

Analysis of an Instrument for Promotion of Development in Childhood, According To the Vulnerability Concept¹

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¹From the undergraduate research project: "Infants' vulnerability degree to disorders in socioemotional development in clinical practice", which is funded by Universidade de Santo Amaro.

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Abstract.

Aim: This paper aims to analyze an instrument of a program for promotion of development in childhood according to the vulnerability concept. **Method:** Qualitative documentary research and a theoretical analysis of the printed instrument named "Every Time is Time to Care", a booklet created to strengthen the role of families in promoting child development. Data was analyzed by categorical thematic analysis and grouped according to their convergence with the analytical matrix of the vulnerability of children to adverse situations in their development. **Results:** These practices may reduce vulnerability conditions in child development: Affective bonds with the child, Family structure, Limit setting, structure, and expectation, Developmentally appropriate experiences, Social support network for childcare; Prenatal care and Physical protection and safety; Access to the rights of social protection and promotion, Social insertion of family and Structure of programs for the care and protection of maternal and child health. **Final considerations:** The booklet encourages good practices for the promotion of healthy development. Data showed that the vulnerability concept has important nearness with health promotion, such as autonomy, empowerment of people and communities, as well as it may bring social answers for inequalities in the health-illness process.

Keywords: Keywords: Health promotion, Health vulnerability, Child development, Childcare.

Date of Submission: 03-09-2021

Date of Acceptance: 17-09-2021

I. Introduction

Child development may be understood as a process of continuity and change of biopsychological characteristics of the children along lifelong cycle, not only assuring survival but also reaching comprehensive development. Development is a result of complex interactions between biopsychological elements of the person themselves and contextual or environmental conditions throughout the children's life [1].

Children that live in unfavorable and disorganized environments face more difficulties and frequently present developmental dysfunctions, that may be conceptualized as a "highly heterogeneous group of diseases characterized by impairments in cognition, communication, behavior, and motor functioning" [2:406]. These dysfunctions are related to impairments in brain development, which may be directly disrupted by genetic deviations or injuries in central nervous system in development. They may be due to exposure to teratogenic agents, traumas, infectious processes, severe malnutrition, disabilities, hypoxia, or neonatal ischemia, as well as by the absence of proper stimuli, responsive nurturing care especially during sensitive periods of development such as early childhood [3].

This complexity of conditions makes children susceptible to developmental disorders, due to situations of vulnerability in their lives. This study adopted the concept of vulnerability defined as a set of individual conditions, social and political, which simultaneously determine the preservation of the health of subjects and communities and their protection against diseases and/or disabilities [4-5]. The individual dimension of the vulnerability refers to cognitive and behavioral elements related to the knowledge available to people and their competence to organize their decision making about their health condition. The social dimension is related to contextual and structural elements, linked to the socioeconomic condition of the citizens and their access to citizenship rights such as health, education, social assistance, and equality of gender, ethnicity, religious freedom, and sexual condition. Thus, the programmatic dimension is related to the organization form of policies, programs, and services and to the governmental commitment to guarantee available resources, to manage and to monitor preventive actions [4].

The concept of vulnerability engages elements of individual, social and programmatic order and allows

professionals to look beyond singular and biological dimensions, but instead with a wide comprehension about determinants of effective child development. This acquaintance by health teams implicates the acknowledgment concerning synthesis of health family conditions, likewise, to incorporate interventions according to equity and comprehensiveness [5].

Health programs to stimulate child development with equity, comprehensiveness and autonomy may provide significant opportunities to overcome inequalities that impair children's development [6]. Such health programs may contribute to decrease child vulnerability as well as to lead to a model of care centered in children and family's needs to surpass the health model focused only on medical diagnoses. Thus, the analysis of available instruments according to vulnerability concept may provide high comprehension about their potentials and limits to guide health professionals' actions to support child development [6-7].

This study chose an instrument from a program labeled: "Our Children: Windows of Opportunity" ("*Nossas Crianças: Janelas de oportunidades*" in Portuguese language). This was a project, with the municipal government of the city of *São Paulo*, Brazil that started in 2003. It was designed to improve practices of family medicine teams that are working at Primary Health Care related to promotion of child development[7].

This project is theoretically grounded in the Science-Based Framework for Early Childhood Policy designed by the Center on the Developing Child (CDC) of Harvard University. The approach uses a set of scientific principles which presuppose those early experiences in children's lives determine whether developing brain architecture will guarantee a steady or fragile base for cognitive and emotional competences as well as health conditions[8].

Consistent with the principles defined by the CDC, the project "Our Children: Windows of Opportunity" recognizes the importance of stimuli during Early Childhood and it strengthens the support for parenting, childcare, and the relevance of child development as an indicator for monitoring quality of life in the community. Similarly, it shows the importance of Governmental commitment to assure the proper conditions for suitable stimuli for child development, the systematization of guided actions to children according to scientific knowledge which value scientific evidence and popular wisdom as a tool for comprehensive care[9-10].

The project was operationalized through instruments as a booklet for the families that displays themes concerning daily care for child development, since pregnancy and during early childhood. The booklet named "Every Time is Time to Care – family's booklet" was designed for caregiver guidance. It also has a care-monitoring card, with a list of family care actions that can improve development [11]. This booklet was designed to be shared by caregivers and health professionals, to support families in caring for their children in their home environment. It contains recommendations about attachment, nurturing affection, daily care, protection, and child health promotion – focusing since prenatal period until three years old. Likewise, it describes situations that favor child development, according to health promotion resources [12].

Thus, this paper aims to analyze the content about an instrument of a program for promotion of development in childhood according to the vulnerability concept.

II. Method

This is a qualitative documentary research study which intends to identify information and facts in documents based on research questions and hypothesis. In this study the documents included were all written and printed texts as well as other kinds of bibliographic materials [13].

The research document was the instrument of the program named "Family's Booklet – Every Time is Time to Care", that composes the technologies set used in the project "Our Children: Windows of Opportunity" [11-12].

The entire booklet was analyzed using categorical thematic analysis, comprised of the analytic organization (reading the booklet by recognition of content issues), codification (aggregation of contents in homogeneous units according the nature of provided care), categorization (grouping contents unities in accordance to the elements of vulnerability) and result inference (interpretation and discussion of the family booklet content facing child vulnerability to development and its applicability in care practices)[14].

The content was grouped in accordance with the dimensions and elements of the vulnerability concept, by using the Matrix of Vulnerability of Child for Development Disorders[6]. Finally, the content was quoted in sentences through the symbol (p.) that means the page where they are in the booklet. The original statements were translated from Portuguese language to English for publication.

This research was not submitted by an ethical appreciation, because it was not performed with human beings and its contents are available in the public domain[11].

III. Results

The analysis showed that the booklet content includes recommendations to be undertaken by family or child's caregiving network. They were organized according to their relation to dimensions of vulnerability: Individual, Social or Programmatic[4-5].

Recommendations related to the Individual Vulnerability

The content related to the individual dimension of vulnerability are the recommendations that should be performed by family, and aim to specifically support mother's care, to promote women's health and to protect the child's birth and health, as well to stimulate their development. The recommendations that converged with the element of vulnerability "Affective bonds with the child" [6] are those that refer to the affective ties of parents or caregivers to the child as quoted in the booklet:

He went out exceedingly early for work and the son was still asleep. When I came from the service it was too late and the boy was not awake. This made him terribly upset. But he would not let me go see it Even so: spoke quietly with the son who slept and kissed your face every night and make a knot at the end of the sheet that covered the boy. (p. 10)

Does the family demonstrate affection for the child talking, snuggling her, touching her with affection and playing with her? (Even when the child is not crying!) (p. 15)

Does the family enjoy the moment of breastfeeding to snuggle, play, watch and talk to the baby? Also seeks to make meals a pleasant moment of contact and conversation? (p. 19).

The element of vulnerability "Family structure" [6], that indicates the number of people involved with prenatal care, as well who supports mothers to care of child, is quoted in the booklet:

Did you receive any help or support from your family after baby birth? How and who? Does your family participate of baby's breastfeeding moment? How and who? (p.7)

How is the father feeling? He is especially important for the mother and the baby/. (p.8)

Did your family participate in the planning of your pregnancy? Does your family follow up your pregnancy? How? Does the father or other family member come in and accompanies your prenatal consultation? Does your family will help in daily tasks?(p.7)

In the same way, the booklet promotes family's attachment with ludic activities:Look out, folks! This space is to show the child. You can paste pictures, drawing, storytelling, writing their birthdays, taste, and way of being. (p.13)

There is a great opportunity to enhance child's social-emotional development, through recommendations that permeate the element "Limit setting, structure, and expectation" [6]:

Does [the family] broadcast their values and identity through the daily care, built with routines that respect the needs and understanding of children, encouraging dialogue and respect? (p. 11)

Does the family organize a care routine needs, phases and rhythms of the child? (Considering sleep routines, hygiene, food, and games) (p. 15)

Does the family put limits on the child, talking and explaining the causes, indicating that it is considered wrong or dangerous, without spanking, insulting, or punishing with aggression? (p. 15)

Does the family seek to know what the child did during the day, learned again, and if she is with some concern and need some help? (p. 15)

The instrument promotes the child development by stimulating the family to accomplish care actions directed to "Developmentally appropriate experiences" [6], that allow children to live/enjoy appropriately their developmental experiences:

Does the family promote the physical and emotional development of children, taking care of your health, hygiene, food, education, culture, and leisure? (p. 11)

Does the family set with the children how they will participate in domestic activities, considering their age and their capabilities? (p. 15)

Children learn by exploring the world [...] children learn playing [...] children learn by imitating [...] children learn by repeating [...] children learn relationships. (p. 16-17)

Does the child play with toys, books, magazines, pencils and papers, scrap material? Do they read, draw, paint, invent, mount, etc. (p. 17)

Does the family enjoy playing and chat with the child at the time of feeding, bath or change of clothes? (p. 17)

Does the family spend some time with the child daily, participating in your games, chatting, telling stories, or singing? (p. 17)

Does the family encourage the child to meet and play with other children? (p. 17)

Does the family encourage child participation in activities in the neighborhood (away from home), such as games, sports, parties, tours, religious meetings? (p.17)

Does the family enjoy the moments of meals to encourage participation and the independence of the child, having patience with her? (p. 19)

The booklet values the role of community to support the childcare, by the element “*Social support network for childcare*” [6], when recognizes the limitation of family to care for their children:

Do you relate with neighboring families and the community? (p. 11)

During the puerperium, relatives, friends, and neighbors, in addition to the health team, are particularly important to support the family that just grow with the arrival of a new member. This support is critical to the woman, especially if she is sad (risk of depression) or very confused (risk of psychosis). (p. 8)

Does the family take care of your social support network and know set it when they need it? How and who? (p. 15)

Does the family have other caregivers (not relatives) and places where you can leave your child? Who and what? (p. 15)

Prenatal care[6] is pointed as crucial to determine child development, thus the instrument efforts the access of woman to health care services, her compliance to antenatal care procedures, as well her follow-up over puerperium period:

Do you search the Health Service when there is some suspicion of pregnancy, for consultations, examinations, and guidelines? (p.6)

Do you seek to know the changes that will occur with you during pregnancy? (p.6)

Do you reinforce the care with your diet and with your body, especially your breasts and your teeth? (p.6)

Did you accomplish at least seven prenatal consultations?(p.6)

Do prenatal consultations are being carried out? (p.7)

Do you and your family know how to recognize danger signs in pregnancy (liquid loss, swelling, headache, stop the movement of the baby)? (p.7)

Do you and your family know the signs of delivery (Several regular contractions, loss of fluid through the vagina, low back pain, vaginal secretions with blood)? (p.7)

Do you and your family are able to follow the guidelines received (Vaccinations, food, preparation for breastfeeding, participation in the group of pregnant women)? (p.7)

Do you and your family know that you need to avoid the use of medicines without medical advice, smoke, use drugs or alcohol? (p.7)

Hence, in the individual dimension of vulnerability, the booklet has interface with element of vulnerability “*Physical protection and safety*” [6], when the recommendations aim to guide mothers and caregivers to take their children for the health care, as well to prevent diseases:

In the early years of life, it is necessary to take the child to the health service, even without her being ill (p.14)

Does the family recognize when the child needs treatment and take her to the health service? (If the child has a cough or difficulty breathing, diarrhea, prolonged fever etc.) (p.21)

In the first six months of life, does the baby receive breast milk only, at least 8 times a day? (p.19)

After the 6th month of life, in addition to breast milk, does the child receive juice / fruit puree and salt pope at regular times? (p.19)

Furthermore, the booklet stimulates caregivers to take an adequate dietary pattern and hygiene for their children, as well to keep safely their children from dangerous situations:

In the first six months of life, does the baby receive breast milk only, at least 8 times a day? (p.19)

After the sixth month of life, in addition to breast milk, does the child receive juice / fruit puree and salt pope at regular times? (p.19)

Does the family seek to create and maintain personal hygiene? (Daily bathing, washing hands, brushing teeth, care of hair and clothing) (p. 20)

Does the family take care of daily hygiene of children by encouraging their participation until you can perform this activity alone? (p. 20)

Does the family prevent child contact situations of violence and use of drugs or alcohol? (p.15) Does the baby stay in different places (neck, cot, floor) and position (lying, face down, sitting)? Does the family offer different and not dangerous objects to the baby? (Colored, cloth, plastic, paper, rubber, wood) (p.17)

Recommendations in the Social and Programmatic Vulnerability

Furthermore, approaching to the social dimension of vulnerability, the booklet proposes recommendations to be carried out by Governmental agents/institutions. These recommendations converge with the element of vulnerability “*Access to the rights of social protection and promotion*” and “*Social insertion of family*” [6], and aim to promote human rights and citizenship, as well as to support families socially:

Right to family acquaintanceship and community [...] right to birth certificate [...] right to sport, leisure, and culture [...] right to health - the right to health involves various types of care: good nutrition, health care, adequate housing, regular visits to health service to monitoring the growth and development, immunization, and security. (p.24-25).

To have a healthy life, some public services and community are essential [...] job opportunity [...] paved streets, electricity supply, water, sewage, and garbage collection service. [...] housing, public transport [...] (p.12)

Hence, in the programmatic dimension of vulnerability, the instrument has interface with the element of vulnerability *Structure of programs for the care and protection of maternal and child health*[6] and seeks to guarantee a healthy birth/delivery and promote newborn health, through the interventions of professionals of health teams:

Does [the pregnant] receive proper vaccinations, if necessary? [...] receive dental treatment, if necessary? [...] receive vitamins and supplements if necessary? (p.6)

Will you receive a visit from the health service nurse until 10th day after delivery. (p.8)

IV. Discussion

Within the *Individual dimension* of vulnerability, the instrument may strengthen an encouraging and protective care, as well as improve practices of care for the family [6]. This encouragement of care occurs because the booklet searches to enhance the mother’s and caregivers bonding to the child. There is evidence that the quality of early interaction between mother and infant is an important indicator for future child’s socioemotional and intellectual development [8-9]. Moreover, the booklet reinforces the importance of parenting roles in childcare, and encourages bonding processes and liability of care, because there is a relation between parenting roles and caregivers with infant’s cognitive and socioemotional competence[3].

According to the parental competence, the booklet aims to support the family to stimulate children to organize their activities, demonstrate interest by daily activities and participate of homing tasks according to their age and ability. Likewise, it supports the caregiver's protagonist role in establishing the limits and support children in every time[15]. The instrument also seeks to give support for caregivers to provide experiences that stimulate competencies for development. There is agreement with literature that children, who receive proper stimuli, nutrition, and health care in their early childhood, have less chance to present impairment in their development [16].

The booklet stimulates the participation of social support network to help the families attend child needs. Such support is necessary due to life and work conditions those women have living in a contemporary society and by their troubles to care their children, what demands new formulations of bonding and personal relationships [17-18].

The booklet draws near to reduce fetal exposure to the antenatal teratogenic situations that may injure neurological structures and functions. Thus, the booklet may improve the quality of prenatal care, because in the perinatal context, it should be considered that children who undergo adverse birth conditions, as well as uterine growth restriction, prematurity, hospitalization of more than five days and use of invasive mechanical ventilation, also become vulnerable to developing impairments in the development[19-20].

The booklet seeks to prevent child’s lack of protection as health situations that require prompt intervention, situations that can bring contamination or contact with infectious agents or iatrogenic and pollutants, injury situations, substance abuse and death risk, as well as to proposes actions to prevent child malnutrition[3].Such situations may cause physical dysfunctions, intellectual and socio-emotional[21-24].

Within the *Social vulnerability*, the booklet points out for interventions for human rights promotion and citizenship, that represents access to resources that support the decision making, to face the socio-cultural barriers and health care conditions, as the access to education, health, sports, recreation, leisure, and culture [25].

The booklet approach for family’s social furtherance that intends to support the families to reach socioeconomic permanency. It aims to assist in the overcoming of difficulties of family members to use their production capacity. This element can be described by the availability of jobs, their quality and remuneration

proposals. The work determines, directly as a socioeconomic element, child development and its promotion due to material conditions and the availability of caregivers to be with the child [26].

In the *Programmatic vulnerability*, the booklet addresses by interventions for healthy birth and for newborn health promotion. This element considers that work and care teams are also critical for the promotion of child development. This element is related to the care model or the way that teams must act before the families to promote child development and the reduction of vulnerability present conditions[27].

Hence, the booklet offers to professional teams many opportunities for promoting child development, decreasing vulnerability conditions in the context of children and their families. They are synthesized in the Figure 1:

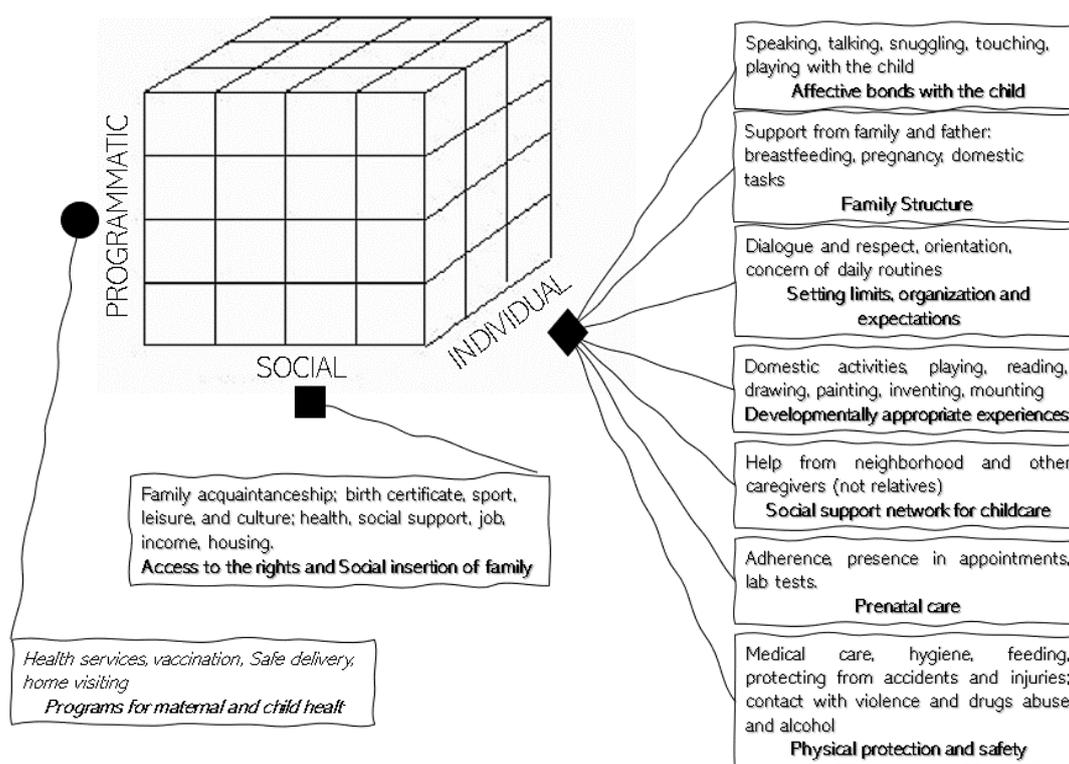


Figure 1 –Synthesis of Actions and Interventions for reducing vulnerability conditions in the child context, according with the “Family’s Booklet – Every time is time for caring”[11].São Paulo, Brazil, 2021.

V. Final considerations

This study sought to analyze an instrument of a program for child development promotion in the light of vulnerability concept. We considered that the project “Our Children: Windows of Opportunity” through the instrument “Family’s Booklet – Every time is time for caring” converges with referential of the vulnerability in the individual, social and programmatic dimensions. Thus, there would be the possibility of this instrument and its recommendations may decrease vulnerabilities and improve child development.

This booklet may strengthen an encourage a protective care, improve practices of care, promote the children’s access to their rights as citizens and guide the comprehensive and wide health care model for child development promotion, according to child’s health needs. However, because it is a documentary study, there are limitations in generalizing the data discussed here that need the empirical application in future research that will direct new ways and practices for childcare.

Hence, data showed that the vulnerability concept has important nearness with health promotion, such as autonomy, empowerment of people and communities, as well as it may bring social answers for inequalities in the health-illness process.

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