Health Professionals’ Perception Related to Communication Technologies for Access to Information about Crack

Abstract

Background: The aim of this study is to identify the information and communication technologies used by health professionals to assist in training and updating of technical and scientific knowledge about crack, exchange of experiences, and development of programs to prevent consumption and treatment of addicts. Methods: The qualitative methodology was used, constructed an intentional sample by criteria and applied research techniques through semi-structured interviews, triangulation of the analysis, and key informants. The study resulted in the presentation of differences between the way key informants and health professionals sought information. Results: Internet was the preferred source; however, key informants sought information on sites of scientific journals and reference centers, while health professionals did free searches on the internet to consume information. Conclusions: The literature does not reflect a broad scope of the specific area, but relates the problem of access to health information to other characteristics. The sources of information about crack are focused on digital technologies, the internet and its specific tools. It also finds that health professionals are not being capacitated solidly on the subject of study.

Keywords: Crack cocaine, health professionals, information, and communication technology

Introduction

One of the milestones of the time in which we live is the problems related to abusive use of psychoactive substances.[1] In Brazil, crack cocaine, which has defined as a “devastating drug”, stands out due to its physical and social effects.[2] The 21st century presents strong use of crack, especially in large urban centers.[3] In Brazil, crack emerged in the late 1980s, in São Paulo, as one of the products of the cocaine extraction process and quickly conquered the lower social classes of the city.[4]

Crack has been breaking social[5] and geographical barriers,[6] posing a challenge for health professionals regarding prevention of their use and treatment of dependents. Among the difficulties to deal with this issue is the need to improve the training of health professionals who will work in the care of users and their families.[7] This training faces difficulties that go beyond the knowledge of scientific concepts.

According to Carlini-Cotrim[8] Brazil, until the 1990s, was a country that did little research on the use of psychoactive drugs. The absence of scientific investigations would have led, in addition to negligence, to misconceptions regarding the importation of models from other realities. The construction of more effective preventive actions, aimed at minimizing the problem of drug abuse, depends on the type of information one has on the subject, favoring more tolerant or more restrictive attitudes, depending on the constructed archetype. The sources of information that help to develop these actions are diverse and, when unreal or distorted, can cause more problems than benefits.

In the context of the 21st century, Information and Communication Technologies [ICTs] are an important tool to find, disseminate and deepen the scientific information developed in centers of excellence, which represent the most adequate parameter of evidence for health decision making. Therefore, it is questioned how health professionals use ICT in their training and updating of knowledge. Thus, this study aims to identify the sources of consultation, in the universe of ICT, used by these professionals to assist in

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the formation and updating of knowledge about crack, in the exchange of experiences and development of health education programs.

**Methods**

Qualitative and descriptive statistics have been chosen to represent the relative frequencies of sample characterization. These methodological characteristics were fundamental for the development of this work, since the opinions, experiences, and values of the interviewees were their substrate. The understanding has been sought through the discourse of health professionals, the sources they use to inform themselves, and the knowledge they have about the technologies of access to information.

The qualitative approach does not privilege the numerical criterion and does not seek a statistically representative sample. Therefore, instead of randomness, we chose the intentional selection of the sample, choosing as participants those who experienced the social phenomena under study, the so-called information-rich cases, seeking, within the sample, the greatest possible variety of cases, in order to contemplate the different perspectives of the phenomenon. To be consistent with the proposal, the sample size is neither probabilistic nor defined by sample calculation.

The sample size was not determined prior to the start of the study. The participants were continuously selected until the theoretical saturation point was reached, at which point information became redundant, recurrent, or recurrent. It means that the ideas conveyed by one participant had already been informed by others and the inclusion of new participants did not result in additional understandings or clues that could indicate new perspectives of the phenomenon, indicating that the selection should be interrupted. Although the sample is not statistically representative, it does not mean that the sampling process has not been systematic defined through the adoption of special sampling techniques. One is sampling by criteria, the so-called inclusion criteria.

To this research, the social phenomenon studied was the identification of the sources of consultation in the universe of ICTs used by health professionals, to aid in the formation and updating of knowledge about crack. Thus, the criteria were health professionals involved with the drug/crack theme with different origins: public and private network with working time in the area for more than two years and different ages. It was considered that the realities of public and private networks may be different in terms of information and the possibility for younger professionals to have greater identity with technologies have led to a differentiation of age groups. The 2-year time was a safety measure do not include in the sample newly entered into the profession.

The selection was made with participants in the metropolitan region of São Paulo. The first ones selected were people of notorious knowledge on the subject that, later, presented and indicated the other participants of the sample, limited to this region. For the recruitment of the selected, the strategy was used to list the initial professionals, the gatekeepers, who started to indicate the others in the selection process. The main resource in qualitative research was discourse, since speech reveals structural conditions, systems of values, norms, symbols, emotions, anxieties, and anxieties. The interview is an interactive tool in which the establishment of the investigator-researched bond fulfills an essential function in the quality of the empirical indicators produced and must be sensitive to the language, values and concepts of the culture investigated. The great advantage of this process of approach is to allow access to feelings, thoughts and intentions, capturing the desired information in an immediate and current way, allowing corrections, clarifications, and adaptations.

According to Patton, we chose three forms of triangulation: techniques used in data collection [snowball technique with individual interviews]; data sources [key informants, health professionals and teachers]; data analysis [categorization and inference by two researchers], which guarantee the reliability and validity of the qualitative data that will be obtained. The triangulation occurred with the presentation of the results so that two other independent researchers, selected by the principal investigator, could do the methodological process of reading and preparation, which consists in the classification of the testimonies.

**Results**

We interviewed 27 health professionals who stated that they only addressed care practices with patients and that they have moderate to low interest in the drug/crack theme, although some believe their patients are directly involved, such as users of crack or other drugs. When asked about the frequency with which they approach the subject in their professional practice, they reported sporadically for 70% of the respondents, 4%, daily, 19%, monthly and 7%, weekly. For 37% of respondents, their public has no interest in knowing about drug/crack; to 52%, the interest is partial, without specifying what particularity of interest; to 11%, there is interest in knowing more about the drug.

**Drug recognition**

All interviewees said they had heard of crack. One of the interviewees, a doctor of the Medical Doctors Program of the Ministry of Health [MH], who allocates Brazilian and foreign doctors in the basic health care network of the Unified Health System [UHS]. They say that “in your country there is no such drug”, because they are health professionals, mostly from the basic care network, some of the interviewees claim to have the closest contact with the drug because their patients are users and have stated this in their anamnesis. It was also found that community
health agents are key actors for this identification, because some patients deny drug use and the finding is focus on information from the community health agent.

**Knowledge about crack**

When asked about what they knew about the drug, participants described several elements, which were summarize in frequency citations, in Table 1. It is been noticed that there is a majority speech about dependence, followed by statements about which the interviewee hears about the drug, its composition and its social effects.

Respondents reported popular media and their own patient reports as a source of knowledge about the drug. The previous talk, that the media is the main channel of knowledge about the drug, is corroborate, but sometimes it is also contradicted in relation to patients being a source of knowledge about the drug. During data collection, it can be seen that for some professionals, who have the anamnesis as fundamental for the care, the patient reveals to be or not a user of some type of drug mainly due to the adverse effects of the association of the drug with some medication, for example. This fear is verified by professionals when they try to find out whether or not their patient is a drug user.

The spontaneous speech about dependency was the most frequent among health professionals. Respondents reported that what they most know about the drug is their ability to cause addiction. With regard to the social effects caused by the drug, one can perceive the familial, economic and social involvement of the drug use. There is also the perception that the drug generates a systemic damage to the individual, in different spheres. In references to the organic effects that the drug causes, there is a direct association of damage to the nervous system and the perception of the psychological damage of the drug.

**Professional approach**

When questioned about how they approach the subject in their professional practice, professionals report considerable social phenomena. For them, 44% of citations are only about generic drug guidelines; 22% have a habit of directly questioning the patient about whether or not they are a user; and 19% claim to refer only to specialized services [Table 2].

Two participants described that their professional approach is been given in consultation, without further detail. Two others explicitly stated that the professional did not have or had little contact with the subject. Most of the statements [44%] relate to the professional advising the patient about the drug, in general, about their empirical knowledge about the harm of the drug. A medical professional noticed the need for family involvement in the treatment and the invocation of therapeutic measures in the treatment process. One group of respondents stated that the approach is straightforward, with the goal of drug precaution. Already, the indirect information comes from the Community Agents. In addition to the orientation processes, professionals interviewed, mostly from the basic health care network [general practitioners], claim to refer patients who identify as users to specialized services, such as the Psychosocial Support Center—Alcohol and Drugs [CAPS AD] or mental health professionals.

**Source of crack information and update paths**

The health professionals interviewed made statements in which they affirm that the Internet is the main place to search for information [Table 3]. The second most frequent citation is the search in specialized centers.

When describing the scientific databases, the name Scielo [database] appears in the totality of the testimonies. For the Specialized Centers, the testimony cites CAPS AD as a reference for specialized centers. Personal relationships for information search have been marked by descriptions about professional and patient contact.

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**Table 1: Frequency of knowledge about crack by health professionals**

| Talk About Crack                      | Frequency | % |
|--------------------------------------|-----------|---|
| Dependency Capacity                   |           |   |
| Drug Composition                      |           |   |
| Knowledge Source About crack          |           |   |
| Social Effects                        |           |   |
| Organic Effects                       |           |   |
| Form of use                           |           |   |
| Psychic Effects                       |           |   |
| Acquisition Cost                      |           |   |
| Frequency of use                      |           |   |
| Treatment                             |           |   |
| Crack Be an Epidemic                  |           |   |
| Know Very Little                      |           |   |

**Table 2: Professional approach to crack**

| Approach                             | Frequency | % |
|--------------------------------------|-----------|---|
| Drug Guidance                        |           |   |
| Question Directly                    |           |   |
| Forwards to Specialized Service      |           |   |
| During the Consultation              |           |   |
| Has Little or No Approach            |           |   |

**Table 3: Search location for information search**

| Location                               | Frequency | % |
|----------------------------------------|-----------|---|
| Internet                               |           |   |
| Specialized Centers                    |           |   |
| Scientific Databases                   |           |   |
| Courses                                |           |   |
| Television                             |           |   |
| Personal Relationships                 |           |   |
| Newspapers and magazines               |           |   |
| Congresses                             |           |   |
Reasons for search in information channels

Table 4 presents the reasons for seeking information at the sites described above. In it, it can be observed that 50% refers to the ease in the use of the source of information. Respondents reported that user-friendliness is the main factor for using the information sources described by themselves. The Internet was cited as the main source of access to information, with the justification of ease of use and access. The justification that on the Internet are the main sources of information of the present day was also use by the interviewees. When source is personal relationships, the justification lies in the ease of finding accurate information with a co-worker. Another issue, which the researcher associates strongly with the ease item, is the speed in collecting the information. The comparative analysis of his profile shows that this subject has a different academic profile compared to the majority of respondents. The Internet was been cited as a source of great credibility by the interviewees and the search for information in referral centers had its credibility criterion highlighted too. For two interviewees, the updating issue was highlight and the internet was the source of information with greater capacity to update.

Facilities and difficulties in the use of information channels

The interviewees discussed the facilities and difficulties they find in the quest channels for information cited. Table 5 shows the relative and absolute frequency of citations that the 27 participants described throughout the interview.

It is observed that 44% of the citations are relate to the trustworthiness of the information, that is, the care that the interviewee has when searching for information on the Internet. For 28% of the references made in this regard, the availability of information is divided into positive and negative factors. When referring to the Internet, they emphasize that information is available at any time, at the “hands reach”. Even print media are transpose into digital media. There was, therefore, a consensus that information on the internet is available to anyone at any time.

Regarding the availability of appeal, 13% referred to the presence or absence of a resource that provides access to information. However, for some professionals, these features are scarce in their professional environments, which makes the tool a limiting factor. For another, time restrictions are also complicating the availability of computers. Those who cited personal relationships as a source of information also listed their strengths and weaknesses.

For those who cited the Internet as the main source of information search, care with the reliability of information is the main difficulty. However, for a participant, this is not a concern he has confidence in what it is been deposited on the internet and does not consider that its content is passive of doubts. Respondents stated that one of the facilities of the Internet is the speed in providing information. This rapidity is associated, according to the interviewees, with the availability of the technological resource.

Effectiveness of training of information channels

In the analysis of the statements about the efficiency of the information search channels, the interviewees had a dichotomous conclusion: they affirmed that 21% of the channels of search of information that they used enabled and 79% did not qualify. Among those who said that the channel enabled, a participant who quoted the internet describe this way: “I think it is the best channel, in relation to updating, reliability of information.” The others stated that they were satisfied with the training and did not declare their justifications. Almost 79% of them said that the channels of communication did not enable them, declare different reasons for this. One is that the internet, despite its facilities, is still deficient because it focuses on niches and makes information unavailable to a larger audience. Another argument is that the internet offers a lot of [good] information, but that would not be enough for a training to take effect.

Needs for effective training pathways

Table 6 shows that the majority of the interviewees were divided between saying that the ideal to qualify them would be a professional qualification [27%], for example,
a preceptor in the subject or the accomplishment of specific courses [45%].

It can be observed that in this frequency distribution that the interviewees’ perception about the need for formal training situations is great, even though the Internet is an active means of searching for information. Most of the citations refer to the need for courses to train health professionals without the explanation of the course, but a researcher understood that these could have a synchronous and formal learning format. Some explained the format of the course and the ideal training, which would be one of greater specificity.

In 14% of the frequencies, the interviewees emphasized that a real contact, close to the situation, is the ideal format to train them about crack. It is observed that the basic action of the health professional is lacking a specific and dedicated support to enable them on the subject. In two cases, the professional described that access to the scientific literature is the ideal to enable him on the subject.

**Corporate supply of information channels**

Respondents generally confirmed that they must always seek information beyond what the institution usually offers. These resources range from using your internet access to your homes, for example, for lack of time in the workplace, or for help and information in specialized centers such as CAPS AD. For those who have cited the internet as an auxiliary source of information search, the justification remains the agility and ease of access to this source of information. When asked about this need, the demand for training courses was reiterate, even with the availability of internet resources. An affirmation justifies the declared need of the interviewee to seek regular, formal training. Another interviewee stated that his institution offered access to science-based databases, which for him is a valuable resource for his training. Access to specific job centers with drug users is a recurring source for health professionals who have declared CAPS AD to be a safe and affordable source to seekers for information. However, even these centers have restrictions that are been revealed by the interviewees.

**Information requests about crack**

When questioned about crack information demands that they do not know how to respond, 88% of citations point to the existence of this demand and only 12% refute it. The rationale for those who refute the need is that patients, out of fear or disinformation, do not bring questions to them, which makes them comfortable with the subject. For another interviewee, the demand is zero, but there is an impetus to seek complementary information to continue the treatment. The group of quotes that affirm that there are demands has as a characteristic to point out that the demands exist, and that all ignorance is a stimulus for which to seek information.

**Discussion**

When it comes to drugs, the need for constant updating of the professional involved in their prevention or treatment is essential. Crack is a very convincing example of this assertion, since there are numerous changes promoted by users, trafficking and others that have changed the way drug use and behaviors are been related in Brazil.[19]

The professional must be updated with the changes so that their interference, whether prevention or treatment, is effective.[20] Information technology is a powerful and efficient weapon for this update to occur. Otherwise, the impossibility of its use or misuse leads professionals to ignore or, when they do, to use common sense strategies and concepts, contributing little to solve the problem.[21] A predominant use of ICT by health professionals for professional training in the area of drugs was been observed. The use of these resources was involved in perceptions that weakened their use compared to a specific group studied, the key informants.

Health professionals said they did not fully trust the information available on the Internet. For about 28% of respondents, the distrust in the information deposited in the Internet or in the media to which they have access is a question of the fragility of these channels. Concerning to the risks that information found on the Internet offer, information specialists have been developing checklists with criteria and indicators, in an attempt to establish minimum standards of quality.[22] According to Fogg *et al.*, some indicators increase while others decrease the quality of information on the web. One of them is relate to the website domain. Whether it is governmental [.gov], educational [.edu] or institutional [.org] will have better acceptance if it contains an address that allow the user to contact the page manager and have his doubts answered.[23]

The interest in drugs by patients is low and this condition is mainly due to the social level of the participants. The population of this study is form by professionals of Basic Attention and not by experts in drugs, but the proposal was due to the need to verify how the professional that is “gateway” of systems of specialties acts and their knowledge about crack. It can be understood that the necessary the health professional to know the use of substances that may influence the therapeutics necessary for their consultation. Adequate vocational training is important for the effectiveness of the care of users.[24] According to Barros and Pillon,[25] it is also necessary to emphasize the development of educational programs on alcohol and other drugs for health professionals to work at all levels of health care, from primary care to more specialized levels.

The internet is the source of prevalent crack information among health professionals. In their speeches, it is not explicitly defined which Internet tool they refer to, but,
indirectly, this feature is a search engine such as Google. The media in general is another niche of absorbing information. This finding leads to an indication that the sources are not systematized and do not have a qualitative origin that can be measured.

The empirical knowledge also supported the aggregation of knowledge and information by the populations. In the case of health professionals, the information provided by community agents, are consider by these as safe sources of information. This condition consolidates the idea that the populations studied are focus on non-systematized information and conduct their professional actions in these parameters. The mass media are the main source of information and research for a large part of the population, interfering with the production of meanings about health and disease and reaffirming traditional models and practices that are often discriminatory. They can also act as important allies in promoting, preventing and protecting health.

The main characteristics of the communication channels chosen by health professionals have been related to ease of use and “trustworthiness”. For them, the ease feature is associated with the almost immediate availability that the internet confers, as opposed to a conventional literature. It is been believed to focus on the broader technical knowledge of these professionals, related to the availability of information on the internet and in the media. Faced with fragile information, broad or unreliable, the professional feels unprepared to deal with the issue of crack and verifies that the demand for their knowledge is greater than the repository that has.

The media through the internet, have repeatedly established some “premises” when referring to this drug, which, most of the time, distance themselves from reality. For example, an epidemic was been shown that did not prove to be true; a nationwide survey brought up a few expressive numbers [350,000 regular crack users] when compared to other drugs. However, the “epidemic” increased the prejudice of society with these users, attributing to them the great number of assaults and violence practiced, mainly in the city of São Paulo. Based on this erroneous information, health professionals went out to the field to promote the involuntary or compulsory hospitalization of total vulnerable crack users, left to their own devices.

These professionals still insist on promoting outdated speeches based on the drug, divulged by the digital and printed media, configuring a passive user in a total way, without self-will and without internal strength to give up the narcotic. This vision enables society to decide for these users without taking into account their weaknesses, their antecedents and their reasons.

Conclusions

This study aimed to evaluate the way in which health professionals use ICTs in their training and updating of knowledge in order to identify the sources of consultation in this universe of digital communication technologies as an aid in training and updating on crack the exchange of experiences and the development of health education programs. As for the sources of information on this subject, it was noted the concentration on the Internet and its specific tools. It is worth highlighting that health professionals investigated about the quality and efficiency of these means of access are still not able to satisfy their training needs through these tools.

By listing the reasons for accessing different media to search for information about crack, it was observed that the unavailability of corporate resources and knowledge about scientific databases. It should be remembered that the populations studied are part of a region concentrated around centers of excellence in research and dissemination of information. Therefore, it is believed that the reality of more distant regions may be even more compromised either by the more difficult access to information or by the lack of availability of basic accessibility infrastructure resources, such as high-speed internet. It is therefore imperative and urgent that drug information, especially crack cocaine, is reliable, reliable, and based on scientifically proven foundations.

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Conflicts of interest

There are no conflicts of interest.

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