Social Risk for The Family of Drug Users Hospitalized Due to Physical Injury

Risco Social de Familias de Usuários de Drogas Internados por Trauma Físico

Riesgo Social para la Familia de Usuarios de Drogas Hospitalizado por un Trauma Fisico

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ABSTRACT

Objective: The study's purpose has been to classify the familiar social risk of long-term drug users and hospitalized due to physical trauma. Methods: It is a descriptive-exploratory study that was carried out in a toxicological assistance center from Parana State and through 30 sentinel events - hospitalized individuals diagnosed with physical trauma associated with poisoning by drugs abuse, over the period from April to September 2014. Data collection instruments were a semi-structured interview and the Coelho-Savassi's Family Risk Scale, where it was answered by a family key-informant. The scores were analyzed descriptively. Results: The Family Risk Scale score have indicated that 19 families were under social risk, where 9 of them were under maximum risk, and have also shown families with socio-demographic percentage matching the lower classes of the population. Conclusion: The following categories influenced the family risk rates: drugs of abuse use period; unemployment; and low social bond of sentinel events.

Descriptors: Street Drugs, Alcoholic Intoxication, Social Vulnerability, Intoxication Control Centers, Community Health Nursing.

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RESUMO

Objetivo: Classificar o risco social de famílias de indivíduos internados por trauma físico e usuários de drogas, investigados como eventos sentinela.

Métodos: Estudo exploratório-descritivo, realizado em um centro de assistência toxicológica do Paraná, com 30 eventos sentinela - indivíduos internados com diagnóstico de trauma físico associado à intoxicação por drogas de abuso, no período de abril a setembro de 2014. Instrumentos de coleta de dados foram um roteiro para entrevista semiestruturada e a Escala do Risco Familiar de Coelho e Savassi, respondidos por um familiar informante-chave. Os escores foram analisados descritivamente. Resultados: A pontuação dos escores da Escala de Risco Familiar indicou 19 famílias em risco social, sendo nove com Risco máximo, e famílias com percentuais sociodemográficos de camadas populares da população. Conclusão: Tempo de uso das drogas de abuso, desemprego e baixo vínculo social dos eventos sentinela, influenciaram os índices de risco familiar.

Descritores: Drogas Ilícitas, Intoxicação Alcoólica, Vulnerabilidade Social, Centro de Controle de Intoxicações, Enfermagem em Saúde Comunitária.

RESUMEN

Objetivo: Clasificar el riesgo social familiar delos consumidores de drogas a largo plazo y hospitalizado por un trauma físico. Método: Estudio exploratorio descriptivo, realizado en un centro de asistencia toxicológica de Paraná, con eventos centinela - 30 personas hospitalizadas con diagnóstico de trauma físico asociado a la intoxicación por drogas de abuso, de abril a septiembre de 2014. Instrumentos de recolección de datos fueron una hoja de ruta para la entrevista semiestruturada y Escala de Riesgo Familia de Coelho y Savassi, respondida por un informante clave familiar. Las puntuaciones se analizaron descriptivamente. Resultados: La puntuación de la Escala de Riesgo familia indicaron 19 familias en riesgo social, nueve con máximo riesgo, y las familias con el porcentaje sociodemográfico de las clases más bajas de la población. Conclusión: Uso del tiempo de las drogas de abuso, el desempleo y la baja vinculo social de los eventos centinela influyeron en los índices de riesgo de la familia.

Descritores: Drogas Ilícitas, Intoxicación Alcohólica, Vulnerabilidad Social, Centros de Control de Intoxicaciones, Enfermería en Salud Comunitaria.

INTRODUCTION

Drug consumption is a risk factor for accidents and violence and rates of over 50% of the records of physical trauma in health services, culminating in deaths, temporary and permanent functional losses, and in diseases that generate high social and economic costs. Physical trauma is a multisystem event with an endemic character and is located in the health field as one of the grievances of the families, as a consequence of risk factors in the social and family dynamics, of loco regional policies of the families, as a consequence of risk factors in the social and family dynamics, of loco regional policies of the families, as a consequence of risk factors in the social and family dynamics.

The association of drugs of abuse and urban violence is one of the causal factors of physical trauma, mainly because drug users exhibit impulsive and risk-taking behaviors that increase the likelihood of suffering or witnessing traumatic events. It is important to know the circumstances in which physical trauma associated with drugs of abuse occur, and the factors related to this event - the family context, the environment of drug use and the victim’s circle of coexistence, since it makes it possible to identify and break the web that determines the approximation with the drug, abuse, violence, and severity of the event.

Users of drugs of abuse usually access health services only when they present complications related to compulsive consumption, clinical impairment due to chronic use or in situations of violence and physical trauma. The use of these occurrences as sentinel instruments or events to monitor the repercussions of drug abuse on the health of the population is consistent with the principles of health surveillance, as it provides a measure of the patient’s and family’s health trajectories through the health care services, and also assess the care quality.

Herein, a sentinel event developed and tested in an academic way was used to adapt this methodology to the epidemiological surveillance of the repercussions of drug abuse on the health of drug users and their families, and to construct indicators to monitor the drugs of abuse phenomenon in the society.

Articulating hospital admission, physical trauma and intoxication by drugs of abuse and understanding hospitalization for physical trauma as a violent event in individuals and families that should have already been assisted by public policies, through health promotion devices and prevention of injuries or of treatment and social reintegration, the author developed the hypothesis that the analysis of these sentinel events could collaborate in the elaboration of campaigns of prevention of the use of drugs, with a view to breaking the chain of risk and reducing consumption in regional spaces.

Supporting the potential of the sentinel event to measure the severity of the cases, the study group presented specific characteristics that characterized it as a “differentially populated” to evaluate the repercussions of drug use in the family. They were individuals with a long trajectory of drug use and with social severity evidenced in individual characteristics and in the life contexts of the families, as a consequence of risk factors in the social and family dynamics, of loco regional policies of inadequate coping and failures in the reception of users and families in health services.

This author intends to carry out the cost-effectiveness analysis, to evaluate the economic impact of the proposed innovative methodology, since the results will offer subsidies to the management and the public health policies in the definition of technical-operational strategies of the incorporation of assistance to the individuals and families that coexist with drugs of abuse in health care.

Nevertheless, it is known that drug use does not occur in a socially uniform way and is present mainly in communities and families with high social vulnerability. The field of study on families in social vulnerability has been widely explored in sociological research and behavioral, considered vulnerable families whose individuals that make up deficits in their personal resources and...
living conditions - either social or environmental - and the care for their members may be impaired.12-13

The strong association between the presence of family history and a culture of expansion of the use of drugs of abuse in the family, with an intergenerational pattern of worsening living conditions, has led to the influence of the social context on the prevalence levels of drug use, using Indirect social indicators such as family income, educational level and place of residence. Living in an “addictive environment” negatively affects the offspring and it is estimated that for every abusive drug user, five or six people in the family are affected, having a considerable weight in the genesis of violence in the family environment, in work accidents, illness, and death.11

Given this context of social risks, the present study aimed to classify the familiar social risk of long-term drug users and hospitalized due to physical trauma, which were investigated as sentinel events.

METHODS

It is a descriptive-exploratory study, of cases considered “typical” for the sentinel event under study, which used the methodological reference of epidemiological investigation of sentinel event.7

Regarding the study population, it was considered individuals who met a specific set of criteria for sentinel disease under investigation - physical trauma and use of drugs of abuse - detected by a compatible clinical records/ suggestive signs and symptoms or confirmatory laboratory tests.

The descriptor of the sentinel events capture was the ‘hospitalization for diagnosis of physical trauma associated with drug abuse intoxication,’ in individuals with family bond and residence in Maringá-PR, regardless of sex and age, attended at the Hospital Universitário Regional de Maringá, over the period from April to September of 2014, and accessed from the notification of the sentinel event at the reference toxicological assistance center for the Northwestern region of Paraná State. We interviewed 30 relatives of the sentinel events that were considered family key-informants, then following the parameters for the epidemiological investigation of the event - documentary analysis, family interview, and case assessment.28

The data collection instruments were a script for a semi-structured interview, with questions for socio-demographic and economic characterization of the interviewee and his/her family, and the Family Risk Scale.14

The Escala de Risco Familiar de Coelho e Savassi (ERF/CS) [Coelho-Savassi’s Family Risk Scale] is an instrument with sentinel information to assess the situations of risk to which families may be exposed in daily life and social vulnerability, which is used by Primary Health Care teams in Brazil. It is a tool for evaluating and monitoring the social and economic reality in the context of the life of each family, recognizing the real health needs and, thus, offers subsidies to carry out prevention, promotion and health planning, according to the risks presented.14

The use of ERF/CS risk sentinels is justified by the characteristics present in the family and is classified according to the risk criteria identified. They are related to the epidemiological relevance - less than six months, more than 70 years old, systemic arterial hypertension, diabetes mellitus, to sanitary relevance - low sanitation conditions, and the impact on family dynamics - bedridden, physical and mental deficiencies, severe malnutrition, drug addiction, unemployment, illiteracy, and the resident.14

Among the risk situations, those that receive the highest score are families with people who are bedridden or physically disabled, low sanitation conditions, cases of severe malnutrition or who present a tenant/room ratio larger than one. Situations of risk with a score equal to two are cases of drug addiction, unemployment and tenant/room ratio equal to one. Illiteracy, age less than six months or greater than 70 years old, systemic arterial hypertension, diabetes mellitus are worth one point each. Once the scoring has been established for each existing risk situation for each family, these values are added together. Families receiving a final score of less than 5 are classified as Non-Risk, from 5 to 6 as Minor Risk, from 7 to 8 Average Risk, and 9 or more as Maximum Risk.15

The interviews were conducted individually, through a home visit, and lasted approximately 50 minutes. Script mask and data were compiled into a spreadsheet in Microsoft Office Excel 10.0 Software and analyzed through simple descriptive statistics (central location and scatter measurements) and description of Family Scale scores.

All the ethical aspects involved in the research were strictly obeyed. The research project was submitted to the Research Ethics Committee involving Human Beings from the Universidade Estadual de Maringá, Certificado de Apresentação para Apreciação Ética (CAAE) [Certificate of Presentation for Ethical Appraisal] No. 06218713.0.0000.0104/2013.

RESULTS AND DISCUSSION

Most of the physical trauma that resulted in the capture of sentinel events occurred in an external environment (73.4%), mainly traffic accidents, falls and physical aggression, and 26 victims (83.3%) suffered previous trauma to the sentinel event investigated.

The age of sentinel events ranged from 13 to 65 years old, with an average of 40.1 years old. The majority were male (29 - 96.7%), race/skin color self-declared white (20 - 66.7%) and unmarried (23 - 76.7%). In relation to schooling and occupation, 10 (33.3%) had less than four years studied and half were unemployed.

Alcohol was the drug reported by most sentinel events at hospital admission, confirmed by clinical or laboratory criteria (28 - 93.3%), but 13 were associated with various
drugs, and half used the drug daily for abuse and carried out illicit drug-taking operations - seven begged for money on the street and two "worked for drugs."

The time of use of drugs of abuse by sentinel events ranged from 1 to 56 years, with an average of 20.8 years, but in nine cases the family had knowledge of drug use after 10 years or more. Abstinence for more than five years was recorded in only three cases, and most of the relatives (17 - 56.7) reported that the user presented aggressive behavior, then leading to both domestic and social violence; 12 of them (40.0%) had experienced some kind of violence in childhood, and in 16 families (53.3%), family addictive behavior was reported, with 13 parents being users.

The per capita income for the average families represented approximately one minimum salary in force during 2014 (R$ 689±652.06) with a variation of four minimum wages and less than one minimum wage. The majority of the families (59.9%) had up to two individuals with individual income and in three of them, the income came only from the retirement of one of its members. The family's access to health and social protection services was mostly the network of attention of the SUS, and reported that at some point in their life they used the public social support network and philanthropic institutions that provide help services for use drugs.

Most of the relatives interviewed were women (26 - 86.7%), mainly mothers of the drug user (14 - 46.7%), and seven of them were in the position of "head of the family". Half were married and average schooling was 7.5±4.8 years. The majority (16 - 53.3%) referred to any disease or health problem - severe systemic arterial hypertension, depression and diabetes mellitus.

Summarizing the classification of family social risk, the score ranged from two to 11 points, with an average of 6.1 and mode of 6. The scores showed 11 (36.7%) families classified with an absence of social risk, although many sentinels were pointed out as risky with lower scores. Regarding the 19 families identified with some level of social risk, seven (23.3%) were categorized as Minor Social Risk, three (10%) as Average Risk and nine (30%) as Maximum Risk. (Table 1)

The most frequently observed risk sentinels were systemic arterial hypertension, diagnosed in at least one member of 16 families, unemployment of at least one relative, found in 14 families, and low household and sanitation in the domiciliary surroundings, illiteracy, and diabetes mellitus, were present in nine families. Only three sentinels were not classified as risky: members of the family with physical disabilities, with severe malnutrition and under the age of six months old.

Table 1 – Family social risk of sentinel events according to social risk sentinels. Maringá/PR, 2014.

<table>
<thead>
<tr>
<th>Social risk</th>
<th>n (%)</th>
<th>Social risk sentinels</th>
</tr>
</thead>
<tbody>
<tr>
<td>R0 - No Risk</td>
<td>11 (36.7)</td>
<td>Unemployment, low income, diabetes, hypertension, 15 years old or older, 5 at risk</td>
</tr>
<tr>
<td>R1 - Minor Risk</td>
<td>7 (23.3)</td>
<td>Low income, low education, diabetes, greater than 15 years old, hypertension, diabetes</td>
</tr>
<tr>
<td>R2 - Average Risk</td>
<td>3 (10)</td>
<td>Mental deficiency, low education, unemployment, diabetes, greater than 15 years old, diabetes</td>
</tr>
<tr>
<td>R3 - Maximum Risk</td>
<td>9 (30)</td>
<td>Mental deficiency, low education, unemployment, diabetes, greater than 15 years old, hypertension, diabetes</td>
</tr>
</tbody>
</table>

Source: Research Data, 2014

By relating individual characteristics of sentinel events to the family social risk score, the average age of drug users was higher in sentinel events in which families were classified as Minor Social Risk (44.7 years old) followed by those with Maximum Social Risk (40.7 years old) and the time of harmful use of drugs was higher in sentinel events whose families presented Minor Risk (29 years old) and Maximum Risk (22.8 years old). Regardless of the family social risk score, the most cited occupation for sentinel events was a construction worker and unemployment was cited at all levels.

Although all sentinel events used alcoholic beverages, six belonged to families with maximum social risk and one of those with average social risk practiced drug poly use, higher indexes found in families with Minor Social Risk and No Social Risk. Four families with maximum social risk reported addictive behavior in the family environment; seven had hypertension in at least one member, and six in illiteracy and unemployment in at least one relative.

Among the seven families with of Minor Social Risk, five reported additive family behavior and in the three families with Average Social Risk, two family members reported addictive behavior.

The main topic of this article is the influence of drug use towards the social risks of families. The II National Survey of Alcohol and Drugs estimated that approximately 5.7% of the Brazilian population is dependent on alcohol and/ or marijuana and/or cocaine in households composed on average of four people, with more than eight million people using drugs and 30 million people living together with a chemical dependent.6 The classification of families by aspects of their social life is articulated to the proposal of health surveillance, which has as a principle the fact that different population groups are exposed in varying degrees to conditioners of the health-disease process, which demands health care aimed at their specificities. The attempt to understand, from a family, life circumstances and identify vulnerabilities and risk situations, is anchored in the socio-assistance conception of the Sistema Único de Saúde (SUS) [Unified Health System] and the National Social Assistance Policy.6

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Brazil has a higher number of drug users, especially for illicit drugs, in the age group from 18 to 34 years old. In the present study, the age group of the investigated individuals presented divergence in relation to the national age pattern, possibly related to a long time of use of the drug(s), which also does not match the average established in population-based surveys, which is 13 years old.8,16

Considering that individual social risk represents the level of risk to a particular individual situated in the vicinity of a situation, all sentinel events used harmful drugs with characteristics of people living under a “pretty bad situation” - poly use, illicit access maneuvers to drugs, aggressive behavior and repeated exposure to violent events, evidenced in traffic accidents, falls and physical aggression - and the long time of use of drugs confirmed characteristics of people with difficulties to establish links - low schooling, unemployment and single marital status. The term “harmful use” can be understood as a pattern of use or consumption of a psychoactive substance which may be harmful to health and whose complications may be physical or psychic.17

It is worth remarking the significant number of sentinel events with workers of the construction industry. Construction industry, recognized for its capacity to absorb large numbers of working men, is characterized by precarious labor relations, a large contingent of informal workers, high turnover, harmful working conditions and many workers experience, throughout their lives, processes and vulnerability, often due to work-related conditions.18

Drug use may be related to other social factors, such as unemployment, sentinel also quite prevalent in families at risk in the present investigation. Unemployment is an important factor of vulnerability since the health of an individual is related to the social determinants of health. Furthermore, unemployment can cause insecurity, stress and a greater tendency towards alcoholism and other drugs, which, in turn, might trigger other health problems.20

The present study pointed to characterization data of the family member interviewed with percentages similar to the profile found in a recent national household survey. Generally, mothers with low schooling and many considered “heads” of the family, who suffer from the negative impact caused by the use of drugs in the family.8 This situation of overloading of dependent child care in single-parent and long-term drug use, presents a temporal tendency towards social aggravation, with an increase in chronic health conditions and greater needs for the use of health services, which is self-reported by the interviewees.

Considering that the family influences both the protection and the risk for drug use, the families’ profile indicated social risk factors that characterize them as families of the popular strata of the population and with characteristics of social vulnerability, as evidenced by the type of family and expressive number of single-parent families, fragile socio-economic conditions, such as the low educational and socio-economic level of the “head” of the family, low income, and expressive number of residents per household.6,14

Nonetheless, the average time of use of the drugs of abuse and the addictive behavior in the family, seemed to aggravate the living conditions of these families, since the economic consequences of the consumption of drugs are significant, characterized by the expenses with the acquisition of drugs, the loss of employment opportunities and occupation in low-paid and qualifying temporary employment, unlawful acts to ensure financial survival and drug acquisition, and increased health care expenditures due to chronic conditions, infectious diseases, and accidents. The consequence of drug use hardly allows the user to stay on the job, leading to robberies within the home, street situation and prostitution, depending on the structure and family support.6

There are risks that only become known when their harmful effects have already affected several people, sometimes with irreversible consequences, and the perceptions of individuals or groups about the risks are diversified, even in the most known risk situations. The strong association between family history of drug use and drug abuse in adolescence and adulthood, with an intergenerational pattern of aggravation and inclusion of other types of drugs within the family, can provide for the expansion of harmful drug use in the family.11,19 The use of alcohol by one family member can stimulate the other and the greater the number of alcoholics in the household, the greater the risk of negative impacts on the family.

Social risk is a form of risk expression for a group of people, made up of the community exposed to the consequences of possible accidents, so this form of risk expression refers to all potentially affected population, relating the magnitude of the possible physical effects to the persons and the expected frequencies of accidents capable of causing such effects.6

The classification of the family risk of these families, corroborating socio-demographic and psychosocial characteristics found in the investigation of sentinel events, would make it possible to determine the planning of activities by the different health professionals, prioritizing families with maximum social risk and average social risk, whose follow-up should occur at longer intervals that of other families and the adequacy of programmatic actions. Likewise, families with lower social risk should also be assisted less often than those of average and higher social risk than families without social risk.14,15

Concerning the scoring presented in the family risk scale, the contexts found relate the situations experienced in the family to unfavorable social indicators and among the most striking findings to determine social vulnerability are unemployment, low sanitation conditions and illiteracy, and the presence of individuals with some type of chronic pathology, in addition to alcoholism, such as hypertension, diabetes mellitus, and mental deficiency of more than one
member. However, there seems to be a combination of the social determinants of health representative of the economic and epidemiological transition - chronic noncommunicable conditions and aspects of living conditions with potential high-risk for infectious parasitic diseases.20

The family risk analysis revealed an elderly population (>70 years old), consisting largely of hypertensive individuals with diabetes mellitus. Although these data are in agreement with changes in the demographic pattern in the general population of the country, the presence of dependent elderly in families with addictive behavior aggravates the family dynamics and further burden the caregiver members.12

Systemic arterial hypertension, the most prevalent sentinel in all households, shows that chronic noncommunicable diseases also strongly affect poor sections of the population and vulnerable groups. The low sanitation conditions represented one of the most prevalent sentinels in the families investigated and among the families at risk, corroborating a study carried out in the Rio Grande do Sul State, Brazil, which related the poor health infrastructure to situations of greater risk or social vulnerability.20

It is worth mentioning the importance of a classification system for the evaluation of vulnerable families, aiming at prioritizing care; still, all families should be assisted, since the meaning of risk involves temporality. According to the National Primary Care Policy, promotion, prevention, recovery and rehabilitation actions should be extended to the entire population in order to keep the healthy families at either low or no current risk.15

CONCLUSIONS

The study has highlighted families with socio-demographic percentages similar to the national profile of families belonging to the popular strata, but the time of use of drugs of abuse by sentinel events was not similar to that of cross-sectional investigations and was higher than the national average established in populational baseline surveys, then influencing socio-economic and psychosocial indicators for the investigated group, determinants of family social risk.

Data analysis and score scores for the Family Risk Scale indicated 19 families with some level of social risk - seven (23.3%) were categorized as Minor Risk, three (10%) as Average Risk and nine (30%) as Maximum Risk - findings that suggest that health professionals’ actions in prevention, adherence to treatment and social integration need to be strengthened, prioritizing families in contexts of greater social risk.

The identification and classification of the family risk degree, as well as the factors contributing to it, through a multidimensional assessment tool has proved to be a useful tool for adequate planning and directing public health policies.

Given this context, the results of this study allow a greater understanding of health professionals about the social risk of the families attended, thus seeking to contribute to the redirection of health care. It is suggested that, in order to attend families in varying degrees of social risk and with members who share harmful use of alcohol and other drugs and for a long time, it is necessary to offer a care with equity, integrated and interdisciplinary, from the evaluation of pertinent information to family constitution, dynamics of family relations, economic structure, schooling level, family health aspects.

The study’s limitations are related to the fact that the study was limited to the reality of a municipality in the Northeastern region of Paraná State, but it is understood that drug use is a complex phenomenon and it is not aimed here to reduce it to a facet of social dimension, rather to analyze how the consumption of alcohol and other drugs is related to certain social characteristics of families of a sample of individuals who were hospitalized for physical trauma, and included in a group with specificities of sentinel events, then aiming to evaluate repercussions of the use of drugs towards the family context.

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The authors claim to have no conflict of interest.