Human Systems Therapy for adolescent cannabis use

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Abstract

Hashish users compared with non users have high satisfaction from substances and low satisfaction from family and friends. The aim of this study is to induce satisfaction from human relationships through Human System Therapy (HST) on the hope that hashish use will be reduced. This is expected on the hypothesis that the low satisfaction from family and friends strongly contribute to hashish use. The subjects were 15 hashish teenager users (experimental group comprised of 8 hashish users, and the belonged to the control group comprised of 7 hashish users). The intervention lasted four months (2 sessions per month). After the application of Human System Therapy (HST), the results showed at a significant level that all the hashish users from the experimental group stopped using hashish and at the same time only the 28.6% of the hashish users in the control group stopped using hashish (p=0,007). The results also showed that family satisfaction increased more in the experimental group (p=0,041) after intervention.

Keywords: Hashish use, adolescents, Human Systems Therapy, family satisfaction, Interaction Theory

1. Introduction

There are many findings relating reduced family satisfaction and relations with adolescents' drug abuse. Namely factors such as poor family relations ([1], [2], [3], [4], [5]), family conflict ([6], [7]), divorced parents ([8]) are related with drug abuse. There are also many findings relating the use of other drugs and substances with adolescents' drug abuse ([1], [9], [10], [11], [12], [13], [14], [15], [16]).

The Theory “Stages of drug involvement” ([10], [11]) can explain the relation between various drugs abuse. And the “Sensation seeking” Theory ([17]) can explain the findings that show a link between sensation seeking variables and drug use ([18], [19]).

The “Interaction theory of motivation” ([20], [21]) can explain the above both categories of findings, and the lower satisfaction from family and peers and the higher satisfaction from other drugs, in the hashish users, in comparison with no users. According to “Interaction theory of motivation” there is a mutual inhibition between the motivation for satisfaction from human relations and the motivation from satisfaction by substances. Concerning the drug abuse, this theory implies that the low satisfaction from human relations induces behaviors for satisfaction from substance use, and vice versa. In addition, according to this theory a desire which is satisfied, it is increased by the time, and this can explain also to a certain extend the addiction process itself.

Considering the above, our group ([22]) has conducted an analysis from epidemiological data that supported the above considerations of “The interaction theory of motivation” concerning high school students concerning drug abuse. In particular, it was found that hashish users compared with non users were smoking cigarettes and using alcohol 6 times more than non users, and also they had 2 times less family satisfaction and less presence of both parents at home. On the basis of the above, it can be expected that an effective intervention towards increasing family satisfaction and peers satisfaction will reduce hashish use.
The more successful systemic interventions that included family and individuals are the Multisystemic Therapy (MST) developed by Henggeler (23) and the Multidimensional Family Therapy (MDFT) developed by Liddle ([24], [25], [26], [27])

“Human Systems Therapy” (HST), is based on General Systems Theory. It is applied independent of the type of problem at many levels of human systems hierarchical organizations, such as on individual, family and wider social level systems, using the same principles and techniques ([28].

The aim of this work is to test the hypothesis that hashish use can be reduced through the use of HST by increasing satisfaction, which can be accomplished by the improvement of the relationships of the hashish users with their families and peers.

2. Methodology

2.1. Human Systems Therapy

This method is based on general systems principles and a number of relevant techniques [28]. An advantage of that method besides of its effectiveness which is also reflected on the results of this study it is that it can be applied at many levels of human living systems organization such as individuals, groups, families and larger systems in a way that the intervention at one level can solve problems at another level. This is another reason of using HST. In this work we intervene at a group of adolescents in order to influence family satisfaction and in their personal relations.

2.2. The sample

The sample was consisting of 15 hashish abusers students from a Technical School of the city of Iraklion, Crete, Greece.

The experimental group was comprised of 8 hashish abusers (62.5% boys, 37.5% girls), their average age being 16.88 years old (Standard Deviation 1.458). Three (3) of them attended A class, and five (5) attended B class. Seven (7) pupils lived with both parents, and only one (1) lived with both parents and other relatives, e.g. extended family. The control group was comprised of 7 hashish abusers. This sample was randomly mixed with equal number of non abusers in order to protect the users’ anonymity.

The intervention (8 sessions) was applied on the experimental group.

Variables were first tested for normality. The Fisher’s exact test was also used, in order to test the possible statistical difference after intervention between the control and the experimental group.

3. Results

Table 1 shows that hashish users after intervention completely withdrawn from hashish use, at a statistically significant level (p=0.008), and at the same time no significant decrease took place in the experimental group (p=0.625).

The results of Fisher’s exact test on hashish use between the experimental and the control group before and after the intervention reveal that 100% of the experimental group stopped using marijuana, and that only the 28.6% of the control group stopped using marijuana (p=0.007).

Additionally the results on low score of family satisfaction and high score of family satisfaction ([29]), between both groups before and after the intervention, show that the family satisfaction score of hashish abusers increased significantly only in the experimental group after the intervention (p=0.041).

Table 1. Sign test for hashish users of the experimental and control group after intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Hashish users</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative differences</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Positive differences</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ties</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Students of Technical School usually are working
4. Discussion

We intervene in a group in order to protect the users’ anonymity. During this intervention we discussed about adolescents’ family relations, and organization. Namely we do indirectly family therapy through group therapy. This kind of indirect family therapy is used in Greece by George Vasiiliou, Haris Katakis, and Kyriaki Polichroni, the present President of EFTA. An indication that the group therapy influenced the family characteristics is the finding of Lambraki et al ([30]) that the hashish users’ low score of family satisfaction was increased after the group therapy. We also indirectly intervene on the class, and on the peer group.

This multilevel intervention (on individual, class, family, and peer group) is in accordance with the context of Human Systems Therapy (H.S.T.), that is applied independent of the type of problem at many levels of human systems hierarchical organizations, using the same principles and techniques ([28]).

Factors of success of intervention may be (a) the method of intervention, and (b) the validity of the hypothesis that satisfaction from human interactions, and especially the family ones, contributes to the reduction of hashish use.

Previous research trials using Human Systems Therapy (H.S.T.) had also better outcomes compared with other methods in similar cases as in reducing psychotic symptoms in schizophrenia ([31]), and improving adaptive functioning in profound mentally retarded adults ([32]).

Regarding the validity of the hypothesis of the contribution of family and peer satisfaction, as antagonizing hashish use, it can be also considered as tested through the results of the present research. This hypothesis is also confirmed indirectly by the work of Liddle ([27]), that were based their successful intervention also on the assumption that increase of family satisfaction reduces the use of hashish.

In the experimental group of this work after intervention the score of family satisfaction was increased ([30]).

Comparing the present intervention with other successful interventions for drug dependence we notice that:
(a) Cognitive behavioral methods are effective to reduce or stop the hashish use, although the majority of participants to treatment continue the use after intervention ([33]).
(b) MDFT ([25]) and MST ([23]) are systemic therapies. Especially MDFT succeeded in reducing the drug abuse ay a percent 54% for the users, within 6 months and in about 50 sessions. Our intervention lasted 4 months, the sessions were 8 and there was a 100% withdrawn from hashish use.

It is interesting in our research that the 100% of the experimental group stopped using marijuana. This is possible due to the effectiveness of HST, since the application of HST, that reduced the psychotic symptoms of schizophrenics ([31]), had better outcome compared with the other psychosocial therapies.

One limitation of this intervention is the size of the sample, that was small. However, there were significant statistical differences, since all the users of the experimental group withdrawn from hashish use after intervention.

The results of this work can be useful for the prevention from the use of heavier illegal drugs such as heroin or cocaine.

It would be interesting a further trial of the HST for other drug dependence cases, such in individual, family and therapy in institutions.

5. Conclusion

The above results support (a) the effectiveness of HST, (b) that increase of satisfaction from family and peers relations can reduce hashish use and (c) interaction theory of motivation regarding drug abuse, that includes the assumption of an antagonism between the preference for satisfaction from human relations and the preference for satisfaction from non human relations, such as hashish.

REFERENCES


