

## DRUGS USE BY SIX TO SEVEN-YEAR-OLD CHILDREN FROM AN ELEMENTARY SCHOOL IN CELAYA, GUANAJUATO, MÉXICO

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*This study aimed to identify the use of drugs by six to seven-year-old students from an elementary school in Celaya, Gto., Mexico. It is a cross-sectional exploratory study with non-probabilistic sample. Thirty-nine students, both genders, were interviewed, and the use of drugs was identified, not only among students, but also among people close to them. The whole sample (100%) was 7 years old, 61.5% female, 77% reported their mothers smoked, and 25% she consumed alcohol; 24.3% reported their father smoked, and 48.6% he consumed alcohol; 30.6% of the scholars had already consumed alcohol once (beer), 8.1% had tried cigarettes, but not other drugs.*

DESCRIPTORS: street drugs; education, primary and secondary

## USO DE DROGAS EN NIÑOS DE 6 A 7 AÑOS DE UNA ESCUELA PRIMARIA DE CELAYA, GUANAJUATO, MÉXICO

*El objetivo del presente estudio fue identificar el uso de drogas entre escolares de 6 a 7 años de edad de una escuela primaria de Celaya, Gto., México. Se realizó un estudio exploratorio transversal. El muestreo fue no probabilístico, entrevistando a 39 escolares de ambos sexos e identificando que el uso de drogas ocurre entre ellos y entre las personas más próximas. El 100% tenía 7 años de edad, 61.5% era del sexo femenino, refirió el 77% que su madre fumaba y el 25% ingería alcohol; el 24.3% que su papá fumaba y el 48,6% que consumía alcohol, el 30,6% de los escolares ya había ingerido bebidas alcohólicas (cerveza) alguna vez, el 8,1% ya había experimentado con el cigarro, no ocurriendo con otras drogas.*

DESCRIPTORES: drogas ilícitas; educación primaria y secundaria

## USO DE DROGAS ENTRE CRIANÇAS DE 6 A 7 ANOS DE UMA ESCOLA PRIMÁRIA DE CELAYA, GUANAJUATO, MÉXICO

*O objetivo deste estudo foi identificar o uso de drogas entre escolares de 6 a 7 anos de idade de uma escola primária de Celaya, Gto. México. Realizou-se um estudo exploratório transversal com amostra não-probabilística. Foram entrevistados 39 escolares de ambos os sexos, e identificou-se que o uso de drogas ocorre tanto entre eles como entre as pessoas mais próximas. Toda a amostra (100%) tinha 7 anos de idade, 61,5% eram do sexo feminino. Dentre eles, 77% mencionaram que a mãe fumava, e 25% que a mesma ingeria álcool; 24,3% referiram que o pai fumava e 48,6% que o mesmo consumia álcool; 30,6% dos escolares já tinha ingerido bebidas alcoólicas (cerveja) alguma vez na vida, 8,1% já haviam experimentado cigarro, não ocorrendo o mesmo com outras drogas.*

DESCRIPTORES: drogas ilícitas; educação primária e secundária

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## INTRODUCTION

**D**rugs use has increased significantly in Mexico. The country currently occupies the 11<sup>th</sup> position in the global consumption ranking, preceded by Finland and Colombia. Until now, the country that has ranked first is the United States of America. According to the National Addiction Surveys about the consumption of illicit drugs in Mexico, performed in 1988, 1993 and 1998, , drugs use and prevalence from 1988 to 1998 increased alarmingly<sup>(1)</sup>.

In 1998, the prevalence of illicit drugs consumption in Guanajuato was higher than the national average for all age groups. Likewise, in 1991, the consumption of tobacco in this state was higher than the national average. Guanajuato occupies the fifth place in the ranking of Mexican states with the highest number of institutions specialized in the treatment and rehabilitation of drug addicts. This data aside, few systems for permanent registration of information on drug addiction and few Mexican studies report on the situation of drugs use, specifically in the state of Guanajuato, and even less research reports on its relation to children and adolescents in the same state<sup>(2)</sup>.

It is an irrefutable fact that Mexico is a country with illegal drugs consumption, wherethe supply multiplies. Besides, these drugs are already getting closer to children and adolescents, who start using them as early as the age of eight<sup>(3)</sup>.

The use and abuse of substances that cause dependency constitutes a complex phenomenon with adverse consequences for individual health, family integration and social development. This problem has become a challenge for society; therefore, each area has the responsibility to face it.

Several research groups have been organized at the Celaya School of Nursing and Obstetrics (FEOC), each with a specific theme, called Knowledge Generation Line (LGC). The groups are called "*academic bodies*". One of them looks at "The Impact of Nursing Interventions on Addictions" and is in charge of monitoring research on the problem of drugs use and abuse. Its LGC is "*nursing care in addictions*". Its general research project is called "*Nursing intervention in drugs use reduction among students from elementary, middle, senior high and college levels of Celaya, Guanajuato – Mexico*". Other projects are derived from it, aimed at investigating drugs use per age groups.

Nowadays, both the frequency and factors predisposing to drugs consumption by school children from Celaya – Guanajuato are unknown. This fact generates the need for research aimed at the exact identification of this information , with a view to suggesting and disclosing strategies to reduce or eliminate the problem.

As mentioned, the drugs use problem has increased to alarming levels lately, affecting younger ages, including children and adolescents. This situation is seen in all fields, not only in Mexico but in other countries as well. The *purpose* of the present study was to *identify the use of drugs by six to seven-year-old children from an elementary school in Celaya, Guanajuato - Mexico*.

## METHODOLOGY

An exploratory and cross-sectional study was performed. Data collection happened from July to August 2006, before the children's holiday period. The study universe consisted of children from six to seven years old in the first grade of an elementary school from Celaya, Guanajuato - Mexico. The sample was nonprobabilistic. The eligibility criterion was: children from six to seven years old, both children and parents accepting to participate voluntarily in the research. The exclusion criterion was: children absent at the moment of data collection. The variables considered were: age, gender, education level and drugs use (fact of having already consumed drugs, in other words, if the child has either experimented or has been using drugs).

The present research considered drugs use as the fact that the child had already experimented drugs, i.e. if the child had either used or had been using drugs. The research question was: do children from six to seven years old from an elementary school in Celaya, Guanajuato – Mexico, use drugs? An ex profeso interview script was elaborated for data collection, with two parts: 1) General data (age, gender, education level and a question with multiple alternatives to identify the person directly responsible for the child's care). 2) Drugs use - 29 items to identify the use of drugs by the people closest to the child, mainly in the family (parents, grandparents, uncles, aunts, siblings, etc.). *Question 25* identified the person who offered alcoholic drinks, cigarettes or any other drug to the child, with the following answer options:

mother, father, grandparents, others. *Questions 26 and 27* checked if the child liked or disliked trying cigarettes and alcoholic drinks, or refused the offer. *Question 28* investigated if the child knew what drugs are. *Question 29* identified who talked to the student about drugs, in case the child was aware of this subject. The answer options were: mother, father, grandparents, other (indicating, in this case, the person's relation with the child). Moreover, this study also investigated which drug is most frequently consumed.

In order to develop this study, written authorization was requested from the authorities of the elementary school where the study would take place. The research proposal was also approved by the Ethics and Bioethics Committee of the Celaya School of Nursing and Obstetrics - FEOC. Prior to the direct interview with the children, this stage was discussed with their teachers and one of their parents was asked to sign an Informed Consent term, as the study subjects were minors<sup>(4)</sup>. Article 16 was complied with, protecting the privacy and confidentiality of the child and, thus, the subjects' anonymity was guaranteed, not identifying their names in the research. According to Article 17, paragraph I, the present study was classified as a research of minimum risk<sup>(5)</sup>.

Data were collected in the children's classrooms. It was planned so as not to affect the children's school program. A first-grade group was selected, with children between six and seven years old. The drug subject was discussed with the children, primarily to identify if they had already heard anything about drugs and related addictions. The children were asked to voluntarily answer general questions about the topic. Then, the children played a dynamic game, in which they could express their opinions about drugs and the people who consume them. Furthermore, an ex profeso interview script elaborated was applied. To address this subject with the children, questions had to be asked about drug consumption by other people close to them, before asking directly if they used these products. That is why some questions asked aimed at identifying the use and/or abuse of drugs by people who live near the child, such as relatives, neighbors or acquaintances, trying to obtain the information regarding their life in the family and with friends. The interview started with the question: "who takes care of you?", so as to ask later on if that person consumed drugs. Afterwards, the children

were questioned about other people and situations in which drugs are used (if applicable), who offered them, if they had tried them and what they felt: whether they liked it or not, or if they had refused it. Next, they were asked if they knew what drugs are and who had told them about it. In case they had already tried drugs, they were asked which drugs they had tried. These data were added to the interviewer's final notes. At the end of the interviews, the researchers thanked the children, their teacher and the school principal for their participation.

## RESULTS

An entire group in the first grade of an elementary urban school in Celaya, Gto, was studied. Thirty-nine children (92%) were interviewed, from a total group of 42. The three children who were not interviewed included a child that was absent at the time of data collection and two others who were older than the specified age: a nine-year-old girl and an eight-year-old boy. Actually, these children did not leave the group at the moment of the interviews, and they were also interviewed, but the study did not consider their information in statistical analysis.

### Subject characteristics

All children who were interviewed were seven years old; some of them had celebrated their birthday recently and others were going to be eight years old soon. Among them, 61.5% were female. A total of 76.9% (n = 30) of the children said their mother was the main responsible for their care and 23.1% said they were looked after by both parents. It is important to mention that, although they were not questioned about the care reasons, some of the children said they were looked after just by their mother, manifesting that: their father was with another woman, their mother was single, or their father had left home due to family issues (returned to the parents' house, grandparents of the child); and others even said their fathers were lazy and neither contributed to the expenses of the house nor looked after them. The question asked to obtain that information was: "*Who looks after you when you get sick?*". Primarily, this question aimed to create an environment of trust for the child, so that other specific questions about drugs use could be asked.

Drugs use

a) *By the child's relatives:* Regarding tobacco consumption habits of the mother, 92.3% (n = 36) answered that their mothers do not smoke. From the 7.7% (n = 3) who said their mothers smoke, two children mentioned they just do it at parties, and one child said her mother smokes either at home or at work, even when she is not at a party. In the consumption of alcoholic drinks, 74.4% (n = 29) said their mothers do not consume alcohol. From the children who said their mothers drink, seven mentioned that they just do it at parties, whereas the rest of them (n = 3) said they sometimes drink at home, even when they are not at a party.

The highest percentages of tobacco consumption were found among the fathers, because only 71.8% (n = 28) answered that their fathers do not smoke. From the 24.3% (n = 9) who said they smoke, six children mentioned that they just do it at parties, and four said they do it either at home or at work, even when they are not at a party. Concerning the consumption of alcoholic drinks, 48.7% (n = 19) said their fathers do not consume alcohol. From the children who stated that their fathers drink (n = 18), 14 children mentioned that they just do it at parties, whereas the others (n = 4) said they sometimes drink at home, even when they are not at a party. It is important to mention that, in this section, the total amount of children who answered this question was only 37, because two of them did not live with their father.

The children's uncles and aunts also had tobacco and alcohol consumption habits. In total, 33.3% mentioned their uncles and aunts smoke, and the same percentage (33.3%) said they consume alcoholic drinks, although most of the children mentioned they only smoke and drink at parties.

Less grandparents than parents, uncles and aunts presented tobacco and alcohol consumption habits, as only 17.9% of them said their grandparents smoke and 10% stated that they consume alcoholic drinks, although most of the children mentioned they only smoke and drink at parties. As for children with siblings (n = 10), only one child mentioned his brother smokes and drinks, although he just does it at parties. What is disturbing about this last case is that this

brother is an adolescent, who is only 14 years old and hides this habit from his parents.

b) *By the participating children:* they were asked: "Have you ever drunk alcoholic drinks?". Regarding this question, 61.2% answered they never had, whereas 38.8% (n = 14) already had. When they were asked: "Have you ever smoked a cigarette?", 87.2% said they have never done it, but three children had already smoked at their early age, which in itself is alarming. The entire sample, 100%, said they had never used another drug, and the same number of children said their parents did not give them any medication except on a medical prescription. When they were asked about the person who had offered them cigarettes or alcoholic drinks, 12.8% said it was their uncle or aunt, 10.3% said it was their father and some others mentioned their mother or grandparents (Table 1).

Table 1 - Drugs use by six to seven-year-old children from an elementary school in Celaya, Gto., July 2006

Items	Frequency	Percentage
Already drank alcoholic drinks: ( n = 36)		
Yes	11	30.6
No	25	69.4
Already smoked a cigarette:( n = 37)		
Yes	3	8.1
No	34	91.9
Already tried other drug: ( n = 37)		
Yes	0	0
No	37	100
Already took pills without a medical prescription: ( n = 37)		
Yes	0	0
No	37	100
Who let you try cigarettes and alcoholic drinks: ( n = 14)		
Mother	2	14.3
Father	4	28.6
Uncles/Aunts	5	35.7
Grandparents	1	7.1
Other (friends)	2	14.3
Feeling when offered a cigarette: ( n = 8)		
Liked	0	0
Disliked	6	75
Refused	2	25
Feeling when offered alcoholic drinks (n = 14)		
Liked	1	7.1
Disliked	11	78.6
Refused	2	14.3
What are drugs?:(n = 33)		
A bad substance that kills.	26	78.8
Does not know, or has not been told about it.	7	21.2

n = Total number of data analyzed

Source: Interview script "Drugs use by six to seven-year-old children"

When the children who had already used these drugs were asked about what they felt when they smoked a *cigarette*, six children mentioned they disliked the taste and two refused the offer. Concerning *alcoholic drinks*, one child liked the taste, 11 disliked it and spit out the drink and two said they refused the offer. *No child had used another drug*. In total, 66.7% mentioned that "drugs are bad substances that kill", whereas other children said they did not know what drug is. The people who provided them with information on drugs were their mothers and fathers and, in a few cases, they mentioned grandparents, uncles and aunts. In general, the most used drug by this study population was alcohol, which had often offered by uncles and aunts.

## DISCUSSION

It is hard to discuss the results found, as this is an exploratory study. No other data are available about drugs use by children so young. The only reference found was a newspaper from 2005, which presented some news related to drugs use by children, who were older than in this research though. On July 17<sup>th</sup> 2005, the Mexican newspaper "The Universal" stated that "children start drinking alcohol at home by the age of eight and nine years old whereas, by the age of 11, they tend towards the use of tobacco"<sup>(3)</sup>.

The First General Meeting of the Social Network for a Mexico Free of Addictions was held on August 5th 2005, in Mexico City and, as part of the activities, the members of this network chose the new members of the Board of Directors, mentioning "the most recent national research about addictions shows, clearly, that drugs consumption by young people has changed unexpectedly and is getting more dramatic all the time". Whereas, some years ago, initial drugs among young people were alcohol and tobacco, these people are now starting an addiction life with synthetic drugs (such as ecstasy), cocaine and marihuana. Besides, the average age to start drug consumption is decreasing every year, and *Mexican children from eight to nine years old are now found as active drugs consumers and dealers in their schools*<sup>(6)</sup>.

Another study, carried out by the Oregon Research Institute, involving children under 10 years old, aimed at predicting alcohol abuse and the use of other drugs by adolescents. It studied 365 children

from the second to the fourth grade (seven - nine-year-olds, approximately) and studied them again when they were taking the ninth or tenth grade (14 - 15 years old, approximately), in order to determine the initiation and sequence of the use of alcohol, tobacco, marihuana and other dangerous drugs. The results obtained showed that, among boys, family conflicts are a social factor that predicts the start of drugs use, and that failure in school was related to the continuous use of drugs during adolescence. For the girls, the family environment exerted a moderate effect. The conclusion was that substance use of by 14 to 15-year-old girls can be predicted by the academic and social behaviors developed by the time they are seven to nine years old, suggesting that the efforts made to prevent alcohol and drugs use may be more effective if records of conflicting behaviors in school and the family environment, which predispose to the initiation of drugs use, are previously detected and solved<sup>(7)</sup>.

Nevertheless, the previous study does not mention the frequency of drugs use in six to seven-year-old children, as it only studied their behaviors and related them with the use of drugs during adolescence. The present study analyses drugs use, but not behaviors. However, risk factors mentioned in the study by the Oregon Research Institute were observed<sup>(7)</sup>, because the children from the study population in this research are influenced by relatives who consume drugs. Moreover, there were children from families living in conflict situations or who only lived with their mother (this information was identified by talking to the children, who mentioned their family situation). Even though this is not the reason of this research, it is important, as a study developed by the University of North Carolina at Chapel Hill indicates that the "the factor that most strongly predicts the use of alcohol and tobacco was the event of adolescents who had families with only one of their parents"<sup>(8)</sup>, and two children studied in this research present this pattern.

## CONCLUSIONS

The fact that really young children are trying drugs is alarming, mainly alcoholic drinks and cigarettes, as well as the fact that their parents, uncles

and aunts, in this population, are the ones who have encouraged them to try those substances. Fortunately, most of the children disliked "trying" them, manifesting that they did not want to repeat the "unpleasant experience". There were also children who simply refused to "try" cigarettes and alcoholic drinks. A substantial percentage showed they had received truthful information regarding the subject of drugs and addictions, once their parents provided them with that information.

The research results instigate the development of a second stage, in order to find out about the reasons or motives that lead school children to consume drugs, so that, in a third stage, medium and long-term strategies can be planned to offer a solution or reduce this phenomenon (drugs dependency), which is getting more propagated throughout the population all the time.

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