

Original article

## Indicators of social vulnerabilities of families living in territories included in the Family Health Strategy

Indicadores de vulnerabilidades sociais de famílias residentes em territórios adscritos à Estratégia Saúde da Família

Indicadores de vulnerabilidades sociales de las familias que habitan en territorios incluidos en la Estrategia de Salud de la Familia

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### Abstract

**Objective:** to analyze the indicators of social vulnerabilities of families living in territories included in the Family Health Strategy (FHS) and compare the indicator *per capita* income with the dimension's development and autonomy, family, community and social life and income. **Method:** descriptive, quantitative research with 174 guardians of families living in territories with FHS. Data were collected through a questionnaire from January to March 2019. Afterwards, they were analyzed by simple descriptive statistics, mean and standard deviation. For comparison between groups, the chi-square test was used. **Results:** income was higher in households with a person over 60 living alone; low education and age under 16 years; families with individuals with two or more chronic diseases; and responsible for the family in informal or temporary work. **Conclusion:** *per capita* income and the family, community, and social dimension need to be considered in interventions.

**Descriptors:** Social Vulnerability; Human Development; National Health Strategies; Family Health; Nursing

## Resumo

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**Objetivo:** analisar os indicadores de vulnerabilidades sociais de famílias que vivem em territórios adscritos à Estratégia de Saúde da Família (ESF) e comparar o indicador renda *per capita* com as dimensões desenvolvimento e autonomia, convívio familiar, comunitário e social e renda.

**Método:** pesquisa descritiva, quantitativa, com 174 responsáveis por famílias residentes em territórios com ESF. Os dados foram coletados por meio de um questionário de janeiro a março de 2019. Após, analisados pela estatística descritiva simples, média e desvio padrão. Para comparação entre os grupos utilizou-se o teste qui-quadrado. **Resultados:** a renda foi maior em domicílios com uma pessoa com mais de 60 anos morando sozinha; baixa escolaridade e idade menor de 16 anos; famílias com indivíduos possuindo duas ou mais doenças crônicas; e responsável pela família em trabalho informal ou temporário. **Conclusão:** a renda *per capita* e a dimensão convívio familiar, comunitário, social precisam ser considerados em intervenções.

**Descritores:** Vulnerabilidade Social; Desenvolvimento Humano; Estratégias de Saúde Nacionais; Saúde da Família; Enfermagem.

## Resumen

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**Objetivo:** analizar los indicadores de vulnerabilidades sociales de las familias que viven en territorios adscritos a la Estrategia Salud de la Familia (ESF) y comparar el indicador de renta per cápita con las dimensiones de desarrollo y autonomía, vida familiar, comunitaria y social y renta.

**Método:** investigación descriptiva, cuantitativa, con 174 jefes de familia residentes en territorios con ESF. Los datos se recolectaron a través de un cuestionario de enero a marzo de 2019. Posteriormente, se analizaron mediante estadística descriptiva simple, media y desviación estándar. Para la comparación entre grupos se utilizó la prueba de chi-cuadrado. **Resultados:** el ingreso fue mayor en los hogares con una persona mayor de 60 años que vivía sola; baja escolaridad y menores de 16 años; familias con personas que tienen dos o más enfermedades crónicas; y responsable de la familia en el trabajo informal o temporal. **Conclusión:** deben ser consideradas en las intervenciones la renta per cápita y la dimensión de interacción familiar, comunitaria y social.

**Descriptorios:** Vulnerabilidad Social; Desarrollo humano; Estrategias de Salud Nacionales; Salud de la Familia; Enfermería

## Introduction

Science has been studying and building precise instruments to measure social vulnerability and, thus, to know the needs of the population related to expanded health, which considers social issues such as: education, income, occupation and culture. Among them is the Family Vulnerability Indicators System (SIVF), created to be applied in the Municipality of São José do Rio Preto, in São Paulo, which arose due to the need for a thorough and deep assessment of the social reality of the city.<sup>1</sup> Social indicators can be

used as support for local decisions in the identification of vulnerability patterns, and, from this, assess the impacts through the qualification of actions to face them.<sup>2</sup>

The Family Health Strategy (FHS) has an important role as a facilitator in monitoring individuals and also in reducing microregional inequalities, as it enables health professionals to work in different territories, which are often vulnerable. The territory is the result of every historical, political and social process that shapes the way people live, and also in the organization of the work of the FHS teams, as it is necessary to take into account the recognition of the social health needs of the people who inhabit the place and its culture, to plan the actions to be developed. In this logic, the organization of FHS teams is based on a territoriality, as of an assigned population, in a geographically demarcated location.<sup>3</sup> These territories are subdivided into coverage areas.<sup>4-5</sup>

Therefore, knowing the territories also allows professionals to develop research and generate reliable estimates, which allows them to understand the local reality and identify areas of greater vulnerability, contributing to the redesign of a network of health care and social promotion, at all geographical scales, considering the living territory. In addition to helping managers to plan effective public policies according to the needs of the population, ensuring access to social assistance rights, a fundamental condition for overcoming existing social inequalities.<sup>4,6</sup> A study conducted in Canada and the United States reinforces the need for proactive intervention to reduce disparities with risk adjustment measures that integrate social factors; support community-oriented primary care; social and economic development, equity, potential-based approaches; and a collective focus.<sup>7</sup>

Nursing can contribute to the territorialization of actions and, thus, articulate the multidisciplinary teams of the health, education, social assistance, housing and public management services of the municipalities. The articulation of these services is fundamental for quality care to be provided, guaranteeing the rights of this population assigned to the territories, facilitating access to services and contributing to the monitoring of the resoluteness of actions.<sup>6</sup>

Some vulnerability indicators that constitute the instrument adopted to measure the vulnerability index of the city of São José do Rio Preto, in the State of São Paulo, were organized in a questionnaire and applied to families in a municipality in the countryside of Rio Grande do Sul (RS), far from the capital and metropolitan regions, which can bring

different results from large cities. These indicators point to the vulnerability of families in FHS assigned territories and reveal the multiple vulnerabilities related to the dimensions of development and autonomy, community and social family life and income. Therefore, the need to assess vulnerability arises to identify social problems and, thus, to know part of the reality of the population of vulnerable territories.<sup>1</sup>

In this sense, it is believed that, by identifying the indicators of social vulnerabilities of families living in territories assigned to a FHS of a municipality located in the northwest region of RS, it is possible to identify problems that require intersectoral interventions. Based on the aforementioned assumptions, the present study aims: to analyze the indicators of social vulnerabilities of families living in territories assigned to the FHS and compare the indicator *per capita* income with the dimensions development and autonomy, family, community, social life and income.

## Method

This is an exploratory, descriptive field research with a quantitative approach, developed in the Municipality of Palmeira das Missões, located in the northwest region of the State of RS, from January to March 2020. The city has a population of 34,328 inhabitants, according to the 2010 census of the Brazilian Institute of Geography and Statistics (IBGE). The average monthly salary of formal workers is 2.4 minimum wages and the percentage of the population with nominal monthly *per capita* income of up to 1/2 minimum wage is 35.2%. The Human Development Index (HDI) is 0.737. In the map of poverty and inequality, the prevalence of poverty is 30.53%, of subjective poverty, 23.65% and the Gini index is 0.41%.<sup>8</sup>

In the area of Health, Palmeira das Missões has ten FHS units. The research was carried out in three: Centro Social Urbano (CSU), Mutirão and Fundação Hospitalar Palmeira das Missões FUNHPAM, chosen because they are the areas recognized by health service managers with several risk factors and social vulnerability.

Representatives of families over 18 years of age who were at home at the time of the interview and lived in the territories assigned to three FHS units, in the Municipality of Palmeira das Missões/RS, participated. The total number of families in vulnerable

situations was 1677, with 1155 from the FHS CSU and Mutirão units and the others from the FHS FUNHPAM. The sample calculation totaled 313 families in the three territories, with an average of 105 per FHS unit.

Inclusion criteria were: being a user of FHS services; being at home at the time of data collection; being aged  $\geq 18$  years on the date of the interview; and living in the neighborhood for at least six months. And as an exclusion criterion: user without cognitive health conditions to answer the research instruments. No participants were excluded from this research.

For the selection, a list provided by the heads of the FHS units was used, with a simple draw: one family for every five. The first family was taken, four were skipped, the next family was taken and four were skipped, until the end of the document. The choice of families was random. Three visits were made to each drawn family, in an attempt to find them at home.

However, during the data collection period, the COVID-19 pandemic and quarantine began, which made it impossible to continue the research. Thus, 70 families from the FHS FUNHPAM, 76 from the FHS CSU and 28 from the FHS Mutirão were interviewed, totaling 174 representatives interviewed.

To measure family vulnerability indicators, the instrument of the São José de Rio Preto Family Vulnerability Indicators System – SIVF was used, which is organized into a table composed of Dimensions (Reception Safety, Development and Autonomy, Community and Social Family Living and Income), which consist of components that are branched into individual and composite indicators, according to the partial methodology of cascading indicators.<sup>1</sup>

In the original proposal of the instrument there are four dimensions and, in this study, an excerpt was made, in which the dimensions of development and autonomy, family, community and social life and income were analyzed. The development and autonomy dimension consists of 14 indicators: gender of the head of the family, older person over 60 living alone, type of disease, physical disability, mental disability, illiteracy, education, main activity, alcohol dependence/alcoholism, dependence on illicit drugs, pregnant child (10 to 14 years) and pregnant adolescent (15 to 19 years), vacancy and change of residence in the last 12 months.

The dimension of community and social family life is composed of 10 indicators: family and community life, someone in the family who has been imprisoned in the last 12 months, someone in the family who is complying with socio-educational measures, people in the family who live on the street, people in the family who live in shelter, family member dependent on drugs, family member with a disability or mental illness, unemployment of the head of the family. And the income dimension includes: *per capita* income below R\$170.00, low *per capita* income and education, low *per capita* income and disability, low and underage *per capita* income, *per capita* income of older people, income from people aged 10 to 15 who work and expectation of future income. The indicators were organized in the instrument in the form of questions, with yes and no answers.

The interviewers underwent training, and performed a pilot test before starting the data collection, which was carried out by the researchers accompanied by the Community Health Agents (CHA), in home visits (HVs), from January to March 2020. Afterwards, the data were entered into a database in the Excel software, with analysis using the Statistical Package for the Social Sciences (SPSS) version 26.0, generating simple descriptive statistics (mean, standard deviation and percentage). For comparison between groups, the chi-square test was applied. Statistically significant differences were considered when  $p < 0.05$ .

The study followed the ethical recommendations and was approved on September 12, 2019 by the Research Ethics Committee of the Federal University of Santa Maria, under Opinion number 3.571.048 and Certificate of Presentation for Ethical Appreciation number 19828119.4.0000.5346.

## Results

In this research, 174 family representatives were interviewed, with a mean age of  $49.83 \pm 17.56$  years, who, for the most part, declared themselves white and brown, with 1 to 4 years of study, and with a minimum *per capita* income of R\$100.00 and a maximum of R\$1,200.00.

Table 1 describes social vulnerability through indicators of the development and autonomy dimension. The highest frequencies observed were the presence of 55

(30.5%) households with people over 16 years of age and less than 4 years of study; 45 (25.9%) households with people who had two or more chronic diseases; and 38 (21.8%) households in which the guardian was unemployed.

In the sample, there were no households with a female family head with children under 15 years old, without a spouse and illiterate, and households with pregnant children/adolescents (10 to 14 years old).

**Table 1** - Indicators of the development and autonomy of families in territories assigned in the Family Health Strategies, Palmeira das Missões, Rio Grande do Sul, Brazil, 2022. (n=174)

Development and autonomy indicator	Yes n (%)	No n (%)
Household in which the head is a woman with children under 15, without a spouse and illiterate	-	174 (100)
Household with 1 person over 60 living alone	16 (9.2)	158 (90.8)
Household live people with 2 or more chronic diseases	45 (25.9)	129 (74.1)
household with someone with a physical disability (motor/neurological disorders)	19 (10.9)	155 (89.1)
Household with some person with mentally/intellectually incapacity	8 (4.6)	166 (95.4)
Household with people over 16 and less than 4 years of study	53 (30.5)	121 (69.5)
Household with people between 4 and 15 years of age who are not studying	5 (2.9)	169 (97.1)
Household in which the person in charge is working informally or has temporary work	29 (16.7)	145 (83.3)
Household in which the person responsible is unemployed	38 (21.8)	136 (78.2)
Household with alcohol/alcoholism dependents	10 (5.7)	164 (94.3)
Household with illicit drug addicts	9 (5.2)	165 (94.8)
Household with children/adolescents (10 to 14 years) pregnant:	-	174 (100)
Home with pregnant adolescent (15 to 19 years)	2 (1.1)	172 (98.9)

Regarding family, community and social life and income, the most frequent indicators were: households with divorced/separated people or widows, 52 (30.1%) families; and 15 (8.7%) families with *per capita* income below R\$178.00. Of these families, in seven (46.7%) the person responsible had less than 4 years of schooling.

**Table 2** - Indicators of the dimension of family, community and social coexistence and income in territories included in the Family Health Strategies, Palmeira das Missões, Rio Grande do Sul, Brazil, 2022. (n=174)

Indicator Family, community and social interaction related to income	(continua)	
	Yes n (%)	No n (%)

Household where there are divorced/separated persons or widows	52 (30.1)	121 (69.9)
Household in which there are people who are imprisoned in the last 12 months	-	174 (100)
Household in which there are people who are complying with socio-educational measures (minor offenders)	-	174 (100)
Household that has people living on the street	-	174 (100)
Household that has people living in shelter	-	174 (100)
Family with per capita income below R\$178.00*	15 (8.7)	158 (91.3)
Household with per capita income less than R\$178.00 and the guardian with less than 4 years of schooling*	7 (46.7)	8 (53.3)
Household with disabled people with per capita income below R\$178.00*	3 (20)	12 (80)
Household in which the family head is under 18 years old and per capita income less than R\$178.00	-	15 (100)
Household with older people (60 or more) with per capita income below R\$178.00*	1 (6.7)	14 (93.3)
Household with income of people from 10 to 15 years of age who work (young apprentice)	1 (0.6)	173 (99.4)

\* The per capita income of R\$178.00 was stipulated for the study.

Table 3 shows the comparison between *per capita* income and the dimension of development and autonomy. The results indicate that families with *per capita* income > R\$500.00 had people over 60 living alone, when compared to families with lower income ( $p=0.001$ ). Households with lower income had higher percentages of people between 4 and 15 years of age who did not study ( $p= 0.040$ ), and whose guardian worked informally or had temporary work ( $p= 0.006$ ).

**Table 3** - Comparison of Per Capita Income and the dimension of development and autonomy, Palmeira das Missões, Rio Grande do Sul, Brazil, 2022. (n=174)

Variable		(to be continued)			p-value
		<R\$178.00 per capita n(%)	R\$178.00 to R\$500.00 per capita n(%)	>R\$500 per capita n(%)	
Household in which the head is a woman with children under 15, without a spouse and illiterate	Yes	-	-	-	-
	No	16 (9.2)	64 (36.8)	94 (54)	
Household with 1 person over 60 living alone	Yes	-	-	16 (100)	0.001
	No	16 (10.1)	64 (40.5)	78 (49.4)	
Household live people with 2 or more chronic diseases	Yes	7 (15.6)	12 (26.7)	26 (57.8)	0.105
	No	9 (7)	52 (40.3)	68 (52.7)	
Household with someone with a physical disability (motor/neurological disorders)	Yes	3 (15.8)	10 (52.6)	6 (31.6)	0.108
	No	13 (8.4)	54 (34.8)	88 (56.8)	
Household with someone with	Yes	1 (12.5)	4 (50)	3 (37.5)	0.631



mentally/intellectually disorder	No	15 (9)	60 (36.1)	91 (54.8)	
Household with people over 16 and less than 4 years of study	Yes	6 (11.3)	14 (26.4)	33 (62.3)	0.169
	No	10 (8.3)	50 (41.3)	61 (50.4)	
Household with people between 4 and 15 years of age who are not studying	Yes	2 (40)	2 (40)	1 (20)	0.040
	No	14 (8.3)	62 (36.7)	93 (55)	
Household in which the person in charge is working informally or has temporary work	Yes	7 (24.1)	11 (37.9)	11 (37.9)	0.006
	No	9 (6.2)	53 (36.6)	83 (57.2)	
Household in which the person responsible is unemployed	Yes	7 (18.4)	12 (31.6)	19 (50)	0.082
	No	9(6.6)	52(38.2)	75(55.1)	
Household with alcohol/alcoholism dependents*	Yes	-	5 (50)	5 (50)	0.470
	No	16 (9.8)	59 (36)	89 (54.3)	
Household with illicit drug addicts	Yes	1 (11.1)	3 (33.3)	5 (55.6)	0.964
	No	15 (9.1)	61 (37)	89 (53.9)	
Household with children/ adolescents (10 to 14 years) pregnant	Yes	-	-	-	-
	No	16 (9.2)	64 (36.8)	94 (54)	
Household with pregnant adolescent (15 to 19 years)	Yes	-	-	2 (100)	0.423
	No	16 (9.3)	64 (37.2)	92 (53.5)	

Table 4, in turn, brings the comparison between per capita income and the dimension of family, community, social life and income. A statistically significant difference was observed in households with working people aged 10 to 15 years (young apprentice) who belonged to families with per capita income less than R\$178.00 (p=0.007).

**Table 4** - Comparison of per capita income with the dimension of family, community and social life and income Palmeira das Missões, Rio Grande do Sul, Brazil, 2022. (n=174)

		(to be continued)			
Variable		<R\$178.00 per capita n(%)	R\$178.00 to R\$500.00 per capita n(%)	>R\$500 per capita n(%)	p- value
Household where there are divorced/separated persons or widows	Yes	4 (7.7)	14 (26.9)	34 (65.4)	0.129
	No	12 (9.9)	50 (41.3)	59 (48.8)	
Household in which there are people who are imprisoned in the last 12 months	Yes	-	-	-	-
	No	16 (9.2)	64 (36.8)	94 (54)	
Household in which there are people who are complying with socio-educational measures (minor offenders)	Yes	-	-	-	-
	No	16 (9.2)	64 (36.8)	94 (54)	
Household that has people living on the street	Yes	-	-	-	-
	No	16 (9.2)	64(36.8)	94 (54)	
Household that has people living in shelter	Yes	-	-	-	-
	No	16 (9.2)	64 (36.8)	94 (54)	
Family with per capita income below R\$178.00*	Yes	15 (100)	-	-	<b>0.000</b>
	No	1 (0.6)	63 (39.9)	94 (59.5)	
Household with per capita income less	Yes	7 (100)	-	-	-

than R\$178.00 and the guardian with less than 4 years of schooling*	No	8 (100)	-	-	
Household with disabled people with per capita income below R\$178.00*	Yes	3 (100)	-	-	-
	No	12 (100)	-	-	-
Household in which the head is under 18 years old and per capita income less than R\$178.00	Yes	-	-	-	-
	No	15 (100)	-	-	-
Household with older people (60 or more) with per capita income below R\$178.00*	Yes	1 (100)	-	-	-
	No	14 (100)	-	-	-
Household with income of people from 10 to 15 years of age who work (See Young apprentice)	Yes	1 (100)	-	-	<b>0.007</b>
	No	15 (8.7)	64 (37)	94 (54.3)	

## Discussion

In the households where the research was applied, there was a prevalence of people over 16 years of age and less than 4 years of study. Low education is an aspect that can make the individual vulnerable, especially in youth, because, even among the young population, the number of those who do not attend school and/or do not have basic education, or at least complete elementary education, is high. In Brazil, the rate of school attendance increased from 2002 to 2014, and illiteracy decreased, indicating that schooling increased in this period.<sup>9</sup>

The development of society requires economic and political mechanisms that guarantee access to essential goods and services, such as education. Ensuring access to education allows young people and adults to enjoy and contribute significantly to the culture, technology and scientific productions developed for society.<sup>10</sup> However, what is observed in the present study is that one third of young people were not in school, and one of the reasons may be the need to work to contribute to household expenses.

In approximately one quarter of the households surveyed, there was a prevalence of people with two or more chronic diseases. A study carried out with women points out chronic diseases and age as factors that interfere with their quality of life, being a reason to seek consultation in health services.<sup>11</sup> Chronic demands may be associated with characteristics of the physical and social environment, and, consequently, with a higher index of social vulnerability, regardless of individual

characteristics. Brazilian studies have identified a higher prevalence of systemic arterial hypertension and diabetes *mellitus* among the most vulnerable families.

In households with a larger number of residents, an adult is more likely to have hypertension or diabetes.<sup>4-5</sup> Illness may be related to different factors involved in the life of this population, including age, culture, eating habits, difficulty in obtaining healthy foods, understanding the disease itself, and following the guidelines received by health professionals.

Cardiovascular diseases are the most prevalent chronic diseases in populations and hypertension is one of the leading causes of death. In this regard, research shows the need to carefully consider the prevention of hypertension among adults aged 40 and over, married, separated, divorced or widowed women, and men who have never been married.<sup>12</sup>

Unemployment is an indicator of vulnerability (evidenced in approximately 22% of the households in the study) and directly interferes with the choices and autonomy of individuals. Unemployment can cause the feeling of incapacity and disorganization of the individuals' own identity, generating consequences for their mental health and social relations, which indicates that the psychic factor is the most compromised.<sup>13</sup> In view of this, the need to confront unemployment is highlighted, through collective and intersectoral actions that recognize work as a human right, with articulation between public policies and services to thus provide autonomy to the population and reduce vulnerability.<sup>14</sup>

In half of the families who reported having a *per capita* income of less than R\$178.00, the guardian had less than 4 years of schooling. Access to decent education reflects on people's quality of life, and income is an element that defines social *status* and also has a direct influence on the autonomy of individuals. Research carried out with the female population reinforces the need for policies that reduce social vulnerability, and the expansion of access to education and income.<sup>11</sup> Education has repercussions on the improvement of socioeconomic conditions, as professional training and qualification provide an increase in income. Ensuring quality education can serve as a mediating vehicle for human development.<sup>15</sup>

It is evidenced in this research that one third of the households had divorced/separated people or widows. Those who live alone may have greater fragility due to the absence of family ties, which can also compromise health. Widowers, for example, when they are older, and do not have a support network, have greater functional impairment.<sup>16</sup>

In this investigation, income was higher in households with a person over 60 living alone. In Mar del Plata, Argentina, a survey<sup>17</sup> was carried out with the older population, in which sociodemographic characteristics were evaluated; among them, the high percentage of widowers living alone was observed.<sup>17-18</sup> Retirement, pensions and government benefits are the main sources of income for older people.<sup>19</sup>

Households with lower income had higher percentages of people between 4 and 15 years of age who did not study. In a study that analyses the characteristics of young people and adults who did not attend school and did not have elementary school or complete basic education, it was observed that there was significant inequality in relation to education in young people of lower income, living in the countryside, black, and without occupation, which are characteristics associated with social vulnerability.<sup>10</sup> There is evidence that, in many families, the encouragement of those responsible for children to study and attend school is associated with the gain of benefits from government programs, since it is a condition for being included in the program.<sup>15</sup>

In this study, the prevalence of households in which the guardian worked informally or temporarily was also observed. The working condition of the individuals can cause several damages to their health and psychological, decent work is a right of the population.<sup>6</sup> Research points out that informal workers are more vulnerable, as they are at greater risk, such as from occupational accidents, and often not then aware of their rights and do not have training or access to personal protective equipment (PPE).<sup>19</sup>

Statistical significance was observed in households with people aged 10 to 15 years who worked, and who belonged to families with *per capita* income below R\$178.00. The Young Apprentice Program (YAP) is a social inclusion policy aimed at low-income young people, that is, young people in situations of social vulnerability. This program has the objective of combating child labor, and ensuring the right to work with better conditions, considering the specificities and the youth condition.<sup>20</sup>

The YAP contributes positively to the lives of young adolescents, developing them professionally, generating employability, and allowing them to absorb theoretical, technical and operational knowledge aimed at the production of goods and services.<sup>21</sup> However, young people do not always have access to the program, which may have occurred in this research, and the objectives of the program are not achieved in a way that promotes the development of young people.

A study in South Korea shows that the economic situation and type of school have an indirect effect on the well-being of adolescents, and the factors that significantly affect the well-being of adolescents are social support, sense of community, economic situation and type of school. By strengthening education strategies, these adolescents can be encouraged to become healthy adults, who can contribute to changes in their lives and in their communities, developing them in cultural, social and job generation aspects, which contributes to mitigate social vulnerabilities.<sup>22</sup>

As limitations of the research, it should be noted that the results cannot be generalized, due to the characteristics of the population involved, and it is a non-probabilistic sample, since, in the midst of data collection, the COVID-19 pandemic began, which made it impossible to continue it. However, it provides data to support intersectoral prevention and promotion actions to address social vulnerabilities.

It is expected to have contributed to reinforce the need for an expanded look at health, based on indicators of social vulnerabilities, for nursing and family health teams. It also offers managers knowledge about the vulnerabilities of territories, helping them to propose strategies that can develop their populations.

## **Conclusion**

The study analyzed the indicators of social vulnerabilities according to the dimensions of development and autonomy, family, community and social life, and income. In the development and autonomy dimension, there was a higher prevalence of households with people over 16 years of age and less than 4 years of study, people with two or more chronic diseases and households in which the guardian was unemployed. In the family, community and social life and income dimension, households with

divorced/separated people or widows predominated, and families with per capita income below R\$178.00. In these, the guardian had less than 4 years of schooling.

There was also a proposal to compare the per capita income indicator with the dimensions of development and autonomy, and family, community and social life and income. In the development and autonomy dimension, families with per capita income > R\$500.00 had people over 60 living alone, when compared to families with lower income. Households with lower income had higher percentages of people between 4 and 15 years of age who were not studying, and whose guardians worked informally or temporarily. And, compared to the dimension of family, community and social life and income, households with people from 10 to 15 years of age who worked (young apprentice) belonged to families with per capita income below R\$178.00.

The adapted instrument used can be replicated in other studies, as the indicators of vulnerability, when identified and analyzed, show prevalence of social vulnerability of families. The implementation of public policies such as Zero Hunger, school reform, the Child and Adolescent Statute, the Elderly Statute, Primary Health Care and the FHS contribute to reducing social vulnerabilities.

## References

1. Martins RA, Oishi J, Manzato AJ, Ferrari F, Baida LC, Leme ET. O Sistema de Indicadores de Vulnerabilidade Familiar - SIVF do município de São José do Rio Preto, SP. *Rev Bras Estud Reg Urbanos* [Internet]. 2015 [acesso em 2021 ago 06];3(2). Disponível em: <https://revistaaber.org.br/rberu/article/view/34>
2. Guerra FC, Zucherato B, Gonçalves RD. Indicadores sociais a partir da cartografia de vulnerabilidade: exemplos de Bragança Paulista e Campos do Jordão (São Paulo - Brasil). *InterEspaço*. 2020;5(19):202015. doi: 10.18764/2446-6549.e202015
3. Nonato LOF, Peres AM, Khalaf DK, Souza MAR, Figueiredo KC, Lapierre J. Primary Healthcare management strategies in socially vulnerable territories exposed to violence. *Rev Esc Enferm USP*. 2020;54:e03608. doi: 10.1590/S1980-220X2018054903608
4. Gomes CS, Bernal RTI, Moreira AD, Teixeira RA, Cardoso LSM, Ribeiro ALP, et al. Estimates of hypertension and diabetes mellitus prevalence according to Health Vulnerability Index in Belo Horizonte, MG, Brazil. *Rev Bras Epidemiol*. 2021;24(Suppl 1):e210015. doi: 10.1590/1980-549720210015.supl.1

5. Calistro MO, Teixeira Y, Lacerda IRAS, Sousa SM, Agostinho Neto JA, Duavy SMP, et al. Territorialization using georeferencing and stratification of the social vulnerability of families in Primary Care. *Ciênc Saúde Colet*. 2021;26(6):2141-8. doi: 10.1590/1413-81232021266.39402020
6. Lisbôa LC, Girianelli VR, Vasconcellos LCF. Características e demandas da população em situação de vulnerabilidade social acompanhadas em Belford Roxo (RJ). *Saúde Debate*. 2020;438-50. doi: 10.1590/0103-1104202012512
7. Haggerty J, Chin MH, Katz A, Young K, Foley J, Groulx A, et al. Proactive strategies to address health equity and disparities: recommendations from a bi-national symposium. *J Am Board Fam Med*. 2018 May-Jun;31(3):479-83. doi: 10.3122/jabfm.2018.03.170299
8. Instituto Brasileiro de Geografia e Estatística (IBGE). Palmeira das Missões - Panorama [Internet]. Brasília (DF): IBGE; 2017 [acesso em 2022 out 03]. Disponível em: <https://cidades.ibge.gov.br/brasil/rs/palmeira-das-missoes/panorama>
9. Castro JA. Bem-estar social brasileiro no século XXI: da inclusão ao retorno da exclusão social. *Educ Soc* 2019;40:e0222141. doi: 10.1590/ES0101-73302019222141
10. Santos R. Jovens e adultos com baixa escolaridade, oferta de EJA e desigualdades nas chances de conclusão do ensino fundamental e do médio. *Cad Estud Pesq Políticas Educ*. 2019;143-74. doi: 10.24109/9788578630669.ceppe.v1a5
11. Cazella LG, Almeida LY, Oliveira JL, Zanetti ACG, Souza J. Qualidade de vida de mulheres e as características sociodemográficas associadas. *Enferm Foco*. 2019 [acesso em 2020 out 03];34-9. doi: 10.21675/2357-707X.2019.v10.n3.2448
12. Segawa HK, Uematsu H, Dorji N, Wangdi U, Dorjee C, Yangchen P, et al. Gender with marital status, cultural differences, and vulnerability to hypertension: findings from the national survey for noncommunicable disease risk factors and mental health using WHO STEPS in Bhutan. *PLoS One*. 2021;16(8):e0256811. doi: 10.1371/journal.pone.0256811
13. Schmidt MLG, Januário CARM, Rotoli LUM. Sofrimento psíquico e social na situação de desemprego. *Cad Psicol Soc Trab* [Internet]. 2018 [acesso em 2022 out 03];21(1):73-85. Disponível em: <https://www.revistas.usp.br/cpst/article/view/151066>
14. Pinho RJ, Pereira APFB, Lussi IAO. Homeless, the world of work and the specialized reference centers for population in street situation (centro pop): perspectives on actions for productive inclusion. *Cad Bras Ter Ocup*. 2019;27(3):480-95. doi:10.4322/2526-8910.ctoAO1842
15. Ribeiro KG, Andrade LOM, Aguiar JB, Moreira AEMM, Frota AC. Educação e saúde em uma região em situação de vulnerabilidade social: avanços e desafios para as políticas públicas. *Interface*. 2018;22(1):1387-98. doi: 10.1590/1807-57622017.0419
16. Noronha K, Andrade LMB, Camargos MCS, Machado CJ. Limitação funcional e cuidado dos idosos não institucionalizados no Brasil. *Cad Saúde Colet*. 2021;29(N Esp):59-72. doi: 10.1590/1414-462X202199010315
17. Xifra MJ. Perfil sociodemográfico y apoyo social percibido de personas mayores en condiciones de vulnerabilidade. *Rev Ocup Hum*. 2021;10-24. doi: 10.25214/25907816.996

18. Confortin SC, Schneider IJC, Antes DL, Cembranel F, Ono LM, Marques LP, et al. Life and health conditions among elderly: results of the EpiFloripa Idoso cohort study. *Epidemiol Serv Saúde*. 2017;305-17. doi: 10.5123/S1679-49742017000200008
19. Souza JO, Almeida MMC. Work accidents with exposure to biological material in physiotherapists according to formal and informal employment bonds. *Rev Pesq Fisioter*. 2020;10(4):683-91. doi: 10.17267/2238-2704rpf.v10i4.3272
20. Belmiro CB, Lucena CA. A relação entre juventude, trabalho e educação profissional no século XXI: uma análise sobre o Programa Jovem Aprendiz sob a perspectiva de classe social. *Rev HISTEDBR On-line*. 2020;20:e020046. doi: 10.20396/rho.v20i0.8653401
21. Villar MCO, Mourão L. Evaluation of the Young Apprentice Program through a quasi-experimental study. *Trends Psychol*;26(4):1999-2014. doi: 10.9788/TP2018.4-11Pt
22. Shin J, Lee H, Choi EK, Nam C, Chae SM, Park O. Social determinants of health and well-being of adolescents in multicultural families in South Korea: social-cultural and community influence. *Front Public Health*. 2021 Mar 24;9:641140. doi: 10.3389/fpubh.2021.641140.

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