



Vulnerability factors that influence the accessibility of outpatient treatment services at the Institute on Alcoholism and Drug Dependence for people with disorders related to drug use, Costa Rica 2017

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Abstract

Background: in the world, there is a significant number of people who use drugs and some of them need treatment in a care center, where they receive services that help them with their addiction problem.

Objectives: through this descriptive study we studied the factors of vulnerability that influence the accessibility of people with disorders related to drug use, to ambulatory treatment services in a care center in Costa Rica.

Methodology: The investigation was structured in two moments: a) between March and April of 2017, 146 outpatient users (88/60% men and 58/40% women) were surveyed in the care center, selected according to convenience criteria, their participation was anonymous and confidential; an instrument was used to collect the following data: socio-economic, geographic accessibility, economic accessibility, access to information, treatment and consumption of drugs; b) three professionals were interviewed (two in psychology and one in medicine) who work in the center of attention, to complement the results of the survey.

Results: the average age of onset of substance use (alcohol, tobacco and marijuana) was fifteen years, most consumed between five and seven days a week, less than half of respondents have income (less than \$ 100), there are difficulties to attend scheduled appointments due to this factor, the distance traveled, aspects of transportation, difficulty of work permits and hours of service. They emphasize the need for greater motivation, family support, the human quality of professional attention and involve the person in the planning of their treatment according to their particularities.

Conclusions: Among the factors related to the people who were surveyed that affect the access to outpatient treatment services to the care center, stand out: the age of onset of consumption, the pattern of substance use, the place where they came from, the distance traveled, transportation, availability of monthly income and family support. Regarding the focus of attention, the frequency of appointment assignments, the hours of attention, the continuity in attendance at scheduled appointments that is affected by lack of motivation and the treatment received by people by professionals who are affected they attend. The care services must be designed according to the characteristics of the people who use them and information mechanisms must be promoted that encourage the use of the services of people with problematic drug use.

Keywords: substance abuse treatment center, accessibility, vulnerability, health services

Introduction

In the World Drug Report 2017, it is indicated that approximately 250 million people consume some kind of drug, among which alcohol, tobacco, opium derivatives, amphetamines and marijuana, among others; however, of adults, about 30 million have a problematic consumption condition^[1].

Uncontrolled drug use generates a set of effects that includes the deterioration of all dimensions of the individual's health condition, but also affects the family and social environment^[2] and is linked to all aspects and effects of the social phenomenon of drugs^[3].

Hence, it is important and necessary to establish mechanisms to prevent the occurrence of major damages and help these people to regain control of their decisions, which highlights family support and care in treatment centers for people with addictions^[4, 5].

There are several factors that can threaten the right and accessibility of a person with problematic drug use to a specific care center, where various therapeutic services are

offered that precisely seek to mitigate the effects of excessive drug consumption^[6].

Among those factors, we can mention aspects that are specific to the person (attitudes, perceptions, drugs consumed, physical and mental conditions), the center of attention (hours, professionals, therapies) or these with other economic factors (costs), geographic (distance), social (information, incompatibility with work), judicial or culture^[6, 8].

These aspects can contribute or deteriorate the progress of a therapeutic process, so they must be identified and managed appropriately with the intention of improving the provision and scope of care when it is possible to prolong the permanence of people in the process of therapy^[9].

In Costa Rica, people with problematic drug use have the Institute on Alcoholism and Drug Dependence (center of attention), which is known as IAFA for its acronym in Spanish, where ambulatory treatments are offered to treat addiction to psychoactive substances^[10].

The objective of this work was to study (identify and describe) the factors of vulnerability that influence the accessibility of

outpatient treatment services in the IAFA, by people with disorders related to drug use.

Methodology

This work was known by the Bioethics Committee of the University of Cota Rica.

Place of study

The center of attention is the ambulatory treatment service of the Institute on Alcoholism and Drug Dependence in San Pedro de Montes de Oca, San Jose, Costa Rica.

The descriptive research consisted of two moments:

- a) A survey of a sample of people with problematic drug use and
- b) An interview with three professionals (two in psychology and one in medicine) who provide care to these people, this to complement the survey findings.

A. Survey of users of the outpatient treatment service of the care center Population under study User users with problems related to drugs that use the ambulatory treatment services of the IAFA.

Selection criteria of the sample: people over 18 years of both sexes, with follow-up appointment in the psychology, social work and medicine consultation.

Exclusion criteria: people on first follow-up appointment, in detoxification condition or in consultation for assessment.

Sample

The records of patients attended in 2014 and 2015, as well as in the first 8 months of assigned appointments in 2016, were used as reference for determining the calculation of the sample.

The registered data showed an average of 640 appointments per month, the month with the most appointments was May (889) and the month with fewer appointments was August (190).

It was consulted the database of the electronic file in the IAFA of each person, to check the patients who had appointments assigned in the first 8 months of 2016 and who met the established criteria.

The sum of these appointments in the first 8 months was 5.121 people, who met the selection criteria.

We used non-probabilistic sampling with intentionality because the specific criteria for the selection of people were established.

The formula destined for the calculation of finite populations was used, considering the following aspects: $N = 5121$; $p = 0.5$; $\alpha =$, 95% confidence level; $Z = 1,96$; $d =$ maximum estimation error $0,08 = 8\%$, $1 - \alpha / 2 = 0,025$.

After performing the calculation, it was established that the sample was 146 people.

Data collection instrument

A data collection instrument was designed with four basic areas: socio-economic data, geographic accessibility, economic accessibility, access to information and treatment and drug use; with the following aspects:

1. Demographic and socio-economic characteristics: sex, age, nationality, civil status, educational level, place of residence, employment status and economic income.

2. Aspects related to the consumption of drugs: age of beginning of consumption, years of drug consumption, days and amount of consumption of each drug.
3. Factors related to the provision of ambulatory treatment services: Main difficulty to attend appointments to the center of attention, frequency and number of appointments, number of appointments, professionals who attended people (kindness, treatment, commitment, clarity of the explanations, possibility of giving opinions, confidence of the staff), drugs for which it receives treatment, treatment in other centers and termination of treatments
4. Conditions of geographical and economic accessibility: Means of transport used and place from where people come, perception of distance traveled, travel time, money invested in transportation, problems generated by displacement, have medical insurance.
5. Terms of access to treatment information: Mechanism used to know about services, hours of operation, satisfaction of care and recommendations for improvement.

The instrument was reviewed by an expert in statistics and a pilot was carried out to verify its usefulness.

Application of the data collection instrument

- The instrument was self-administered (average thirty minutes).
- The period of data collection was carried out in the months of March and April of 2017.
- The procedure for data collection is described below:
 1. In the first instance, the person in charge of the Patient Care Process was coordinated to have the space of 20 minutes with the people who were selected.
 2. In the second instance, the collaboration of the professionals that assist the people was requested to detect the appropriate candidates according to the selection criteria.
 3. In the third instance, people were consulted about the availability to attend the request for application of the data collection instrument.
 4. The instrument was applied to users who accessed voluntarily and anonymously after signing the informed consent.

Statistical aspects

The reliability of the scale questions of the questionnaire related to the sections of attention received, the distance traveled and the satisfaction of the service was verified, using the alpha cronbach method, which gave an index of 0,78.

The descriptive and inferential statistical analysis was carried out with the data obtained.

Statistical tests

The following tests were performed: Nonparametric test Chi square and parametric tests of variance analysis to determine the variability between the data of the groups in the sample and correlations between variables.

B. Semi-structured interview with professionals who provide the service

Three professionals attending the ambulatory service of the care center were interviewed, which were selected for

convenience, two professionals in psychology and one in medicine.

The interview was conducted considering the following key questions:

Hours of attention and their problems with access? Days and seasons where there is a greater use of services? Legal problems on the part of people? Does the person get to the attention? Greater population group that arrives at appointments?, Problems that people express with respect to the service?

Results

1) Surveys carried out on users

General characteristics of the participants surveyed

146 people participated (88/60% men and 58/40% women), in an age range between 18 to 73 years (the older the fewer participants), but 76% were younger than 50 years old. The majority of Costa Rican citizenship (138/95%) and Nicaraguan nationality (6/4%). 45 (31%) people with incomplete secondary education, 36 (25%) with complete primary, 22 (15%) with incomplete primary, 15 (9%) with complete or incomplete university, respectively and others. 70 (48%) single people, 35 (24%) married, 23 (15%) in free union and the rest divorced. The majority of people (97%) said they were residents of the urban area (big metropolitan area) and the rest of other rural areas of the country. 60 (41%)

people are salaried, 33 (22%) were looking for work, 21 (14%) independent worker, 10 (7%) without work, 17 (11%) work at home and the rest are retired people. There are 59 (40%) people reporting monthly income of less than 50,000 colones (\$ 100), 46 (31%) less than 350,000, 25 (17%) more than 450,000 and the rest do not report.

Consumption of drugs

The average age of onset of drug use was as follows: at 15 years of age the consumption of alcohol, tobacco and marijuana, at 18 cocaine and at 21 crack. 85 (58%) people receive treatment for alcohol consumption, 46 (32%) for tobacco, 52 (36%) for marijuana, 41 (28%) for cocaine, 39 (27%) for crack (cocaine stone) and the rest a combination of those drugs. Regarding the total years of consumption of the different substances, the average was higher than 10 years. In the particular case of alcohol, the average was 16,8 years with a mode of 20 years, the same for tobacco with an average of 17 years and a mode of 20 years, 14 years of problematic consumption in the case of marijuana, 11 cocaine use and 13 years of crack cocaine use. The average days per week that these drugs consumed, in all cases was greater than five days. Approximately ten percent of the people surveyed report having had a judicial problem. Table 1 shows the amount of consumption reported for each drug.

Table 1: Distribution of the respondents according to the amount of drug they consumed per day

Drug	Unit	Min/Max	Absolute value	Relative value
Alcohol	Bottles	1 a 5	15	17,2
	Gulps	5 a 24	9	10,3
	Beers	1 a 15	20	23,0
	Liters	½ a 4	22	25,3
	Combined	Gulp, beer	21	24,1
Total				100,0
Tobacco	Cigarettes	1 a 21	21	31,8
	Packs	½ a 2	45	68,2
Total				100,0
Marijuana	Cigars	1 a 15	42	76,4
	Grams	1 a 10	7	12,7
	Ounces	½ a 1	6	10,9
Total				100,0
Cocaine	Ounces	4 a 10	24	54,5
	Cocaine bags	1 a 3	8	18,2
	Cocaine tip	1 a 23	12	27,3
Total			44	100,0
Crack	Ounce	1 a 10	7	18,9
	Cocaine stones	2 a 100	30	81,1
Total				100,0

Comprehensive approach to addiction

86 (59%) people of the total said that they arrived to receive attention in the psychology office, 68 (47%) in medicine and 31 (21%) in social work. These people reported that they have attended the center according to the following frequency: from one to less than five appointments (67/46%), from six to ten appointments (22/15%), from eleven to fifteen appointments (22/15) %, more than sixteen appointments (27/19%) and the rest did not report. 45 (32%) people indicated that they have an appointment every two weeks, 4 people (3%) every three

weeks, 63 (44%) every month, 21 (15%) every two months, 9 (5%) every three months and the rest more than three months. 53,5% of people said they had not received treatment in other centers, while 46,5% said they had received treatment from other public or private centers. Of those who had received treatments in other centers, 35 (24%) people did not finish the treatment and 31 (21%) always finished it. 86% () thought that the treatment, kindness and courtesy at the time of the consultation had been good, 89% considered that the staff is committed, 84% said that the explanations received were

good, 83% considered that they have the opportunity to comment on their health condition, 90% think that the staff projects a good confidence projection.

Accessibility to treatment against addiction

On the day of the appointment, the majority of respondents said that they came from their home (111/76%), from work (19/13%), from an internment center (9/6%), from a study center (170.7%) or from another place; 35% considered that they had to travel an intermediate distance, 24% considered it as long, 22% short, 15% very long and 4% very short; 63% used the bus, 18% used their own vehicle, 17% walked, 7% in a taxi, 6% were transferred by a friend or relative and the rest used the train, 18% took less than thirty minutes, 27% less than one hour, 29% less than two hours, 18% less than three hours, 6% more than three hours and the rest did not respond; 27% spent less than one thousand colones (\$2), 32% less than two thousand (\$4), 15% less than three thousand (\$6), 10% less than four thousand (\$8) and 16% more than four thousand, the majority (64%) prefer to be attended in the morning, 22% in the afternoon, 1% in the evening and the rest did not report; 60% of the people learned about the center through a relative or friend, 17% through radio, television or telephone and 26% through other means, 94% have satisfaction with the attention received.

Significant statistical tests

1. Non-parametric test Chi square

A relationship was found between:

- The user's work condition at the time of the survey and attendance at the appointments of the center of attention ($p = 0,03$).
- Person have a problem to attend appointments and sex ($p = 0,03$).
- The money spent to attend appointments and the distance traveled ($p = 0$).

2. Analysis of variance and correlations

It was found that there is significant statistical difference between:

- Distance traveled and the money spent to attend appointments ($p = 0$); the average of money spent according to distance is different between men and women ($p = 0$).
- Age in years and days per week that consumes alcohol ($p = 0,01$); so that the older age plus number of days per week that includes alcohol.
- Distance traveled and appointment allocation ($p = 0,01$); greater distance greater difficulty to attend appointments.
- Money spent on transportation and appointment allocation ($p = 0,01$); the greater number of appointments the greater the number of money spent.

2) Interviews with professionals

In the opinion of the professionals interviewed, the main difficulties that people face to attend appointments are related to lack of money, work permits for those who have to request it, and available hours of care. They also indicated that the drugs that consume the most people are alcohol, cocaine and marijuana; at the end and beginning of the year, as well as

Holy Week, are the periods in which people come to the center more frequently. They mentioned that approximately 10% of users have some type of judicial problem related to drug use, that although more men attend the consultation, in recent years, the number of women has been increasing. To improve adherence to treatment, these professionals mentioned that people need more humane and empathetic treatment, as well as the support of the family due to the stigmatization involved in attending the treatment center; the specialists said that from the center of attention they can move to a place that is closer to the people, this to minimize the absence due to this cause.

Discussion

The main purpose of this research was to identify and describe the factors of vulnerability that affect the accessibility of users to ambulatory treatment services offered in the care center.

It was found that alcohol (58.6%) is the main drug by which people seek treatment and that at fifteen years is when on average they started the consumption of alcohol and marijuana, which are the drugs most consumed in Costa Rica. Although the modal age was at 14 years, which is consistent with the results in the USA^[11]; while in illegal drugs, the age of onset was around 20 years and a modal age at 18 years. A fact that agrees in a study carried out on women who use drugs of abuse^[12].

On average, people prior to the start of the treatment consumed five days a week, which shows important problems of drug use, so that people come for problematic situations of consumption of substances in an advanced state of deterioration, which it can cause difficulties in the therapeutic approach^[11], since this behavior can generate enough psychological and physical discomfort to adversely affect the biological and psychological functioning of the person^[13].

Of the people who consume alcohol, approximately 70,5% said that they experienced problems of problematic consumption, which suggests that most of the associations with the consumption end up in a problematic condition for these people, which can generate difficulties that cover the social and physical environment^[14, 15]. Therefore, a risk factor for the person with problematic consumption characteristics is the time of effective permanence that he/she has had in this harmful consumption until he recognizes that he/she has a problem^[16], which consequently influences that access is given limited to therapeutic care. Men and women go to the treatment center, so being male or female seems to be unimportant in terms of attendance at appointments; however, in both groups there was a percentage that said they had problems in attending the appointments. Hence, it would be a factor to investigate to elucidate the problems associated with this variable. Although respondents expressed interest in staying in treatment even when they may experience problems to keep appointments^[6, 17].

There is a high proportion of users who express that they are satisfied with the attention they receive from the professionals of the care center. This is concurrent with investigations that found that one of the elements that most affects the assessment of a health service is the treatment of the professionals to the users^[8], hence the professionals must work more in the identification of the particular problems of

the patients and in the mechanisms of motivation^[7, 18]. Some even indicate that the sex of the professional influences their attention; for example, women tend to give more preventive advice and services, while men dedicate more time to the clinical history and physical examination^[8].

When people find themselves in a situation that makes them feel vulnerable, the least they expect is to receive a deal that generates confidence in order to find a solution to their problem^[19], this sociocultural characteristic is also consistent with the results that derive from this research, by showing a positive assessment in all the spaces of institutional care provided in the center of attention. This observation gives reasons to suppose that people somehow hope to obtain good results in relation to their dependence or addiction. Although it was found that women show greater satisfaction than men with respect to the treatment they receive from professionals, which helps to understand why a greater number of women remain in treatment.

Women who consume substances are in a situation of vulnerability and this may cause them to better assess the treatment they receive. The irrefutable fact is that a person addicted or a drug user is placed in a situation of social exclusion and therefore has greater vulnerability. This has shown that for women the consumption of drugs is a factor of vulnerability due to social exclusion^[12]. Hence, it is appreciated to receive treatment to minimize, alleviate or eradicate the use of substances. In another study it was also noted that some of the particularities of these positive opinions were related to therapeutic adherence, since the positive assessment of users regarding the service received is directly determined by the positive assessment that users express from the therapists try^[20, 21].

It was evidenced that 45,2% of the respondents stated that they have received treatment in other centers previous of than the study center. Hence, an element that is officially accepted as regards the patient's non-permanence in treatment is due in large part to abstinence^[14, 20, 21]. Consequently with this situation there is a tendency to relapse, therefore, it is not surprising that people seek in many cases different therapeutic modalities or that they again enter the previous care centers. In most cases and according to the results obtained, people seek residential services, which is why 27,8% do so in non-governmental organizations (NGOs) of residential modality.

Another aspect that affects accessibility was the fact that both men (25%) and women (12,1%) expressed that absenting themselves from work is a determining factor or impediment to not attending treatment, although the average time between appointment and the next one takes at least one month^[17].

That is, the periodicity between one appointment and the other is a determinant to encourage the patient's stay in the treatment. In this sense, this factor of vulnerability in relation to the frequency of appointments assigned^[18] tends to generate less impact on the accessibility of people to treatment, as it is a frequency of periodic modality. This may also be related to the fact that they may feel a social stigma that is related to having to be absent from work due to problematic drug use^[12, 16, 20, 22, 24].

Also in this investigation, significant differences were found between people who manifested short distances with respect to those who indicated intermediate distances, although most

of the population was identified with intermediate and long distances. In the following findings it is verified that in the case of time and money, users claim that they take between 30 minutes to less than 2 hours, which indicates a coherence with the intermediate distances with spatial, temporal and economic accessibility^[18, 25]. As for the cost of transportation, more than half of the people surveyed mentioned that they travel by bus, so the center must be accessible^[19, 24, 25]; in addition to having money is a determinant to attend appointments. Although only 52,8% of the sample studied has any possibility of income, so this pecuniary type of reporting or limitation is a per se factor of vulnerability for this group of people^[7, 14, 15, 18, 22, 26].

Regarding the place where people come from, more than 70% of the sample surveyed said that at the time of attending the appointment was from their home or place of family residence. This behavior is in line with the experiences that were recorded in other studies, in which people with problems of drug addiction persist in the therapeutic treatment, as long as the patient is interested in achieving an improvement in their disease and in the support they receive from their family members or people residing with the patient at home. Therefore, the home is a determining and motivating factor so that people with some disease or illness feel supported and protected to attend appointments and face therapeutic treatment^[6, 27, 28].

It was identified that a high percentage of people wanted attention during the morning hours, which is an interesting finding since the difference with respect to being attended in the afternoon is much less. This may be related to the fact that most people had come from their home when they come to attending appointment, so that accessibility in the hours is preferred in the morning shift and this could be an accessibility factor^[6, 9, 19].

Also, another important issue is regarding the information which people receive of the treatment services and according to the results of this study, users obtain information^[28] mainly from a family member who motivates them to seek help^[12], as well as the participation of some acquaintance; although the mass media and the telephone line of orientation of the care center do not generate an impact on the decision to receive therapeutic care. Among the main factors that can explain accessibility is the element of care through the level of satisfaction, in that sense and general terms, users of ambulatory care services said they were satisfied in all aspects of the service received. Therefore, it is important to include the person in some aspects related to the decision making during the treatment process^[7, 9, 14, 23, 25, 27, 29].

In general, people who experience problems associated with the use of substances recognize that their health is affected, which is the product of a set of factors that may also interfere in the accessibility referred to therapeutic care or ambulatory care. This situation can have direct and indirect effects in terms of the ability of the service to maximize its potential. The presence of various social, administrative, economic and geographical factors influence the mental health of users through access to treatment. Thence, the institution offering the therapeutic service plays an important role through the comprehensive services offered to the population^[30].

As limitations of this work, it is mentioned that because the

study population was selected based on inclusion criteria, the findings are not dimensioned for the entire population that uses outpatient treatments, although the calculation of the sample is also used. We must bear in mind that there are some periods of the year where more people go to receive treatment, so in some cases there were months with differences of up to 100% more patients with respect to others and this is an aspect of evaluating a long time in the data collection and not three months. No research was found that properly related to the accessibility of drug treatment services in Costa Rica, this aspect limited the specific references to the country to compare with the results that were found in this investigation. Although some aspects were included that assessed the perception of the users, other measurements that could give other contributions on precise elements on the accessibility to the treatment services were not included.

Conclusions

Among the characteristics of the people who were surveyed that affect the access to outpatient treatment services to the care center, the age of onset of consumption, the pattern of consumption of various psychoactive substances, the place where people come from, the distance traveled, transportation, availability of monthly income and family support. Regarding the focus of attention are the frequency of appointment assignments, hours of service, continuity in attendance at scheduled appointments that is affected by lack of motivation and the treatment that people receive from the professionals who attend them. Greater articulation of the offer in the care center is required with the particularities of the users of the treatment services, as well as better information mechanisms that promote the use of the services.

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