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RESEARCH ARTICLE

Childhood Addiction in Iran: A Grounded Theory Study

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Abstract:

Background:

Nowadays, addiction is one of the major world crises, which threatens the lives of many people and imposes serious damage on families, societies, and especially children who are the most vulnerable. The aim of this study was to explain the process and reasons of addiction among children in Iran.

Methods:

The present study was a qualitative grounded theory study. Participants were selected based on the study objective from addicted children or the personnel of welfare centers working with addicted children. Accordingly, 11 adults and 3 children were interviewed. The Strauss and Corbin method (1998) was used to analyze the data.

Results:

The facilitating factors for addiction included social factors (unsafe outside environment, addicted relatives, social pitfalls and easy access to drugs), economic factors (poverty, lack of proper facilities at home), educational factors (parent's low educational, not understanding social problems), religious factors (low adherence to religious beliefs), and family factors (incompetent parents, the absence of parents, lack of attention to the child, lack of supervision on child behavior and contacts).

Conclusion:

Effectives step in preventing and reducing children's addiction can be achieved by increasing awareness among parents and families, teaching life skills to children and their peers through schools, teachers and social workers.

Keywords : Addiction, Addicted children, Child abuse, Children, Grounded theory, Iran.

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1. BACKGROUND

Nowadays, drugs and addiction are one of the major world crises, which threatens many people [1] and imposes serious damage on the family, society, and especially children who are the most vulnerable social group [1, 2].

The statistics of drug abuse in today's world is increasing rapidly. A toxicologist named Luding says that excluding food, there is no substance like opiates in the world that has easily entered the life of human beings [3]. The location of Iran and its neighboring countries that are major world drug producing

countries is probably one of the reasons for the high and growing incidence of drug abuse and addiction in Iran and alarmingly the age of onset is declining as well [3]. Addiction means drug dependency, which is harmful to individuals and the society, and illicit drugs are any type of chemical compound that alter brain function causing excitement, depression, abnormal behavior, anger or impairment in judgment [4].

According to the UN (United Nations) definition, addiction is an acute or chronic poisoning that is harmful for an individual or community and is caused by using natural or industrial illicit drugs. Drug addiction creates a sense of urgency to continue drug abuse and supply it in every possible way, and an intense interest to increase the amount of drug

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consumption, leads to psychological and physical dependence [5]. Newborns, infants and young children are the most innocent individuals involved with narcotics, because they are often involved without their own will and due to the irresponsibility or ignorance of adults [6].

Addiction leads to the disintegration of an individual's character and family foundation and also contributes to social life degradation and destruction of the society. This phenomenon destroys the ability to organize and manage a healthy society, disrupts normal social performance, and imposes a crisis to the human society [1].

In addition to the physical and psychological consequences of drug abuse in children, the social consequences of these drugs are also very alarming, as these children should become the workforce of the community in a close future [7]. Improving the mental and social health of the community depends on empowering children and given the fact that drug control is a complicated process, early interventions should start before the children enter elementary school [8]. Children under 12 years of age whose personality and values are still not fully developed tend to abuse drugs because of more external reasons such as substance use by their parents [7]. Studies have shown that in families with drug addiction, children are more attracted to using drugs [8]. Hajli *et al.* studied the attitudes of individuals about the causes of drug abuse. Based on their findings, the most important causes were bad friends, addiction in the family, living in notorious neighborhoods, unemployment and parental divorce [9]. Heidari *et al.* studied the causes of drug abuse among addicts referred to a public rehabilitation center in Khorramabad. The results of this study showed a significant relation between addiction and low self-esteem, successive failures in life, mimicking the drug abuse behavior of family members, economic inequalities, unemployment and lack of job opportunities, urging of friends and peers, relief from pain and physical illness, pleasure in using and positive attitudes toward drugs [3]. Another research done in Zanjan, Iran indicated that there was a significant correlation between socializing with notorious friends, pleasure, poverty or high income, illiteracy, family problems, unemployment, relief from pain and tendency to addiction [10].

In Iran, cultivation of poppy, coca and cannabis for drug production, importing, shipping, exporting, manufacturing, holding, shipping, purchasing, distribution, delivery, transit, supply and sale of opioid drugs, establishing or administering a place for opioid drug use, manufacturing, purchase, sales, and maintenance of equipment and tools for the manufacture or use of drugs, and drug use in any way are offenses and crimes [11].

Most previous research so far have studied addiction among adults, but there has not been enough research about children's addiction. Authors of this study hope that information obtained from this project can be used to find effective ways for supporting vulnerable children and coming up with solutions to prevent addiction in children, as well as providing suggestions to authorities.

The purpose of this research was to explain the phenomenon and causes of addiction among young children in Iran.

2. METHODS

This study utilizes the grounded theory qualitative method to explain the process and factors influencing addiction among children. Grounded theory is a kind of field research that studies phenomena in their natural settings, and its purpose is to deeply understand behaviors, practices, beliefs and attitudes of individuals and groups in their real life, in a such way that it tries to explain and clarify the social processes [12].

This study was approved by the Ethics Committee of Kerman University of Medical Sciences, Kerman, Iran (Ethics Code: IR.KMU.REC.1394.166).

After obtaining the necessary permits, participants were initially selected based on the study purpose among aid workers of Kerman welfare centers. Subsequently, the researcher performed theoretical sampling with the help of personnel from welfare centers. Participants were selected from social workers, educators, donators, psychologists with at least four years of work experience, parents or care takers with addicted children, and addicted children themselves. People, who did not give consent or did not cooperate or were not willing to answer the questions, were excluded from the study.

In this study, with the collaboration of the Kerman welfare center a number of children from 6 to 16 years old that had a history of addiction to opium, heroin, hashish, or alcohol were identified and enrolled in the study. The researchers initially talked with the social worker in charge of the child or the child's parents, and explained the objectives of the study for them. Then, after obtaining verbal consent from the child and the child's guardian, the first author (a male interviewer) performed interviews with children who were all boys. Because of the special situation of the interviewees and the fact that this study was not a clinical trial, the Ethics committee allowed the researchers to proceed with only verbal consent.

The location of the interview was selected by the participants and was mainly the rehabilitation or welfare centers in which the participant (worker, psychologist, philanthropist, mentor and child) lived or worked.

The main approach for collecting data in this study was deep semi structured interviews. Each interview took 30 to 60 minutes depending on the condition and willingness of the participant. As well as doing interviews; the researchers, took notes in the field from their observations, feelings and the participants' behaviors. The participants were assured about the confidentiality of their information.

The interview started with talking about the experiences and feelings of the participant about addiction or working with addicted children. The interview was conducted with questions based on the Strauss and Corbin grounded theory methods; such as "What do you think can be the underlying or facilitating factors of addiction in children? What would be the inhibiting factors and ...?" As these interviews were conducted with different people with different levels of understanding, such as a psychologist, benefactors and addicted child, based on the type of person interviewed, the dialogue and the level of transparency needed was different and in order to avoid ambiguity, simple words were used or further explanations were provided to the participants. Also, if necessary the

interviewer attempted to ask additional questions to better understand the participants' thoughts and experiences. All interviews were conducted by one interviewer (AJ).

In the qualitative analysis, the researcher should immerse in the information and read the transcriptions again and again in order to be able to extract the core statements and concepts by encoding the transcriptions [12]. Analysis of data in grounded theory requires the simultaneous collecting, coding, and analyzing of data starting from the first interview.

All interviews were recorded on MP3 and then, they were transcribed word for word and then coding was performed. In this study, the Strauss and Corbin method was used for data analysis which includes the 3 stages of open, axial, and selective coding [12].

The first stage of analyzing was open coding in which the researchers read the interviews several times in order to attain a general understanding of the concepts. Then, they read the interviews line by line and word by word and specified the main concepts of each paragraph and coded them and made the first classification and description of latent concepts. In the axial coding, the researchers compared the coded data with each other and shaped it as categories that fitted together. Researchers compared each open code with the other open codes and put the same codes in one category. Then, they compared each class with the other classes to ensure that the classes are distinct from each other. The Strauss and Corbin's paradigm focuses on issues, such as causal conditions, phenomenon, context, interventional conditions, practical strategies and outcomes that are the basis of linking these classes to each other. During the data analysis, the researchers discovered the themes that played the main roles in the phenomenon, interventional conditions or context and connected them by using the Strauss and Corbin paradigm.

In the selective coding, the researchers attempted to find the main and central class and the connections between the classes; so that, the elementary framework of the theory was identified [12]. The MAX QD 2007 software was used for storage, management and data restoration. The analysis and coding of each interview were done before the next interview.

Although qualitative researchers do not generalize their findings as quantitative researchers do, they try to truly explain the actual experiences of their participants. For this purpose, four criteria including credibility, dependability, confirmability, and transferability were taken into consideration to assess the trustworthiness of the qualitative data.

Long-term involvement with research data and participants provided the opportunity for researchers to examine the phenomena from more angles and achieve a more

comprehensive understanding of the participants' experiences. In order to ensure that the participants acknowledge the findings of the study against their experiences, researcher presented the initial extracted codes to some of the participants and asked their opinion. Also for more credibility after coding the interviews and determining the classes, an academic member acquainted with qualitative methods was asked to check and confirm the coding.

At the start of the study, a very limited literature review was performed. To prevent researchers from being influenced by the results of other studies during data collection and analysis, the researchers also tried to bracket their previous knowledge about this topic.

In order to show confirmability, the researchers tried to clearly explain the path of research and the measures taken so that it could be tracked by others. And for transferability, the research findings were shown to a number of people similar to the participants who had not participated in the research in order to verify the results of this research with their own experiences.

In this study, the necessary permits were obtained from Kerman University of Medical Sciences and the Welfare Organization of Kerman Province. Verbal informed consent was obtained from participants to conduct interviews and do audio recordings. Privacy and data confidentiality and deleting the interviewee's identity information on the recorded audios, the transcribed texts and field notes was observed during the study. The participants had the right to withdraw from the research at any time during the study.

The methodology and results were reported according to COREQ-32 (Consolidated criteria for reporting qualitative research) [13].

3. RESULTS

The research participants were 13 people including 5 males and 8 females. Three people were interviewed two times; and a total of 16 interviews were conducted. The adult participants had working experience from 4 to 15 years. One person was a PhD in Clinical Psychology, two persons had MSc, and were the head of their centers at that time, six persons had bachelors, and one person had a graduate diploma. Also three addicted male children participated in this study. The children who participated in this study were addicted to opioids; not alcohol, cocaine, hallucinogens, designer drugs, or tobacco (Table 1).

In this study, 1315 initial codes were extracted. Analysis of the data led to the formation of four main categories: 1.The meaning of addiction 2. Causal conditions 3.Consequences of drug abuse and 4. Preventive factors (Table 2). The research paradigm can be seen in Fig. (1).

Table 1. Characteristics of the participants of this study.

Number	Gender	Education	Type of responsibility	Experience (years)	Children age
1	Male	MA in Anthropology	Responsible for the center	5	----
2	Female	Bachelor of Social Sciences	Social Worker Instructor	6	----
3	Male	----	Addicted Child	----	17-year-old
4	Male	----	Addicted Child	----	15-year-old

(Table 1) contd....

Number	Gender	Education	Type of responsibility	Experience (years)	Children age
5	Male	----	Addicted Child	----	16-year-old
6	Female	Bachelor of Science Degree	Educator	4	----
7	Female	Bachelor of Educational Sciences	Psychologist	5	----
8	Female	Bachelor of Librarianship	Social Worker Instructor	5	----
9	Female	Bachelor of Science Degree	Social Worker Instructor	6	----
10	Female	Bachelor of Architecture	volunteer	4	----
11	Female	Master of Management	Responsible for the center	10	----
12	Female	Bachelor of Architecture	volunteer	4	----
13	Male	Doctor of Psychology	Psychologist	15	----

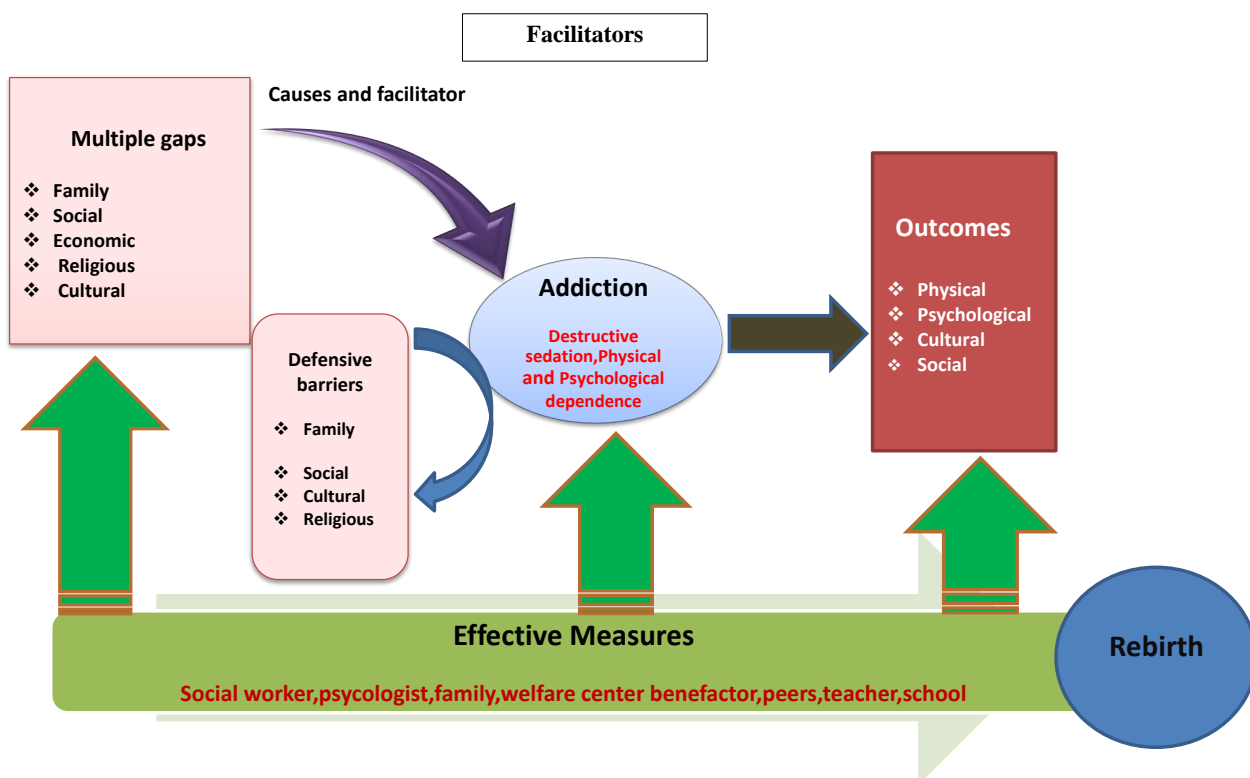


Fig. (1). The Theory paradigm. Causal and Preventive factors.

Table 2. The codes and themes extracted in this study.

Codes	Axial codes	Sub-themes	Themes
Pain relief, restlessness relief	Physical relief	Destructive but narcotic	The meaning of addiction
Soothes the nerves, gives a sense of mental relaxation and relief of feeling inferior	Mental-psychological relief		
Non-normality of the physical system, gradual dependency of the body to the drug, dependence on recurrent drug use, increase in the amount of drug use compared to the past, the phenomenon of tolerance to the drug, impairment in physical performance, severe pain in case of not taking, severe seizures, continuous use, a gradual trend to routine drug use, lack of control over time and amount of taking, gradual increase in amount of drug use, dependency to drug abuse	Physical dependence	Dependence	
Psychological dependence, mental symptoms of withdrawal, experience of mental symptoms in the case of not using, depression, anxiety, fear, low self esteem	Mental dependence		

(Table 2) contd.....

Codes	Axial codes	Sub-themes	Themes
Influenced by people, influenced by the environment, (school, street, park), having no power to say no to people outside home	Environment outside home	Social gaps	Causal Conditions
Addicted family, addicted classmates, addicted friends	Individuals related to the child		
Delinquency, theft, begging on the streets, working children	Social pitfalls		
Low control on access to drugs, increasing concerns about drug use in the community, existence of drugs in the family	Easy access to drugs in the community	Economic gaps	
Economic difficulty in families, parents not having good jobs, child not having pocket money	Financial poverty		
Not having good toys, a good house, good clothes, good food	Lack of facilities at home	Cultural gaps	
Not having a good relationship with parents, low knowledge of the family, lack of understanding of the child from the family, illiteracy of parents	Low educational of parents		
Not having awareness of the dangers of society, being under the influence of bad friends, contact with addicted people, born in a family with cultural poverty	Lack of understanding of community issues	Religious gaps	
Reduction of spiritual health, not internalizing the beliefs and religious values, family not being religious, the faded role of religion in the family	Low adherence to religious beliefs		
Forcing the children to beg, unemployed parents, imprisoned parents, addicted parents, neglect of parents	Irresponsible parents	Family gaps	
Child without a parent, loss of parents, wishing the parents were alive	Absence of parents		
Lack of understanding the child by the family, not providing mental and emotional relief for the child by family, bad behavior of parents	Lack of attention to the children from the family		
Lack of checking the behaviors, lack of checking the child's peers	Lack of supervision on the child's behaviors and communications		
Hangover, body aches, severe nausea, back pain, restlessness, bone pain, convulsions, self-harm, no desire for food	Physical Symptoms	Physical consequences	Consequences of addiction
Not having peace, crying, being shy, being sensitive, being confused, being disorganized	Hopelessness	Psychological consequences	
Mood changes, depression, sleep disorders, low self esteem	Depression	Cultural Consequences	
School dropout, low literacy of the family, lack of interest in education, interest in working and earning money	Illiteracy		
Poor social relations, poor communications, not finding a good job	Social life	Social consequences	
Having no sense of responsibility to family and community, undermining social position, lack of sociability towards others, dropping out of school, reduced quality of life, isolation and depression	Individual		
Weak human relations, increasing crimes and imprisonment, rising inequality and poverty, spread of divorce and family disintegration	Social		
Keep track of the child's family, creating inner peace in children, strengthen the sense of responsibility in children, empathizing with the child, keeping the child's secrets, filling the leisure time of the child, creating a sense of hope for the future in children, making effective verbal communication	Social Aid worker	Defensive barriers	Preventive strategies
Fill the emotional gap in children, fill the leisure time of children, living a sense of hope for the future in children, making effective verbal communication	Psychologist		
Having good peers in the center, not having addicted friends, imitating peers	Peer		
Sympathy with children, holding literacy classes for children, creating a sense of hope for the future in children, filling the leisure time of children	Benefactor		
Attention to children, providing mental and emotional comfort for the child, keeping track of children and their peers, lack of drug addiction in the family and parents, teaching the child about addictive drugs and their dangers	Family		
Life skills training, raising awareness about the types of drugs and the effects of taking them, school meetings with parents, creating a sense for studying and healthy living	School		
Role modeling of teacher for children, communicating with children, child's awareness about the types of drugs and its consumption consequences, the impact of teacher behavior on children, giving a sense of hope to the children	Teacher		

(Table 2) contd....

Codes	Axial codes	Sub-themes	Themes
For family: providing training opportunities for parents, raising awareness of parents For Children: filling the leisure time of the child, keeping track of the child's family, providing welfare services for the children, providing employment opportunities for children, life skills training, providing health care to children, strengthen the sense of responsibility, literacy classes for children, facilitating the return of children to their family, providing the child with identity by getting a the birth certificate	Welfare Center		

3.1. The Meaning of Addiction

Participants of this study pointed to the following topics to describe the meaning of addiction.

3.1.1. Destructive Relief

According to the viewpoints of our participants, although children achieve short termed mental and physical relief, it's regular use is destructive and leads to physical and psychological effects, such as body aches, back pain, depression, etc.; and they would gradually have to consume more. These children all had family or social problems and therefore, they turned to addiction to get rid of the psychological turmoil.

3.1.2. Dependency

Study participants acknowledged that drug use leads to dependence and this dependence shows itself in two forms of physical and psychological dependence. Physical dependence means the drug use must be frequently used by the child, because their body has become dependent on it. In the psychological dependence, if he does not use the drug in a timely manner, it will have a negative effect on child's mental health in which anxiety, fear and low self-esteem are some to mention. Participant number 6 commented:

"Once drug abuse happens, it usually creates effects that lead to continuous consumption, and if drugs are not used, withdrawal symptoms such as stress and fear appear."

3.2. Causal Conditions

Causal conditions led to factors that from the participants' perspective, had an impact on drawing children to drug abuse or in other words, facilitated the situation for drawing the child into the trap of addiction. These causal conditions are as follows:

3.2.1. Familial Factors

3.2.1.1. Incompetent Parents

Most participants thought that reckless and incompetent parents are the main causes of addiction in children. This include parents who do not put their child under surveillance, do not pay attention to whom the child's friends or companions are, are involved in their own personal issues and do not spend time with their children. This parental negligence provides a substrate for the child's tendency to addicted friends and addiction.

Another factor that all participants agreed upon was

addicted parents. A child who is born in a family with addicted parents and sees drug abuse in his own family in early childhood loses his spirit and motivation and sees himself convicted to becoming addicted. Participants acknowledged that parent's addiction can be considered as an important, driving, and even underlying factor for addiction in children. Participant number 4 stated:

"The father was severely addicted and the mother had severe addiction as well; their child was also involved. That is, ...the father, mother, and brother were all addicted to heroin".

Participants also mentioned that parent disputes and refuge from tension were among the reasons that led to children's addiction.

3.2.1.2. Absence of Parents

Participants expressed that if one of the parents, father or mother have died, since the child feels the parent's absence and wants to fill it, he seeks to fill the gap of his parents or guardians by something in the environment and this provides the opportunity to go toward drugs. The story of one child who got addicted is as follows:

"I am from ... [name of suburb deleted] in Kerman. Both my dad and mom had died. My mother died when I was 2 years old and my father died when I was 7".

The information gained from the participants also suggested that parent imprisonment can be one of the issues that cause children's addiction due to the absence of parents. Some participants thought that maternal absence is more detrimental than paternal.

3.2.2. Cultural Factors

Another factor that can lead to child's drug addiction from the perspective of the participants was educational deficiencies.

3.2.2.1. Low Parental Education

People participating in the study stated that parental literacy can be a deterrent to children's addiction. From the perspective of the participants, parents who are more educated and have high literacy levels, certainly have better knowledge about the environment and society in which they live and can transfer their knowledge to their children. In other words,

children are affected by their parents' literacy and culture and this in turn can improve the interaction of children with their parents and improve their interaction with others.

3.2.2.2. Lack of Understanding of Social Problems

From the perspective of the participants, children who do not have a clear understanding about their community, go wrong in their judgment about community issues and choose wrong friends and peers and eventually get caught in the trap of addiction through the influence of their addicted friends and peers. Participant number 5 said:

“Children who are born in lowly educated families and grow up there, cannot understand most community issues and are easily deceived... It makes them get influenced by their friends sooner than others, and become addicted”.

3.2.3. Religious Factors

Lack of adherence to religious teachings in parents including lack of performing religious practices, such as prayers were other factors introduced as a predisposers for children to addiction by the participants.

One factor that participants emphasized was that not internalizing religious values, and not binding to religious beliefs, and the trimmed role of religion in the family can create a condition that facilitates children's refuge to drugs. Parents who do not do their religious rituals and do not adhere to religious teachings, find themselves in more tension. Because religion provides a framework for their life and helps them to restrain from hazardous behaviours. Subsequently, children follow their parents behavior, and parents have a positive impact on their children through simple and everyday acts such as prayers, or reciting the Qur'an *via* reminding the role of religion and spirituality to their child. Participant number 6 says:

“Religion is one of the factors that can have a protective role, because values are internalized in a child from ages 4 to 5 years old until maturity. And if a child knows that what is said and what is acted are the same in his family, it definitely helps ... religious beliefs and values can protect him against addiction”.

3.2.4. Economic Factors

Participants acknowledged that financial poverty is certainly an issue that has a direct and indirect relationship with addiction. This means that poor families cannot live in a relatively good district and would have to rent a home in suburbs or places infested with drugs due to the inappropriate financial situation of the residents. On the other hand, in poor families parents cannot fulfil the expectations of their children

such as pocket money or other needs, and this especially in boys, causes these children to act in obstinance with their parents and families; and to be drawn to addiction. Participant number 3 said:

“One of the other reasons [for addiction] could be family poverty. Children, particularly boys, usually have demands from their parents, and if parents cannot meet these demands, they go out with their comrades ..., and want to be with them... and receive drugs from them and use drugs; and the family can no longer control their child”.

3.2.5. Social Factors

3.2.5.1. The Outside Home Environment

From the viewpoint of the participants, one of the factors that can have a high influence on children's addiction is the environment outside home. Children can communicate and interact with many people and they can be influenced by them in the environment outside their home or the society. One of the issues that participants expressed was that children should be able to withstand in the society and have the power to say no. Participant number 2 said:

“When a teenager has no power to say no, he accepts the offering of a cigarette in the environment outside home, and when he begins to use drugs, he continues it until the end. That is, if people propose anything else to him, he will surely accept it”.

3.2.5.2. Easy Access to Drugs in the Society

One of the other social factors that can cause addiction in children is drugs easily being accessed in the society, their home and in the community in a way that it can be easily bought and sold, and exchanged with a low cost. The participants believed that if more control was imposed on purchasing and selling drugs by the authorities and institutions or in other words drugs were not easily accessible for people, it could be considered as a deterrent factor and strategy to prevent children's addiction and the opposite can be considered as a driving factor for addiction in children. Participant number 9 said:

“Drugs should not be easily accessible,... drugs should not be easily exchanged in the streets ... and this problem should be dealt with”.

3.3. Consequences of Addiction

Study participants stated that the drugs, due to its long-term use, can lead to different physical, mental, social and

cultural consequences. So that, consumption by children can cause physical consequences, that can lead to symptoms, such as body aches, restlessness, severe nausea, and... in case of delayed use.

Substance use prevents children's calmness and causes disorganization and confusion in children, which subsequently causes hopelessness and irritability. One of the cultural consequences of drug abuse is that when a child becomes addicted, he loses his motivation for studying, drops out of school and seeks to find a job and provide money for his drugs. In this regard, one of the addicted children stated:

"I do not want to go to school;... I dropped out. I want to work beside my friend in the fast food restaurant that he works. I am not interested in studying and I do not like it ..."

The social consequences that are created by drug abuse in children can affect the child's personal and social life, because the child is apathetic to his family and the community and does not show a sense of responsibility and this causes the child to find a precarious social character in the future and leads to seclusion and isolation of children. In this regard, participant number 2 who was a psychologist said:

"Well, a child who is addicted and is driven toward addiction will be isolated; and his quality of life will be low and will have a precarious social situation in the future"

3.3.1. Preventive Strategies

In order to prevent children's addiction or reduce the prevalence of this social problem, strategies were suggested by the participants, and are mentioned below.

3.4. Preventive Factors

3.4.1. Human Factors

Parents and family, social workers, psychologists, peers, teachers and donors, as people who have close relationships with children, can play an important role in preventing child addiction.

It can be said that the most important factor that drags a child to addiction is the family, because the family especially the parents are children's role models. All participants agreed that the main inhibitor, facilitator, and strategies to children's addiction are rooted in the family. Families can provide a safe and joyful environment for children and provide programs that fill the spare time of children and prevent them from drug abuse. Generally, participants thought that the leading role in children's addiction was undertaken by the family. Participant 11 said:

"...what I have seen among all of the children here, I think that first of all the family is important"

From the perspective of the participants, playing and recreational activities conducted by the social workers, fill the free time of children, can keep them engaged and prevent them from thinking about using drugs. Social workers stated that by holding extracurricular classes, and filling their free time and providing sympathy and a sense of responsibility, children come to inner peace, find hope, and discomfort and sadness disappears in them. In this regard, one of the social workers who had a history of 5 years caring for these children said:

"...when classes are held by social workers, they really become happy and their state of depression and sadness disappears"

Another important human factor is peer groups. Children want to mimic what their peers are doing in order to be accepted by the group. From the perspective of some participants, if there are a lot of drug abusers in these peer groups, the child is encouraged and persuaded to turn to drugs. In this regard, one of the psychologists who had 15 years of experience of working with these children stated:

"If there are a high number of peers who use drugs, this really has an impact on the child, because he loves to belong to these peer groups and loves to be with them"

Among the aid that the charity groups were willing to provide was to create education motivation for the addicted children who dropped out of school through literacy classes; so that children could gain the ability to read and write and also fill their time with useful programs. Participant number 8 who was a donor said:

"One of the things that we are looking into is that the majority of children who come here are illiterate and we are trying to teach them how to read and write during this very short time"

School, as a second home for children, can play a significant role in deterring children from addiction. Participants acknowledged that a lot of topics can be raised in meetings hold at the school with parents; such as increasing awareness about drugs, peers who are in contact with the child, the needs and expectations of children and *etc.* In other words, these sessions can increase parents and school's attention to children and put children under surveillance. Participant number 4 who was a social worker says:

"The parents-teachers meetings at school can be helpful in preventing addiction in children"

From the perspective of some participants, teachers can also be an important and effective factor in preventing addiction in children, because teachers are considered as

children's role models. They acknowledged the things that teachers can do is to increase the children's awareness of drug abuse, ways of becoming addicted, and the consequences of addiction. Participant number 8 who was a sponsor said:

"...there is a positive impact of awareness on children, teachers should tell children about addiction, its consequences, and the problems it creates."

3.4.2. Welfare Center

Welfare Centers can help reduce addiction in children and their families through supporting parents. These organizations can increase awareness in parents. This awareness can be in various fields such as the variety of drugs, routes of usage and the dangerous consequences that it follows. Welfare centers can also prevent addiction in child by supporting children. Some of the work that the study participants acknowledged was providing good food, good clothing, recreational and welfare facilities for children. The centers can also resolve some of the children's deficiencies by providing facilities. Participant number 9 who was a sponsor said:

"...health care services, and psychiatry services have a high price, but for children who come here from different places,... the welfare center has a contract with Zanjire Omid [a charity] in Tehran and children are treated for free ..."

Welfare workers said that their experience shows that some of these addicted children have no birth certificates due to the negligence of their parents. In this case, welfare centers coordinate with the Civil Registration administration to get birth certificates for children after performing the legal procedures. Getting a birth certificate is the first step for changing the lives of these children. Without a birth certificate they have no access to school or health services. In this regard, one of the social workers who had a history of taking care of these children stated:

"We try to find the child's birth certificate, if we do not find it or it has been sold, we get a replica for them; if they do not have a birth certificate at all, we will request it via the welfare center and get their birth certificate"

4. DISCUSSION

Findings of this study showed that familial, economic, social, cultural, and religious factors can be effective in children's addiction.

According to our participants' comments, addiction is less likely to be seen in children whose parents have strong religious beliefs. Studies from Algeria and Iran have reported

that religious beliefs played an important role in prevention of addiction. Religious beliefs, and performing prayers define a framework of right deeds for the family; and thus strengthening religious beliefs in families especially in parents can be a strategy to prevent addiction [10, 14, 15].

It seems that addiction was higher among children whose parents were in prison. It is likely due to the fact that parent's presence in the family would cause more monitoring and attention to children; therefore, the presence of parents at home can be an effective factor in preventing addiction among children.

It also appeared that addiction was more observed in children who had lost their parents. In fact, the death of one parent has a much hard impact on the lives of family members especially children. Parents fulfil both physical (such as food, clothing, etc.) and spiritual needs (affection, attention and understanding) of their children. Another point is that children learn their behavioral from the interaction of their parents with other family members and friends. However, children who have lost one of their parents are drawn towards people outside home like addicted peers to compensate for the lack of their presence and eventually fall into the trap of addiction. It can be concluded that children who find themselves alone and are not cared for; may consciously or unconsciously get drawn toward drugs to offset or mitigate the absence of their parents. In a research, about the causes of addiction in Varamin city, Iran, death of a parent was considered as one of the reasons for addiction [16].

In this study parent disputes were also among the reasons mentioned that led to children's addiction. Studies in Iran and abroad have reported that divorce in the family leads to tendency of children towards addiction [10, 16, 17].

The participants of this study commented that parent behavior, such as attention to children and love can be effective in the prevention of child addiction. Studies comparing families with addicted and non-addicted members, have shown that most adolescents who are not involved in substance abuse were those who did not experience family tensions. Researchers think drug abuse does not happen in isolation and familial factors are often engaged [10]. In a study performed on the causes of addiction among young people in Iran, the addicts thought their family was more to blame for their addiction [10]. And another study showed that the family in which people live has a direct impact on the formation of the individual's psychosocial personality, either before marriage or after it. Like the mentioned studies, this study also considers the major influential role of family in the individual's tendency toward addiction [18].

According to results of the study, it seems like children whom one of their family members is addicted are more inclined to drug abuse. This can be justified, because children have a close interaction with their family members, and place family members as their role models. The presence of addicted family members can make drug abuse seem moral for the children and incline them toward drug abuse. In research conducted among family members, researchers found that if the elder of the family is addicted, this misbehavior is accepted

by other family members and leads to children's tendency toward addiction [10]. In a study conducted in Iran, a significant percentage of studied addicts become addicted under the influence of other addicted family members, and they directly blamed their parents and/or other family members for their addiction [19]. Other studies have also reported that an addicted family member or addicted parent (especially addicted father) has a major impact on addiction in children [10, 20].

The present study showed that parental literacy and awareness can be a deterrent factor for addiction in child. A study, from Iran stated that low parental literacy is one of the reasons for individuals tendency toward addiction [21]. Other research from Iran consider lower than high school education [22] or parental illiteracy and low literacy as important social variables affecting tendency toward drug abuse [14]. Other studies in Iran indicated that the less the parents' education and awareness about the effects of drug abuse, the higher the possibility of drug abuse among the youth [23].

Our findings indicated that family poverty is a facilitating and driving factor for children toward drug abuse. It is obvious that a poor family which cannot buy or rent a good home and lives in low socioeconomic suburbs or slums; cannot afford food and clothing and may have to earn money through begging or committing crimes and this can further facilitate children's addiction. Other studies conducted in Iran have also reported that poverty is a predisposing factor for addiction [14, 21]. Research findings suggest that life skills like the power to say no, creative thinking and *etc* can be a deterrent factor for children's addiction. It may be stated that the courage to say no should be taught by the family, parents, school, teacher, social worker and psychologist. It is clear that a child who has learned life skills such as the power to say no, decision-making and critical thinking before doing something can show better and more accurate responses in critical circumstances.

Some of the participants in this study believed that easy access to drugs can be a facilitating factor for children's tendency to addiction. Another study in Iran stated that easy access to drugs is the most important social variable influencing tendency to drug abuse [22].

It seems that another reason for children's addiction is the addicted peers. Studies conducted in Iran have indicated that there is a significant relation between socializing with bad friends and tendency to addiction [3, 9, 10, 15, 17, 24 - 34]; however, these were quantitative studies conducted on mainly adult populations, which makes comparisons difficult.

We hope that the findings of this research can help policymakers and formal institutions control drug abuse in children. Also, solutions and long term programs can be proposed to control addiction in children through cooperation among various sectors, such as welfare centers, the municipality, police forces, and rehabilitation centers.

One limitation of the present study was that we could not do interviews with parents of addicted children due to their lack of cooperation or lack of access. Also we were not able to interview girls because of the objection of the welfare centers.

A few qualitative studies has been conducted so far about children's addiction. The strength of this qualitative study was

that it was able to depict some related social risk factors and provide suggestions for their control.

CONCLUSION

The results of this study suggest that providing support to orphans or children from low income families, life skills training, parental supervision, teaching parenting skills, and tracking and monitoring the child's peers; through welfare organizations, the municipality, police forces, charities and donors can help to prevent, reduce, and control addiction in children.

LIST OF ABBREVIATIONS

UN = United Nations.

COREQ-32 = Consolidated Criteria for Reporting Qualitative Research.

AUTHORS' CONTRIBUTIONS

- [1] Study concept and design: Khanjani, Tirgari, Jafarnezhad.
- [2] Interviews: Jafarnezhad
- [3] Acquisition of data: Khanjani and Jafarnezhad.
- [4] Analysis and interpretation of data: Khanjani, Tirgari, Jafarnezhad.
- [5] Drafting of the manuscript: Khanjani and Jafarnezhad.
- [6] Critical revision of the manuscript for important intellectual content: Khanjani.
- [7] Statistical analysis: Khanjani and Jafarnezhad.
- [8] Administrative, technical, and material support: Khanjani and Tirgari.
- [9] Study supervision: Khanjani.

All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study was approved by the Ethics Committee of Kerman University of Medical Sciences, Kerman, Iran (Ethics Code: IR.KMU.REC.1394.166).

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All human research procedures followed were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2013.

CONSENT FOR PUBLICATION

Informed verbal consent was obtained from all participants and their legal guardians.

AVAILABILITY OF DATA AND MATERIALS

Data will be shared upon request 'ltqo 'eqttgur qpf lpi 'cwj qt0'

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CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest, financial or otherwise.

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