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Original article

HEALTH EDUCATION WITH USERS OF ALCOHOL AND OTHER DRUGS

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ABSTRACT: The objective of this study was to analyze the acquisition of knowledge among people undergoing rehabilitation for drug abuse in health education groups. Convergent-care research was developed with individuals admitted in therapeutic communities. A semi-structured and self-administered questionnaire for analyzing the level of pre- and post-intervention knowledge was used. Data were collected between August 2013 and February 2014. Twenty-eight male users of multiple psychoactive substances participated in the study. There was an increase in the definitions of the effects, awareness of rehabilitation strategies, substance classification and action by the participants. Qualitative analysis revealed differences in quality and depth of the pre- and post-intervention answers. Health education raised the understanding on basic knowledge related to abuse of alcohol and other drugs, and its correlation to the behavior, in addition to its contextualization and reflection regarding the rehabilitation.
DESCRIPTORS: Drug users; Health education; Nursing; Public health; Health promotion.

EDUCAÇÃO EM SAÚDE COM PESSOAS USUÁRIAS DE ÁLCOOL E OUTRAS DROGAS

RESUMO: O objetivo foi analisar a constituição de conhecimento entre pessoas em reabilitação do uso e abuso de drogas a partir de grupos de educação em saúde. Pesquisa convergente assistencial com indivíduos internados em comunidade terapêutica. Utilizou-se um questionário semiestruturado e autoaplicável para analisar o nível de conhecimento pré e pós-intervenção. A coleta ocorreu entre agosto de 2013 e fevereiro de 2014. Participaram do estudo 28 homens usuários de múltiplas substâncias psicoativas. Houve aumento nas definições de efeitos, reconhecimento de estratégias de reabilitação, classificação e ação de substâncias pelos participantes. A análise qualitativa revelou diferença na qualidade e na profundidade das respostas pré e pós-intervenção. A educação em saúde edificou o conhecimento dos saberes primários quanto ao uso abusivo de álcool e outras drogas, e sua correlação com o próprio comportamento, além de sua contextualização e reflexão acerca da reabilitação.
DESCRITORES: Usuários de drogas; Educação em saúde; Enfermagem; Saúde pública; Promoção da saúde.

EDUCACIÓN EN SALUD CON PERSONAS CONSUMIDORAS DE ALCOHOL Y OTRAS DROGAS

RESUMEN: El objetivo fue analizar la constitución de conocimiento entre personas en rehabilitación de uso y abuso de drogas a partir de grupos de educación en salud. Investigación convergente asistencial con individuos internados en comunidad terapéutica. Se utilizó un cuestionario semiestructurado autoaplicable para analizar el nivel de conocimiento previo y posterior a intervención. Datos recolectados entre agosto de 2013 y febrero de 2014. Participaron del estudio 28 hombres consumidores de múltiples sustancias psicoactivas. Hubo aumento en las definiciones de efectos, reconocimiento de estrategias de rehabilitación, clasificación y acción de sustancias de parte de los participantes. El análisis cualitativo expresó diferencias en la calidad y profundidad de las respuestas previas y posteriores a intervención. La educación en salud edificó el conocimiento de los saberes primarios respecto del uso abusivo de alcohol y otras drogas, y su correlación con el propio comportamiento; además de su contextualización y reflexión acerca de la rehabilitación.
DESCRIPTORES: Consumidores de Drogas; Educación en Salud; Enfermería; Salud Pública; Promoción de la Salud.

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INTRODUCTION

The simultaneous use and abuse of multiple legal and illegal drugs among young adults has raised concern by researchers that consider the higher probability of drug addiction when compared to other age groups. The increase of this behavior in other social groups was also observed[1-3]. With regard to health, the chronic use of psychoactive substances causes psychological, social, and economic damages[1,4-6].

The challenge lies on the establishment of practices that promote and prevent damage to the health of these users. One of the proposals focuses on health education, which encourages the creation of knowledge, change in habits, attitudes, and behavior at the individual and collective levels[7]. Regarding nurses, particularly, health education in the field of drug addiction is a defiance[8], since they need the engendering and the articulation of the knowledge of the educator assisting the target population, with a focus on the awareness of the consequences of drug abuse[9].

Those who live with comorbidity, and the abusive use of alcohol and other drugs, evaluate health education as an effective instrument for promoting their health with gains for performing their roles assumed in life[8]. This technology enables collective construction of health, citizenship, self-expression, and turns the discussion forums relevant for their existence[7]. Since it has to do with drug addiction, it also leads to a reflection on the topic discriminated by society and the authorities. Thus, it brings to light decisions on this issue, its relationships, and the treatment itself[9].

In this study, the emphasis was to foster health education among drug addicts, based on psychoeducation assumptions that, briefly, follow clinically the health-illness process of the individual and promote the creation of self-knowledge, with the aim of improving the confrontation of the situation lived and stimulating active participation during their treatment/rehabilitation[10-11]. The aim of the study was to analyze the creation of knowledge among people undergoing rehabilitation of abuse of alcohol and other drugs, based on health educational groups inspired by psychoeducation, as a contribution to the structuring of intervention models in the nursing care process.

METHOD

This convergent-care research applied health education technology based on psychoeducation. This requires the involvement of the researcher with problem questions arising from the practice, indicating care know-how knowledge, resulting in an impact and reconstruction of the nursing care model[12].

Therefore, there was topic definition, scope of work, subjects, and methods of analysis. Later, the screening phase reinforced data collection with the aim of generating material for the research itself and boosting nursing care to improve it. During analysis, data interpretation was sought, evaluating them subjectively and associating them with theories chosen for understanding the reality and the context[12].

The study was carried out in a male therapeutic community located in the southeast of the state of Goiás. The inclusion criteria were: being 18 years of age or older, making use of psychoactive substances, being admitted in the therapeutic community at the time of the interview, and answering the pre- and post-intervention questionnaire. Subjects with medical diagnosis of serious and persistent mental disorder and those who were apparently sedated or in state of mental confusion, and after physical examination of consciousness level on the day of the interview were excluded. Data collection, starting at the screening phase, took place between August 2013 and February 2014, at the therapeutic community.

For group interventions, a pedagogical-care contract was established and conducted in two subgroups, in which the same topics were discussed during eight meetings of 60 minutes each. The first 20 minutes were dedicated to topic explanation and the remaining time to reflective discussion. The topics are presented in Chart 1.

The self-applicable and semi-structured questionnaire included socio-demographic characteristics

of the subjects and discursive questions related to concept, effects, and classification of psychoactive substances, as well as rehabilitation strategies. This instrument allowed the evaluation of the construction of knowledge from the health education groups. This process of intervention and analysis was in line with the convergent-care research stages (Chart 1).

Chart 1 – Overview of the study phases and activities carried in the convergent-care research. Southeast of Goiás, GO, Brazil, 2014

Study phase	Activity
Conception	Research topic: health education with people undergoing rehabilitation for abuse of alcohol and other drugs
Instrument selection	Selection of technology for educational groups and operating method planning
Screening	Application of before/after questionnaires Group topics: - Physiology of the central nervous system - Concept, drug classification, and harmful effects - Types of chemical substances - Rehabilitation concept
Analysis	Tabulation of before/after questionnaire answers, guided by change in the pattern of the answers. Qualitative analysis of the content: thorough reading, detachment from register units, research *corpus* set-up, coding, clustering, and categorization
Interpretation	Synthesis, theorization, and meaning of the results with suggestion for nursing care models

The interventions involved one nurse, one pharmacist, and six nursing undergraduates, field researchers that already concluded the mental health discipline. The register units (RU), which are fragments of answers from subjects, were coded under letter "S" followed by a sequential number (S1, S2…) in parenthesis, the age of each participant and, next, answer 'A' was designated for before, and 'D' for after the intervention.

This research is part of a matrix project aimed at evaluating the health care of people who use and abuse alcohol, tobacco, and other drugs, and it was analyzed and approved on December 14, 2014 by the Research Ethics Committee of Federal University of Goiás, under number 926.819. All participants signed a free and informed consent form, in compliance with research ethical principles and regulating guidelines and standards involving human-beings under resolution number 466, December 12, 2012[13].

RESULTS

Of 39 men participating in the groups, 11 did not meet the criterion for answering the pre- and post-intervention questionnaires, because of discharge or quitting the treatment that took place during intervention. Hence, the study was carried out with 28 men who were users of multiple psychoactive substances, mostly tobacco, alcohol, and some type of illegal drug. Age mean was 32 years and most had incomplete elementary school (n=10/36%). The patterns of the quantitative answers are shown in Chart 2 and distributed under two categories: Basic knowledge on the use of psychoactive substances and Correlated/contextualized knowledge.

Chart 2 – Categorization and knowledge on the subject during health education pre- and post-intervention. Southeast of Goiás, GO, Brazil, 2014 (continues)

Category 1 – Basic knowledge on the use of psychoactive substances		
Knows/identifies psychoactive substances	**Knows/identifies effects of substances on the body**	**Knows/identifies substances and actions**

Definitions	n (%)	Definitions	n (%)	Definitions	n (%)
Increased	12 (43)	Increased	11 (39)	Most pertinent classification	12 (43)
Decreased	12 (43)	Does not classify	8 (29)	Maintained impertinent classification	9 (32)
Maintained	4 (14)	Maintained	6 (21)	Does not classify	4 (14)
Does not classify	-	Decreased	3 (11)	Maintained same answer	3 (11)

Category 2 – Correlated/contextualized knowledge			
Knows/relates substance effect with own behavior		**Knows rehabilitation strategies**	
Definitions	**n (%)**	**Definitions**	**n (%)**
Kept same answer	10 (36)	Increased	15 (54)
Correlated more clearly	9 (32)	Maintained	8 (29)
Maintained inappropriate correlation	6 (21)	Decreased	5 (17)
Does not classify	3 (11)	Does not classify	-

The same percentage can be seen in answers that decreased and increased the identification of substances after intervention. As for the effect of the substances on the body, the acknowledgement of rehabilitation strategies, classification and action of the substances, there was an increase of the definitions. There were no changes between before and after in most of the answers on how to relate the effect of alcohol and/or drug to their own behavior.

The qualitative evaluation of the health intervention was guided by quantitative analysis, setting-up the clustering of the RU into two evaluated aspects: those that kept or decreased the response pattern, and those that provided answers obtained through interviews with the subjects, before and after the intervention.

The following are the narratives of the subjects before and after the intervention in health education. Southeast of Goiás, GO, Brazil, 2014.

Category 1 – Basic knowledge on the use of psychoactive substances

Marijuana, merla, crack, thinner, glue, aerosols, LSD, ecstasy, alcohol. (S7(27)B). Marijuana, LSD, cocaine, merla, ecstasy, solvents. (S7(27)A)

Marijuana, merla, crack, cocaine, heroin, LSD, ecstasy, alcohol, and the worst of all, cigarettes (S10(38)B). Tobacco, LSD, cocaine, amphetamine, heroin, ecstasy, alcohol. (S10(38)A)

Marijuana, cocaine, crack, hashish, heroin, aerosols, glue, belladonna tea (S17(35)B). Alcohol, marijuana, cocaine, hashish, crack. (S17(35)A)

Euphoric effects, soothing, hallucinogens, central nervous system depressants (S6(48)B). Depressing, disturbing, stimulating. (S6(48)A)

Marijuana makes you feel with bitter hunger, crack is just bad. (S18(22)B). Crack makes you [...] don't know what you are doing. (S18(22)A)

The number of definitions/classifications increased

Marijuana, cocaine, base, crack, tobacco, alcohol, heroin, dose, candy, LSD (S20(29)B). Crack, cocaine, LSD, ecstasy, marijuana, alcohol, mushroom, Rohypnol, hashish, belladonna. (S20(29)A)

I have some [...] (S5(35)B). Marijuana, hunger, sleepiness, cocaine, crack I lose sleep, heart arrhythmia, hallucinations. (S5(35)A)

Cocaine: insomnia, anxiety. Marijuana: depressant, apathetic (S02(23)B). Ecstasy, mushrooms, marijuana: disturbing. Amphetamine, cocaine: stimulating. Alcohol, sedative, opioids: depressors. (S02(23)A)

Heroin: central nervous system depressant. Diazepan (valium): tranquilizer, anxiolytic (S06(48)B). Depressant: alcohol, opioids, codeine. Disturbing: marijuana, LSD, mushrooms. Stimulating: crack, cocaine, merla, amphetamine. (S06(48)A)

My problem: cocaine and ecstasy, caused serious physical and family problems (S19(24)B). Cocaine: anxiety. Marijuana: tranquility. (S19(24)A)

No (S24(35)B). Alcohol behavior and mind-altering. (S24(35)A)

Marijuana [...] I relax, then [...] laziness settles in. (S12(24)B). It causes euphoria, depression anguish, despair, lack of control, Family loss. (S12(24)A)

Category 2 – Correlated/contextualized knowledge

Fear of persecution (S04(40)B). I don't sleep daily. (S04(40)A)

Cocaine: euphoria, inhibitor of sexual drive; Crack: irritability, increasing sexual drive; Marijuana: initial excitability and hunger at end (S06(48)B). Cocaine: euphoria, lack of appetite, paranoia. Marijuana: initial euphoria, stoned, hunger. Crack: compulsion, irritability, exacerbated libido, total discomfort. (S06(48)A)

Marijuana makes happy, makes me hungry. Crack I get scared [...] wanting to smoke more to feel high that is so good (S17(35)B). Crack I get scared, sweating [...] Most of us drug addicts like crack. (S17(35)A)

When I used crack, I used to get scared, frightened [...] (S23(28)B). When I drank, I would become aggressive. (S23(28)A)

To build rehabilitation centers with government funds, NA literature classes and therapies, sports incentives (S15(43)B). Weekly classes at high school level on the subject. (S15(43)A)

I would recommend a rehabilitation house (S18(22)B). Honesty. (S18(22)A)

Control the compulsive use, see a psychiatrist for using anxiolytic medications and for insomnia, participate in NA or AA (S26(22)B). Today I believe in the efficacy of voluntary and involuntary interventions. (S26(22)A)

Clearly correlated

Marijuana: hunger; crack: lack of sleep. (S08(26)B). Crack made me agitated, high, without control. Marijuana [...] sleepiness and hunger. (S08(26)A)

No (S15(43)B). Alcohol: I was very nervous, aggressive. Crack: I was very paranoid, in state of panic. Marijuana made me feel relaxed, lazy. (S15(43)A)

Isolation to use cocaine (S27(22)B). [...] my behavior was totally out of control, with anger, without patience, deprived of feelings, and then depression settles in. (S27(22)A)

Make a plan and try to reach the higher power [...] God (S5(35)B). Avoid old friends, places, and addicting habits. (S5(35)A)

[...] let's go to church, find God because drugs [...] is going to destroy your life and your family (S8(26)B). Talks like this one or group with the NA, AA. (S8(26)A)

The ego is responsible for the voice of your thoughts, and as soon as it manifests itself you just need to repeat "healthy" from 1' to 5'. [...] Mental or physical replacement (S10(38)B). No beating up or just medication, use psychology [...] No boring information, more informal [...]. (S10(38)A)

Awareness, explanation, that God loves us, we are the temple of the spirit, intervention through medication (S22(34)B). Through symposiums [...] studies like this from the university (intervention group), therapies, programs, and principles. (S22(34)A)

Subtitle:

*S: Subject;
**(): Age of the participant;
***B: Before intervention;
****A: After intervention;
NA: Narcotics anonymous;
AA: Alcoholics anonymous.

Category 1 showed that the subjects broadened their concept on psychoactive substances, including more legal substances in their definitions, such as medications. In category 2, they engaged in more pertinent talks regarding the effects and actions of psychoactive substances on the body, when compared to the answers before the interventions. They also strengthened the correlation/contextualization between the perceived behavior and drug effect, thus helping in the elaboration of new rehabilitation strategies.

DISCUSSION

Regarding the gender addressed in this research, men are more likely to use illegal drugs than women[1,6], besides other variables, such as low level of education and inclusion in a group of friends where most make use of alcohol, tobacco, or marijuana[1]. The aspects related to poor education are indicated as a social disadvantage and use of illegal drugs[6].

The research result innovates as it points to the knowledge acquired by people who abused alcohol and other drugs regarding the aspects that could contribute to their autonomy, that is, the understanding about drug use and control of problems resulting from this behavior. The primary focus was to understand health education as producing knowledge and promoting self-care; thus, strengthening the caring process. During the procedures in groups, knowledge is exchanged and they seek to understand the health damages caused by the use of chemical substances[14]. It is an individual social empowerment process, exercising reflective and critical thinking, choices and decisions related to their own health, and supported by health professionals[7].

The participants were already familiar with the types of substances, which represented previous knowledge to intervention obtained during the screening stage[12], and which could not be disregarded in the educational process. This allowed a reflection on the effects of psychoactive substances in their lives and led them to express more comprehensive definitions. Such effect corroborates one of the autonomy pillars, which is understanding the use of psychoactive substances and their effects[15].

Along the same line, the re-elaboration of the classification and substance action carried out by the research subjects will add protection factors to a population that shows characteristics of multiple use of drugs. A pattern of drug abuse concomitant with alcohol, tobacco, ecstasy, and amphetamine by-products[1,3] and medications[2] are combinations that substantially increase risks and damage to health, especially when social disadvantage is an issue[16], as in the condition of the study subjects.

The recognition of substance abuse starts with approaching tobacco, since most of illegal drug users are smokers, which can be understood by the fact that nicotine plays an important role in the progression to drug addiction[17]. Increasingly, tobacco use has been linked to drugs, such as alcohol and marijuana[6,17].

In this study, stimulants, such as methamphetamine and cocaine, were used in situations of handling tasks that required long hours of work and agility. Marijuana, hallucinogens, and prescription drugs were chosen because of their soothing effects. As users get to know the substances' results, they start managing the synergy among them, such as reducing the peak of excitatory drugs, and consuming marijuana to reduce the peak of ecstasy on the body[15].

In the educational practices in this research, behavior correlation and relentless pursuit for the drug were often addressed. A habit that can be partially explained by the experiences with chemical substances that affect regulatory circuits of reward, motivation, memory, and decision making[4]. Drug addiction factors are studied based on their rewarding reaction in the limbic-cortical-striatal circuit[4].

Based on this understanding, the research subjects started revisiting their own compulsive and chronic drug abuse behavior. At the same time, they expanded and identified the health damages they lived, most of them compatible with the literature, such as chronic use of illegal drugs that cause neurological damages and learning deficit, in addition to psychological and social consequences[4].

Through the account of the subjects, among the most consumed substances, cocaine is the one that promotes faster pleasant effects, but its compulsive use can lead to a variety of neurobiological symptoms[4]. As for individuals that abuse alcohol, they showed worst performance in delayed recall[18], as well as mood swings, verbal and emotional behavior with a negative impact on social interactions, especially in the presence of other individual who also drinks[5].

The health education process that this study subjects experienced also allowed to increase the identification of prescribed psychoactive drugs. In the United States, the use of prescribed psychoactive drugs is seen as an outbreak and a serious public health problem, mobilizing healthcare policy strategies with damage reduction strategies and control of professionals and health services[19].

Continuing with knowledge on rehabilitation strategies, the subjects indicated religion, the NA approach, psychotherapy, and the presence of researchers in the health education group. In this conjunction, religious belief can have a protecting implication on the use and abuse of psychoactive substances[20], with physical and mental health improvements, besides protecting users who are undergoing treatment and rehabilitation against a relapse, and playing an important role during the recovery phase[21]. Evidence shows that drug use is low among individuals with regular religious practices[22].

For citations regarding the NA, it is important to emphasize that scientific discussions are often carried out, also including the AA[3,22-24]. It is a support group for recovering people, based on a 12-step program to help recovery. Authors refer to spirituality as the main element during treatment, in which users are induced to trust in a higher power that will lead them to the rejection feeling towards relapses, very effective in various groups, especially among women, adolescents, and urban dwellers[23-24].

There is a reference that the combined treatment, using education, psychotherapy, and meditation, is desired and assertive. Individuals that use and abuse psychoactive substances are more likely to develop a mental disorder[25]. When they show a comorbidity, such as mental disorders, psychotherapy has yielded positive results, in combination with pharmacotherapy[26].

Studies show that educational intervention leads to health improvement in the population that receives care[27]; therefore, educational processes promote health. The use of psychoeducation has focused on treatment adherence and relapse reduction, even in situations of comorbidity with serious mental disorders[10-11].

Regarding the work of nurses with population that abuse substances, feelings of unpreparedness and insecurity must be overcome, even the negative view related to the addiction condition and problems resulting from this situation. However, it is important to acknowledge educational actions that cover not only professionals, but also family members and users, in a sense of improving and expanding health care[28]. Furthermore, the family must be included, considering that the use and abuse of psychoactive substances affect the individual, the family, and the social environment they live in[29].

The results of a study conducted in a therapeutic community with nurses who took care of HIV/AIDS people showed the relevance of mental health training for carrying out the job with efficiency. Applying this knowledge, in educational processes and health promotion of people that abuse alcohol and other drugs, or present mental suffering, contributed positively to the treatment, providing comfort and helping understand their health status and preventing onsets[8].

CONCLUSION

The construction of primary knowledge on drug use, mainly the correlation to their own behavior and the contextualization in the search for rehabilitation, was observed. The analysis guided by the research on convergent care allowed the identification of previous knowledge on the types of drugs that the subjects constituted through their own experience. This corroborated the construction of

knowledge on other interrelated topics, such as better quality and depth of knowledge on substance effects, its harmful effects on health and social lifestyle, and the possible paths to rehabilitation.

Taking these results into consideration, contributions for intervention and nursing care models are recommended. First, considering the knowledge each subject brings with their life experience; second, acknowledging the phenomenon of concomitant use of multiple drugs and its severity for damage reduction strategies, and, third, evidencing the mental, neurological, and cognitive damages that chronic consumption of drugs can cause.

Finally, it is important to emphasize the creation of autonomy expressed by the reflections of the subjects on substance effects used with their own behavior, which took them to notice themselves and correlate the built knowledge. Furthermore, it is understood that, in order to tackle this very complex problem, rehabilitation strategies must be comprehensive and take place in varied segments of society (religious, therapeutic, social organizations, health education).

The limitations of this intervention were average results of the quantitative analysis that suggest the development of more precise and suitable instruments in relation to the concept of health education, addressing aspects that are not easily measurable by quantitative indicators. However, health education showed an assertive path that leads to empowerment and desirable co-responsibility for promoting, rehabilitating, and preventing damages to health.

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