self-esteem, feelings of guilt, problems in interpersonal relationships and even substance abuse [3]. Children and young people with addicted parents have to experience an educationally tedious environment. This means that the psychological and physical needs of infancy and childhood are never fully met in their case, so that they experience insecure and vulnerable attachment styles. In such an environment, they are, in fact, exposed to almost any type of disorder, including depression, anxiety, communication problems, and a low level of mental health. Even in prenatal conditions these subjects may have experienced tension. For example, one study which investigated attachment and the effects of addiction on children reported that maternal consumption during pregnancy, as well as maternal tensions during pregnancy, may have a direct effect on the foetus, causing the baby to become addicted or to acquire an irritable negative mood which disrupts the formation of secure attachment [29]. The disintegration of the home environment and, in some cases, the

Table 5. Correlation between all variables and their subsets

Variables		1	2	3	4	5	6	7	8	9	10
Depression	R	1									
	Sig. (2-tailed)										
Anxiety	R	.714**	1								
	Sig. (2-tailed)	.000									
Stress	R	.756**	.689**	1							
	Sig. (2-tailed)	.000	.000								
Positive Relation	R	-.575**	-.489**	-.419**	1						
	Sig. (2-tailed)	.000	.000	.000							
Autonomy	R	-.511**	-.483**	-.437**	.404**	1					
	Sig. (2-tailed)	.000	.000	.000	.000						
Environmental Mastery	R	-.631**	-.573**	-.503**	.514**	.531**	1				
	Sig. (2-tailed)	.000	.000	.000	.000	.000					
Personal-Growth	R	-.522**	-.415**	-.356**	.438**	.461**	.616**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000				
Purpose in Life	R	-.500**	-.449**	-.353**	.493**	.404**	.669**	.553**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000			
Self-Acceptance	R	-.680**	-.531**	-.563**	.582**	.554**	.700**	.627**	.526**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		
General Well-being Score	R	-.729**	-.626**	-.562**	.742**	.711**	.853**	.771**	.774**	.854**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	248	248	248	250	250	250	250	250	250	250

**. Correlation is significant at the 0.01 level (2-tailed).

divorce of parents, partly explains why children with substance-abusing parents are more vulnerable to externalizing and internalizing problems; even if an addicted parent recovers, the child still runs a high risk of externalizing problems [6]. In some cases, due to the weakness of the role played by the addicted parents, some other members of the family are forced to accept their responsibilities by taking on the role of the parent for the younger members of the family – a major issue that they may not be ready for at all. In fact, when an addicted parent cannot play his/her proper role in the family, other members of the family often fill the vacant space and perform the duties and responsibilities of the parents [36]. On the other hand, vulnerable families are struggling with many problems, including financial problems due to a parent's disability (especially in the case of an addicted father), which imposes more anxiety and stress on the family and, in some cases, discourages the children in the family from studying and participating in the payment of family expenses. These children usually do not achieve much success in terms of work or education, and have low self-esteem, which is another factor favouring depression, besides having a sense of worthlessness and incompetence. In general, they look different from other people, which has negative effects on their self-esteem and well-being. These people are often abused in their childhood, have an unsafe attachment style, and are not trusted by most people. So they often have maladaptive schemas, and feel isolated and frustrated, which is consistent with study of Bernard and Barlow [5]. Certainly, children who experience such problems in childhood, especially those who have low self-esteem and a low degree of well-being, cannot receive supportive relationships from their peers. As a result, they often feel lonely, and may even feel attracted to the deviant networks of peer groups or find in them the foundations for committing crimes, just when the opportunity to abuse alcohol and drugs is being provided to them. In relation to the above issues, Dore and his colleagues found in their study that children whose families have

a record of drug and alcohol abuse often have problems with their peers in establishing good, supportive relationships [11]. Of course, these children may have other aspects that help to explain why they behave in this manner. The crucial issues are how their parents behaved towards them in their childhood, and the way the interaction between parents and children took place at that time, since the behaviours acquired in childhood tend to last and may continue to be experienced as very natural even in later life. In other words, the parents of addicts who once frequently harassed a child of theirs to achieve physical, emotional and even sexual intimidation, may, years later, observe a similar kind of behaviour in their child [33]. If we believe that parents may function as a mirror available to their children, it is because all children's efforts may initially aim at identification with their parents. Precisely because those parents, and then their children, have not formed the right judgments, they do not feel ashamed about what they are doing, because each new generation is likely to behave as they have learned. In such an environment beatings, emotional, sexual and physical abuse are usage and custom. Besides, the child does not have the right to protest, and, in any case, that child needs the same addicted parents as a starting point for his/her own future life. In this way the silence and abusive conduct of a cold or unhappy mother or father who often thinks about using their own resources to getting over a hangover are better from the child's perspective than having to go out personally on the street. Surely, such parents do not have enough time to give to the task of caring and paying attention to their child, with the outcome that these kids actually contract some disorders such as inadequate psychological well-being, emotional-behavioural problems and addiction [25]. Imagine being in a place where you have been rejected, and where important people do not respect you; in fact, they all escape from you and do not value you. You find yourself alone among them. In such a situation, you certainly cannot have a relationship of safe attachment to the people around you [29]. Such children live in a state of emotional deprivation. Not only in homes but also when at school, such children feel that their family is different from those of other children, and this feeling leads to social rejection, which results in poorer academic performance than that of their classmates [14]. Based on the analysis summarized in Tables 1, 2 and 3, there was a tangible result that derived from the differences between the children of addicted and non-addicted parents – in reality, the outcome of parenting type. So, if one of the parents has problems, it's obvious that those problems are manifested in their children. The issue that Mayes and his colleagues were the first to acknowledge was the finding that addicted mothers who suffer from a greater malaise than non-addicted ones show greater carelessness in childrearing. The behaviours that emerged in that study included negligence, physical and emotional abuse, excessive control and extreme punishment, instability, and lack of resolution of emotional conflicts [23]. Thus the vulnerability of these substance-abusing groups is high, and, due to the lack of social skills, problem-solving skills, coping skills and genetic vulnerability, the chances of these subjects turning to addiction to escape from their problems are very high [28]. Children with addicted parents are more likely to develop alcoholism and drug abuse than other children. In fact, these children belong to one of the most vulnerable groups of children and adolescents in terms of becoming unable to manage without alcohol and/or drug addiction, often falling victim to psychiatric disorders, too [19]. Such traumas in children cause a prolonged cycle of double stress in them and also cause acute abnormalities [17]. Considering the explanations mentioned above, it can now be better understood why the group of children who had addicted parents recorded significantly lower scores for psychological well-being, both in general and in the subsets, than the group of children with non-addicted parents. So too, as regards the mental disorders, including depression, anxiety and stress, the scores of children with parents who had substance abuse were significantly higher than those with non-addicted parents. Thus the results of this study suggest that addiction is a catastrophic disaster for the family, and that any family member who is exposed to it will inevitably contract some disorders that require special attention. To prevent the continuation of this defective cycle and decrease its consequences, first, it is necessary to design and implement therapeutic interventions for them (i. e. for children one or both of whose parents are addicted). Secondly, given that these children, like all the other children in this nation, are the greatest national asset for the future of the country and are collectively attending a school and classroom, then the nation should seriously consider solutions that are based on a better understanding of addiction and its role in the family and community. Thirdly, preventive plans should be considered for the children of addicted parents, according to the type of parenting abuse.

5. Conclusions

The depression, anxiety and stress scores of children who have addicted parents were significantly higher than those of the children with non-addicted parents, which is consistent with the results of other studies in this area. Therefore, by recognizing and exploring the role of parents' addiction and other factors, such as addicted friends, proactive programmes can be implemented for those parents' children.

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Contributors

All authors were involved in the study design, had full access to the survey data and analyses, and interpreted the data, critically reviewed the manuscript and had full control, including final responsibility for the decision to submit the paper for publication.

Conflict of interest

All authors have no conflict of interest.

Ethics

Authors confirm that the submitted study was conducted according to the WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects. The study has IRB review/approval. In carrying out this study, we first explained our aims and the importance of this study to participants in private, before they signed an informed consent document. In addition, it was explained to all of them that their names and their specifications were not required, and that personal questions would not be asked either in the questionnaire. The cost of conducting this research over the past two years has been the responsibility of the supervisor, consultant, and student who has been supervised by the Psychology Department of the Faculty of Education and Psychology of the Ferdowsi University of Mashhad, Iran. In addition, those most closely involved in this study are: Majid Moinezadeh as the supervisor responsible for the project, Mohammad Javad Asghari Ebrahimabad as the consultant for this project and Behnaz Shid Anbarani as contributing to this project.

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