

# VULNERABILITY IN CHILD DEVELOPMENT: INFLUENCE OF SOCIAL INEQUITIES

*Vulnerabilidade no desenvolvimento da criança: influência das iniquidades sociais*

*Vulnerabilidad en el desarrollo del niño: la influencia de las iniquidades sociales*

Original Article

## ABSTRACT

**Objective:** To know the comprehension of Family Health Strategy nurses about the vulnerability in child development. **Methods:** Exploratory qualitative research carried out with thirty-nine (39) nurses, which worked at 39 Health Units running the Family Health Strategy in Curitiba, Paraná State, Brazil. The study took place from September 2011 to December 2012. For data collection, semi-structured interview was used, and dialectical hermeneutics as a methodological framework, from whose analysis emerged the empirical categories: precariousness in the families' social insertion, inequities in land occupation, difficulties of access to social protection and promotion, and their contradictions. **Results:** Family Health Strategy nurses understand as elements of vulnerability in child development the social inequities: low parental education, unemployment, low income; absence of basic sanitation, precarious situation of the building structure, and lack of access to professionalization, social programs, and vacancies in the kindergartens. **Conclusion:** The nurse understands that the vulnerability in child development is related to elements of socioeconomic nature, and their comprehension of vulnerability exceeds the biological and individual components regarding child development.

**Descriptors:** Health Vulnerability; Child Development; Child Health; Nursing.

## RESUMO

**Objetivo:** Conhecer a compreensão do enfermeiro da Estratégia Saúde da Família sobre a vulnerabilidade no desenvolvimento da criança. **Métodos:** Pesquisa exploratória, qualitativa, realizada com 39 enfermeiros que atuavam em Unidades de Saúde com Estratégia Saúde da Família, em Curitiba, Paraná, Brasil. O estudo ocorreu no período de setembro de 2011 a dezembro de 2012. Para coleta de dados, utilizou-se a entrevista semiestruturada, e como referencial metodológico, a hermenêutica dialética, de cuja análise emergiram as categorias empíricas: precariedades na inserção social das famílias, iniquidades na ocupação do solo, dificuldades de acesso à proteção e promoção social e suas contradições. **Resultados:** O enfermeiro da Estratégia Saúde da Família compreende como elementos de vulnerabilidade no desenvolvimento da criança as iniquidades sociais: baixa escolaridade dos pais, desemprego, baixa renda, ausência de saneamento básico, situação precária da estrutura das construções, e falta de acesso à profissionalização, programas sociais e vagas nas creches. **Conclusão:** O enfermeiro compreende que a vulnerabilidade no desenvolvimento infantil está relacionada a elementos de ordem socioeconômica e sua compreensão extrapola os componentes biológicos e individuais a respeito do desenvolvimento infantil.

**Descritores:** Vulnerabilidade em Saúde; Desenvolvimento Infantil; Saúde da Criança; Enfermagem.

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## RESUMEN

**Objetivo:** Conocer la comprensión del enfermero de la Estrategia de Salud de la Familia sobre la vulnerabilidad en el desarrollo del niño. **Métodos:** Investigación exploratoria y cualitativa realizada con 39 enfermeros que actuaban en Unidades de Salud con Estrategia de Salud de la Familia en Curitiba, Paraná, Brasil. El estudio se dio entre septiembre de 2011 y diciembre de 2012. Se utilizó la entrevista semiestructurada para la recogida de datos y la hermenéutica dialéctica como referencial metodológico de cuya análisis surgieron las siguientes categorías empíricas: las precariedades en la inserción social de las familias, las iniquidades de la ocupación del suelo, las dificultades de acceso a la protección y promoción social y sus contradicciones. **Resultados:** El enfermero de la Estrategia de Salud de la Familia comprende como elementos de vulnerabilidad para el desarrollo del niño las iniquidades sociales: la baja escolaridad de los padres, el desempleo, la baja renta, la ausencia de saneamiento básico, la situación precaria de estructura de las construcciones y la falta de acceso a la profesionalización, los programas sociales y las plazas en las guarderías. **Conclusión:** El enfermero comprende que la vulnerabilidad en el desarrollo infantil está relacionada con los elementos del orden socioeconómico y su comprensión sobrepasa los componentes biológicos e individuales respecto el desarrollo infantil.

**Descriptores:** Vulnerabilidad en Salud; Desarrollo Infantil; Salud del Niño; Enfermería.

## INTRODUCTION

Children who live in developing countries and are subjected to adverse socioeconomic conditions are more vulnerable to various diseases because they are created in risk pregnancies<sup>(1)</sup>. Such vulnerabilities determine the impaired growth and development of these children. Given that, there is evidence on the influence of biological, psychosocial and environmental elements of individuals and their families on their development<sup>(2)</sup>.

The precarious economic conditions are situations of vulnerability that, under certain circumstances, are not isolated, as they permeate the relationship of the child's parents, contributing to increasing conflicts between them, with direct consequences on the relationship with the child - a phenomenon that is called affective misery<sup>(3,4)</sup>.

A situation with inadequate and insufficient stimuli makes up a space of vulnerability, which can be minimized by a supportive environment, defined as a set of ongoing nurturing relationships and affectionate interactions that are necessary to ensure the child's proper brain development<sup>(3-5)</sup>. The absence of such a supportive environment can impair maturation of brain circuits and metabolic regulation

systems, with interruption of organs of development and increased long-term occurrence probability of learning and behavior disorders as well as the impairment of physical and mental health of the child<sup>(6)</sup>.

To identify a vulnerable child, it is necessary to check the interrelationship of the social environment condition in which the child lives to its organic condition<sup>(2)</sup>. Misery - arising from social inequity - is considered a situation that significantly increases the child's vulnerability, which may lead to malnutrition, social deprivation and losses in educational activities as well as a direct impact on child well-being, constituting a barrier to the child's development<sup>(4)</sup>.

In the present study, human development can be defined as a process of change and continuity in psychobiological characteristics of the child for the acquisition of new skills that contribute to their survival and autonomy throughout life<sup>(6)</sup>. This process occurs as a "joint function of the characteristics of the environment and the developing person"<sup>(6: 145)</sup>.

From this perspective, the vulnerability in child development can be understood as a set of conditions that makes the child susceptible to suffer losses or delays in development due to the influence of individual, social and programmatic elements, which are called adverse situations<sup>(7)</sup>.

This research appears to be relevant to the reorientation of professional practice of health teams, as the understanding of vulnerability allows professionals to recognize the health needs of subjects or communities under their care, making possible interventions more adequate to their realities<sup>(8)</sup>. Similarly, its application in child health care enables the reorientation of the care model to overcome the biological and reductionist concept about child development<sup>(7,10)</sup>.

According to the conceptual model of vulnerability in child development, social vulnerability is characterized by social inclusion of the family and its access to social protection and promotion policies<sup>(7,9)</sup>. Such situations are described by family insertion in the social production and, consequently, its reproduction. This is reflected in the perspective of employment insertion, income security, access to education and housing conditions, as they are processes that enhance vulnerability<sup>(10-12)</sup>. Additionally, there should be the access of this population to health services, education, social welfare and guarantee of human rights and citizenship. It is considered that such conditions have a direct impact on promoting child development as well as the autonomy and decision-making ability of families<sup>(10,11)</sup>.

Thus, this study aims to know the comprehension of Family Health Strategy (*Estratégia Saúde da Família - ESF*) nurses about the vulnerability in child development.

## METHODS

This is a quantitative exploratory research conducted in 39 Municipal Health Centers (*Unidades Municipais de Saúde – UMS*) with the Family Health Strategy (*Estratégia Saúde da Família – ESF*) located in five health districts of the city of Curitiba, Paraná, Brazil, which belonged to territories that presented, concomitantly, results for Social Inclusion Indicators (*Indicadores de Inserção Social – IIS*) and Indicators of Housing Quality (*Indicadores de Qualidade do Domicílio – IQD*) equal to or below the mean for the nine districts that make up the municipal territory<sup>(10)</sup>. The health districts chosen according to the previously established criteria were: Cajuru, Boqueirão, Bairro Novo, Pinheirinho and CIC.

The study included 39 nurses – 37 (n=37) females and 2 (n=2) males – who made up the multidisciplinary teams of the aforementioned UMS. They were nurses who have worked for more than two complete years in the FHS in the area of greater social and epidemiological risk of the center. Therefore, we interviewed one nurse in each UMS; they were intentionally chosen. Those who agreed to participate signed a free informed consent form.

For the recruitment of participants, we requested the manager of the UMS to indicate, according to the local plan, the area covered by the center that had the greatest social and epidemiological risk as well as the nurse responsible for that area. These areas were chosen because they allow greater closeness to social and programmatic vulnerability<sup>(7)</sup>.

Health authorities of 43 UMS were contacted prior to the research; however, only 39 centers accepted to participate. As to the four UMS that did not accept to participate: in two UMS, nurses themselves refused to participate; in one UMS there were no nurses working in the area of greatest social and epidemiological risk; and in one UMS, all nurses had less than two years of experience in the ESF.

Data were collected from February to March 2012 through semi-structured individual interviews. The interviews addressed situations and elements that impaired child development from nurses' perspective, situations of impaired child development witnessed by the nurse, and actions to promote child development performed by nurses. The speeches of the participants were analyzed according to the dialectical hermeneutics<sup>(12)</sup>.

Dialectical hermeneutics can be defined as a form of critical and emancipatory interpretation of human phenomena through the understanding and meaning that come from the past. Such theory assumes that there is no consensus or endpoint to the process of knowledge, as it understands that the construction of science occurs through

a dynamic relationship between subjects' reason and the objectivity of their praxis<sup>(12)</sup>.

In order to implement the dialectical hermeneutics, this study followed the following methodological steps: *data sorting* - through transcription of the recorded interviews, re-reading of material, and organization of reports in a particular order to initiate classification<sup>(12)</sup>; *data classification* - through exhaustive and repeated reading of the texts, which allowed the understanding of key ideas and the construction of empirical categories<sup>(12)</sup> from the analytical categories established in the analytical matrix of vulnerability of children to adverse situations to their development<sup>(7)</sup>.

Finally, there was the final analysis, in which it was carried out a process of inflection of nurses' speeches as a starting and ending point. From this inflection on, there was a constant movement from the empirical to the theoretical and vice versa, a process between the concrete and the abstract, between the particular and the general<sup>(12)</sup>. The end result of the analysis was the concreteness of the praxis of nurses as epistemic subjects, expressed in empirical categories in child vulnerability dimension. This study presents empirical categories that belong to the social dimension of vulnerability: precariousness in the social inclusion of the family, inequities in land occupation, difficulties in the access to social protection and promotion and their contradictions.

The empirical categories are summarized in Figures 1, 2 and 3, allowing the reader's understanding of the elements present in the experience of nurses that influence the child's development and of the conditions in the structural dimension that demonstrate the contradiction or denial of the elements experienced by the subjects<sup>(12)</sup>.

Data were collected by a male student participating in the study who was methodologically qualified to conduct the interviews during a specific course. He was not personally or professionally related to the research participants.

In the registration units, respondents were presented and identified with the abbreviation (N) and sequentially numbered in order to ensure anonymity of participants. This research has met the national ethics standards for research involving human beings and was approved by the Ethics Committee of the Health Sciences Center of the Federal University of Paraná under registration No. 1170.095.11.6.

## RESULTS AND DISCUSSION

This material was taken from a research that addressed the individual, social and programmatic dimensions of child vulnerability<sup>(7)</sup>; however, this manuscript particularly explored the social dimension of vulnerability in child

development. This section presents the description and discussion of empirical categories that emerged from the *final analysis* of the dialectical hermeneutics method.

### Precariousness in the social inclusion of the family

In this first category, participants convergently highlighted the low parental education as one of the elements of the family's social inclusion:

*"The thing about the education level is that she does not understand what you are saying, no matter you draw a little sun, a little moon, a little ball [...]." (N18)*

*"Parents come from cultures that have no education [...]." (N3)*

The unemployment situation was considered codependent on low education level. Respondents understood it as a significant aspect of social inclusion:

*"Unemployment is very high, [...] people who live in this area by the side of the river are excluded." (N23)*

*"Then some say: 'Oh, doctor, I am unemployed, my husband is unemployed' [...]." (N26)*

In the same perspective of the unemployment situation, the low income was reported by nurses as another aspect of the family's social inclusion:

*"Because they are real low-income families." (N9)*

*"The mother has nothing to eat and barely shares the milk she gets from the government among five or ten children." (N30)*

Participants refer to low education as a factor that generates difficulties in understanding prescriptions that may compromise the care of children and the stimulation to child development<sup>(13)</sup>. These data are consistent with a study that showed the existence of an association between the mother's education and her ability to stimulate the child's development<sup>(4)</sup>.

The dialectical inflection of participants' speeches allowed to relate the low education of caregivers to the situation of the population with whom this study was developed, composed largely of migrants from rural areas of the state of Paraná and other regions of the country. The majority went to the state capital in search of jobs and better living conditions given the current economic model in Paraná, which is based on large estates and export of agricultural commodities<sup>(14)</sup>. Therefore, there are notable differences between population groups according to the place of residence, which are reflected in education, since the inhabitants of rural areas study less than those of urban areas<sup>(15,16)</sup>.

Because of the structural determinants pointed out, the dialectical inflection showed that the results in this category relate to the reality of many Brazilian families that are segregated from their citizenship<sup>(17)</sup>. The average low education of the population and the permanent inequalities in access to education have been a contradiction of educational policy in many countries<sup>(15)</sup>, igniting the debate on the urgency and universalization of basic education in terms of quantitative and qualitative aspects, as well as the elimination of illiteracy through public policies such as youth and adult education<sup>(16)</sup>.

The dialectical interpretation correlated the situations experienced by nurses in their particular reality to conditions of the general reality, such as job precariousness standing beyond low education. It was possible to understand this situation with an employment generation policy subordinated to a neoliberal strand in the world economy structure, which is directly reflected in the lives of all people<sup>(18)</sup>. This situation was more frequent after the 1990s due to "[...] significant changes in the sectoral composition of employment occurred in urban labor market during the 1990s, in particular, the significant expansion of the service sector and the contraction of the manufacturing sector"<sup>(19)</sup>:  
598).

Unemployment in Brazil is understood as a contradiction of economic policies that favored monetary stability and encouraged the high turnover of the workforce and excessive competition among workers in the fight for scarce job vacancies<sup>(18)</sup>. Therefore, in order to meet its goals of macroeconomic adjustments, the neoliberal State increases unemployment and decreases the share of wage labor in the total number of occupations, reducing wage labor with a formal contract in the total economically active population. Similarly, governments adopt measures that flexibilize and deregulate the labor market to reduce the "Brazil cost", aiming at improving external competitiveness and profits of the big capital<sup>(19)</sup>.

Thus, the particular situations experienced by nurses express the overall situation of misery and poverty that plagues most Brazilians, establishing a high level of social inequality<sup>(17)</sup>. The living conditions at the periphery of major urban centers does not often allow its residents to have access to consumer goods, reflecting the deleterious effects of the current neoliberal policies, such as inflation targeting, high interest rates, flexible exchange rate and primary surplus<sup>(17,19)</sup>.

The dialectical inflection referred to situations of low education, unemployment and low income reported by nurses for social exclusion, which victimizes many Brazilians and constitutes a direct, perverse and irreversible contradiction of the current economic neoliberalism in the Brazilian productive system, especially for aspects



related to employment, labor conditions and relations, consumption patterns, standard of living, and social protection<sup>(19)</sup>. The increase of the Brazilian public debt, associated with unemployment and the difficulty of social mobility, compelled the State to invest in social programs of income transfer focused on the miserable mass of the population<sup>(17,19)</sup>.

Figure 1 summarizes the process of dialectical inflection and indicates that the precariousness in the social inclusion of the family can cause difficulties in caregivers' understanding of the guidelines for health professionals as well as losses in the provision of support material to meet the child's needs and the promotion of development<sup>(9-11)</sup>.

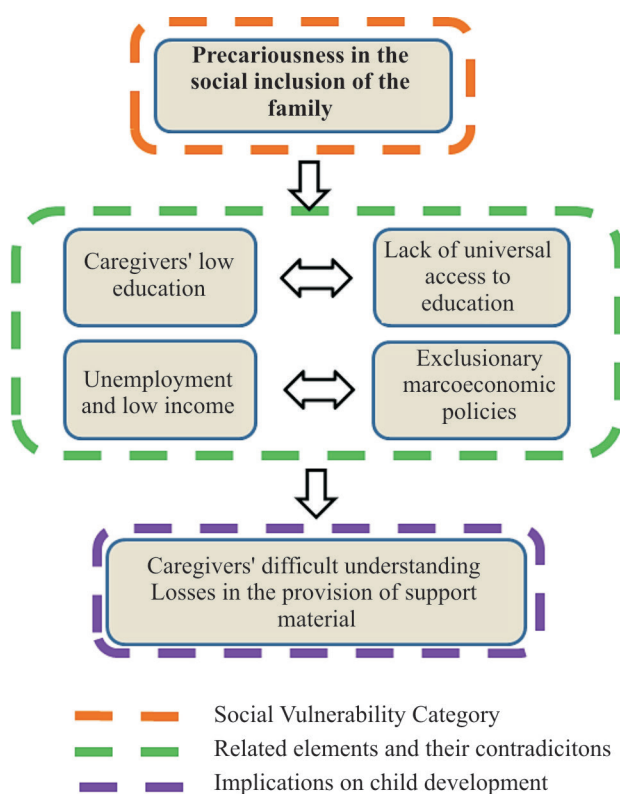


Figure 1 - Precariousness in the social inclusion of the Family, related elements and contradictions seized with their implications on the child's development, according to ESF nurses. Curitiba, PR, 2012.

### Inequities in land use

In this second category, participants report that inequities in land use are characterized by the lack of basic sanitation:

*"Sanitation conditions as well, because it is an invasion area, there is no basic sanitation." (E4)*

*"There are streets without a piping system, there is a lot of open raw sewage, [...] children with positive leptospirosis due to the lack of primary basic sanitation." (N18)*

In other speeches, the nurses point to the precarious situation of the structure of the buildings as an element that harms children's health:

*"[...] Because the house ceiling is not covered." (N19)*

*"The houses [...] are made of cardboard, canvas, and there is a little baby inside there." (N31)*

*"[...] They all live by the river. So they are real taperas [adobe houses]." (N21)*

Nurses describe the lack of sanitation as an element that can influence the child's quality of life. These statements corroborate a study that showed that housing conditions influence the incidence and prevalence of specific diseases, pointing to housing as a socioeconomic factor that has implications for health<sup>(20)</sup>. Among the Social Determinants of Health (SDH), the lack of water supply, sewage and garbage destination can influence health and child development<sup>(11,21)</sup>.

The dialectical inflection related this particular situation of poor housing conditions, reported by nurses, to the general situation of precariousness of unhealthy living conditions in many cities. Survival in urban areas is essentially conditioned on the access to housing, which is an essential right such as health, income and education<sup>(22)</sup>.

These particular situations show the contradiction generated by inequities in the forms of production and appropriation of housing and the urban environment by different social groups, and point to the rapid urbanization of Brazil not simply as a demographic process<sup>(21)</sup>. Poor housing conditions show the contradiction of population urbanization, which becomes a part of a process of privileges for the population inserted in more relevant economic activities<sup>(22,23)</sup>.

The critical inflection showed that poor housing conditions are related to structural and general situations, such as land tenure and poor access to infrastructure and services and consumer goods that provide quality of life for the inhabitants of the land<sup>(22)</sup>. However, it should be considered that the land use and its habitation is the result of a historical process of capitalist production, characterized by private production, which reaches only a portion of society. Such social production is formed by high or upper middle class, which appropriate the territorial areas that have adequate accessibility to the downtown areas of cities and better infrastructure conditions<sup>(23,24)</sup>.

This inequality is largely linked to the rapid urbanization in developing countries like Brazil, which proved far

superior to the most advanced capitalist countries<sup>(23)</sup>. This excessive growth of large cities, driven by capitalist policies, has generated inequities in land use – restricting it to a part of the population – and formed development islands surrounded by irregular occupation areas, composed of slums, ghettos and illegal settlements<sup>(24)</sup>.

Figure 2 summarizes the process of dialectical inflection and demonstrates that the inequities in land use can expose the child to diarrheal and respiratory diseases, causing harms to their health and, consequently, its development<sup>(11,21)</sup>.

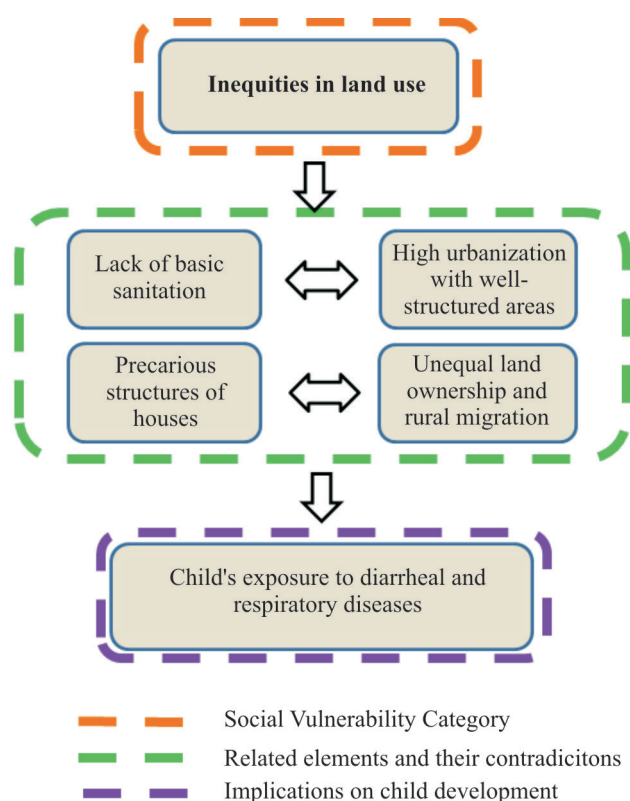


Figure 2 - Inequities in land use, related elements and contradictions seized with their implications on child development, according to ESF nurses. Curitiba, PR, 2012.

### Difficulties in the access to social protection and promotion

In the third and last category, the nurse understands that the difficult access of the child and family to social protection and promotion is an element that can harm the child's care provided by the family. The main difficulties reported are the lack of access to vocational education, social programs and vacancies in day care centers:

*"[...] If there was a place in the secretariat to endorse these families [...], to provide vocational training [...],*

*they could take up a vocational training [...]." (N26)*

*"And the milk program we have to offer [...] it is hard for us [...], there are few tickets per month, we cannot enroll all the children." (N26)*

*"We have problems with vacancies in day care centers [...]." (N36)*

*"There are many things interfering with the child's development: [...] school, which do not have vacancies sometimes." (N39)*

Thus, in this last category, it is considered that social protection can be characterized by the citizens' access to services and benefits certified as rights, as a set of programs and actions aimed at facing different levels of deprivation, risk and vulnerability<sup>(25)</sup>.

The speeches allude to situations in which the family does not have access to vocational training courses and food and nutrition security. The dialectical inflection showed that this situation of lack of access reflects the low public investment in social protection policies; although they have been regulated in Brazil by specific legislation, there are still scarce resources invested in this area. These social programs have been focused on the poor, being often provided by private non-profit organizations and with little social control<sup>(19,25)</sup>.

Although social welfare policies are being developed in many municipalities, they have paradoxically been set aside from the budget established for this sector<sup>(25)</sup>. This lack of priority is probably due to the austerity in public spending, which has been characterized by budget constraints in the allocation of social programs in countries subordinated to macroeconomic adjustments<sup>(19)</sup>.

The participants, in other speeches, describe the lack of access to early childhood education. The dialectical inflection showed that this gap reveals a contradiction in the national reality, which has yet to expand – quantitatively and qualitatively – the vacancies in early childhood education, especially for children under three years of age<sup>(26)</sup>.

The day care center, an institution historically characterized by welfarism and precariousness, has been given a new meaning, being considered an environment for the care, education and development of children<sup>(27)</sup>. In Brazil, as in other developing countries, this value is strongly linked to the population urbanization process and the growing participation of women in the labor market<sup>(28)</sup>.

A study showed that in Brazil in 2007, only 17.1% of children aged 0 to 3 years had access to early childhood education<sup>(28)</sup>. Another research reported that such access has been granted to only 21% of Brazilian children in the target age range for early childhood education<sup>(25)</sup>, which signals a contradiction of the legislation established and government speech, according to which Brazil is an educator homeland. Such a contradiction gets worse when comparing the

inequity in access to early childhood education between children from urban and rural areas, between the white and black or *pardas*, and between those from the poorest and richest families<sup>(28)</sup>.

According to the 2010 Census, Curitiba has about 107,919 children under 5 years of age who have the right of access to early childhood education. However, only 52% (57,870 enrollments) of this universe is enrolled in an institution, whether public – 28% (31,219 enrollments) – or private – 24% (26,651 enrollments)<sup>(29)</sup>. This situation reflects the low investments to expand access to early childhood education, as well as the occupation of the state space by the private sector. Although it declares protecting the child, the State, in a contradictory way, does not guarantee fundamental rights for children due to the macroeconomic adjustments that determine lower investments in social policies<sup>(28)</sup>.

Thus, Figure 3 summarizes the process of dialectical inflection and understands that the difficulties in the access to social protection and promotion can cause a lack of social support to the family regarding child care, as well as the non-guarantee of the child's rights to develop as a citizen and person<sup>(10,30)</sup>.

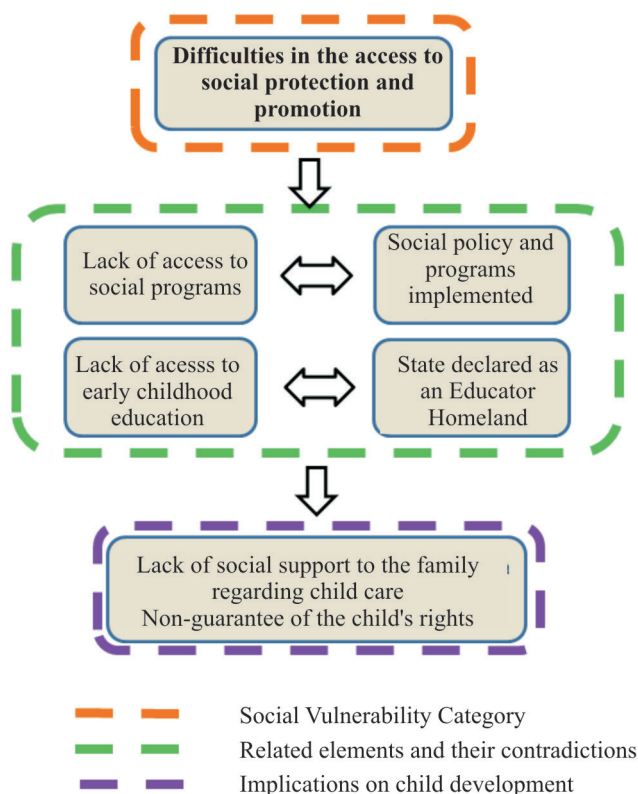


Figure 3 - Difficulties in the access to social protection and promotion, related elements and contradictions seized with their implications on child development, according to ESF nurses. Curitiba, PR, 2012.

## FINAL CONSIDERATIONS

The ESF nurse understands that vulnerability in child development is related to socioeconomic elements, characterized by social inequities. Such inequities are described by the poor social inclusion of the family, inequities in the land use and difficulties in the access to social rights. Their understanding of vulnerability goes beyond the biological and individual components related to child development.

The elements presented determine the family's material conditions to ensure the survival, rights, care and stimulation to the child's development. However, the speeches express contradictions, such as the non-universal access to education, macroeconomic policies that determine unemployment and low income, unequal land tenure, migration from rural areas to large urban centers, social policies legally implemented but undeveloped, and the speech of the Brazilian State as an educator homeland.

The social vulnerability elements reported were seized as an expression of the health-disease process of families, manifested in limitations in child care, highlighting the urgent need for an inclusive and egalitarian social organization that shares its resources for the well-being of all citizens. Social demands show that there is inequality in the social and state structure, presenting themselves as unable to provide families with the necessary conditions for the protection and care of the child.

This study has limitations, considering that it was carried out in only one region of the country and with a limited number of people, not reflecting reality in its entirety. However, the results of this research could contribute to the child care practice and to the development of further studies that seek to advance in the structuring and use of the concept of vulnerability in child health care.

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