

## Building the mental health care network for children and adolescents: interventions in the territory

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**Abstract** *Children with mental disorders may develop serious adverse effects in their functional performance. A structured care network may favor psychosocial components, such as self-confidence and problem solving capacity. This work seeks to identify the care network for children with mental disorders and develop interventions in the territory, highlighting changes achieved from these actions. This is a descriptive study based on the action research method using an eco-Map for data presentation. The results indicate that the majority of children have stressful relationships within the family, and relationships of greater intensity and quality with the Community Health Workers, Primary Care and Education, with childcare, compared with specialist health services. The interventions were based on the guidelines of Family Health, Support Center and stressed the strengthening of family ties, and liaison with health services and schools/ daycare centers.*

**Key words** *Primary health care, Child care, Mental health, Occupational therapy*

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## Introduction

It is estimated that from 10% to 20% of children and young adults suffer from mental disorders in Brazil and, out of these, 3% to 4% require intensive care. Between 1980 and 2006, 9 publications reported prevalence rates from 12.6 to 35.2% when the respondents were parents or the child. By using a diagnostic interview, the rate ranged between 7% and 12.7%<sup>1,2</sup>.

Children and adolescents with mental disorders may face major losses regarding their functional performance, which corresponds to the individual's ability to fulfill daily activities in a satisfactory and appropriate way within each developmental stage. Among the child population, the difficulty to fulfill these activities is usually demonstrated by poor social functioning, mainly affecting the roles related to playing and studying<sup>3,4</sup>.

The National Mental Health Policy, based on Law 10,216/2001, seeks to consolidate an open and community-based mental health care model, whose actions are organized within territory healthcare networks and cross-sectional operation along with other specific policies seeking to establish bond and embracement<sup>5</sup>.

A healthcare network represents the actors conducting actions in this regard, something which includes locations in the territory, such as the school, household, church, club, cinema, etc., and they may include or not healthcare institutions. Effective users' connection to this network favors problem-solving and contributes to the treatment process<sup>6</sup>.

According to Couto et al.<sup>2</sup>, the sectors of education and primary health care, as members of an extended public network for child and young adult mental health care, may play a prominent role regarding preventive and health promotion actions, as well as early identification of cases.

In children's mental health, the healthcare network may contribute to child development, in addition to the family's well-being and quality of life<sup>7</sup>. There is a need to consider the multitude of factors related to the health/illness process, because the purely clinical strategies are insufficient to treatment, they must be combined to the social tools, so that children undergoing psychic distress can be included into their community<sup>8</sup>.

According to the provisions of Decree 7,508, enacted on June 28, 2011<sup>9</sup>, in the healthcare network, where services are interconnected at levels of increasing complexity, so that they can ensure a comprehensive care, specific mental health services for the child population consist of the Cen-

ters for Psychosocial Children's and Young Adults Care (CAPSi) and outpatient healthcare facilities. However, the schools and family health centers do have the highest numbers of children requiring mental health care<sup>10</sup>.

In primary care, there is the potential to detect complaints related to psychic distress and provide qualified listening to the problem, by offering treatment within the territory or referring to specialized services<sup>1</sup>. Thus, the Family Health Strategy (FHS) and the Centers for Family Health Support (CFHS), the healthcare equipment that is closest to the community, can assist in interconnecting to the various network devices, in order to prevent diseases and promote health<sup>11</sup>. The occupational therapist has been included into this context by means of CFHS, and she/he should consider the possible variables related to the process of constructing these networks, so that the actions can provide an actual impact on the contexts where they took place.

So, this article aims to describe the healthcare network for children undergoing psychic distress and promote interventions in the territory, pointing out changes that took place by means of these actions.

## Methodology

This paper was developed by using a section of the action research project named "Occupational Therapy in Primary Care", and the study was approved by the Research Ethics Committee of Centro de Ciências da Saúde of UFPE. This is a descriptive study based on the action research design. This type of research consists in a theoretical and practical approach that seeks intervention in a real situation, producing useful and relevant knowledge, where participants are involved in a cooperative and supportive way<sup>12</sup>. It was carried out within the period from August 2011 to March 2012, with children having a history of psychic distress and relatives enrolled in a Family Health Center (FHC) of the Health District IV in Recife, Pernambuco, Brazil.

Participants were recruited after prior discussion with professionals at the FHC on some peculiarities suggesting child psychic distress. Thus, community health workers (CHWs) identified within the area they cover children with these characteristics, providing a list of names and addresses to the researchers team.

Data were collected through records in field diaries, photographs, and a semi-structured

questionnaire applied only to the relative who is responsible for the child, due to the difficulty of communication and understanding of children participating in the study. The questionnaire was used to characterize participants, consisting of sociodemographic information, including data identifying the child and relative, clinical data, facilities attended as components of the healthcare network, in addition to information on the children's functional performance and social life.

Information from the questionnaire and observation during home visits provided means for interventions in the territory. These actions were carried out by 2 female occupational therapy students who are attending the 7<sup>th</sup> and 8<sup>th</sup> semester of the undergraduate course, monitors in the project, and 1 occupational therapist who is a professor at UFPE.

The interventions were grounded in of CFHS in line with the proposals of the General Coordination of Mental Health and the Management Coordination of Primary Care<sup>13</sup>, indicating that mental health care actions taken in primary care should comply with the healthcare network model, they are based on the territory and conducted in a cross-sectional way along with other specific policies, seeking the establishment of bond and embracement. From this perspective, weekly home visits took place, in order to address the healthcare demands and, whenever needed, the schools were visited, they were also included in the actions, in order to minimize the impacts of signs and symptoms of psychic distress on the educational performance of children.

The CHWs from the FHC have made access to households easier, because they know the territory and its residents. These interventions were registered in the field diary and through the camera. The findings underwent thematic analysis and they were discussed in the light of scientific literature.

The relations of the child and her/his family to the healthcare network were analyzed before and after interventions, and presented by means of the eco-map, a useful instrument to evaluate the relation between actors and their social environment<sup>14</sup>. The eco-map has at its center the number of individuals – children – interconnected to components of the healthcare network, highlighting the various types of bond, namely: strong, stressful, moderate, weak, former, or not observed. To classify the bond intensity, the reports of relatives responsible for children were used, registered in the field diary and questionnaire. Relatives' opinions were related to four de-

vices available in the healthcare network: healthcare services, education services, and nuclear family, which were used to construct the eco-map where the individuals under analysis were identified by means of randomly chosen letters – A, B, C, D, E, F, and G.

## Results and discussion

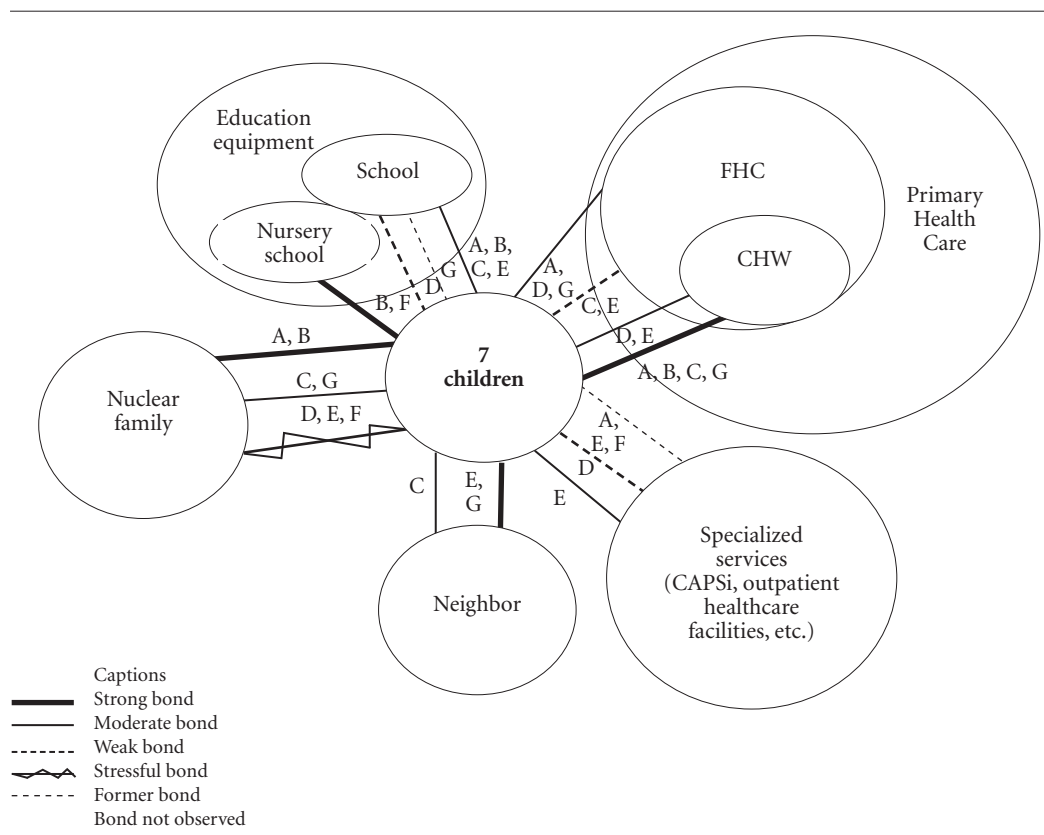
Seven children participated in the study, most of them male, belonging to the age group from 1 to 5 or 6 to 9 years, having a family income of 1 minimum wage, the parental educational level consists of Elementary School, experiencing a single-parent structure, and living in households with 2 to 4 people. These characteristics are similar to those of other studies and they indicate that living under unfavorable social and economic conditions, having parents with low educational level, and dealing with single-parent family contexts or the presence of a stepfather/stepmother (as well as the presence of other people) are factors that may induce the emergence of behavioral problems among children<sup>15</sup>.

Besides, the World Health Organization<sup>16</sup> recognizes that the type of socioeconomic environment influences on the social context, it may pose some disadvantage to the individual regarding the use of equipment available in the setting.

Ribeiro<sup>11</sup> and Serapioni<sup>17</sup> warn that, although the family is recognized by healthcare professionals as a significant element, playing the main role related to the provision of care for a child with mental disorders, it is assumed that the family is not able to meet all the needs observed.

Thus, the survey of the healthcare network available for the children under study (Figure 1) showed that most relationships with relatives were considered as stressful. In turn, the relationship with neighbors constitutes a component of strong support in these cases. *F* and *E*, who are among those with a bond to the nuclear family regarded as stressful, had neighbors who had actively participated in their education, by providing healthcare during maternal absence times, such as working hours. It was also identified that the length and intensity of bond to the nursery school and the FHC or CHWs had higher levels when compared to specialized services, including CAPSi and outpatient healthcare facilities.

It was also observed that some children were in need of specialized healthcare, but they were not undergoing follow-up, as pointed out by these excerpts from the field diary:



**Figure 1.** Eco-map of relations among children with a history of psychic distress and their healthcare network before interventions. Recife, 2012.

[...] A's mother gets closer and says that 'now' she has more time to go on with the child's psychological treatment, referring to the building of her house as the reason why she discontinued it. (Field diary, 08/24/2011)

G's mother reports that she attended AACD and was referred to the speech therapist, but she still could not go, apparently avoiding to provide details related to the reasons why she have not gone on with that. (Field diary, 09/13/2011)

Children with some diagnosis, as in the case of D and G, used the FHC, especially to have access to medicines and referrals to specialized services. Among the others, only C and A cited the FHC as equipment of their healthcare network during the provision of care by the team. In turn, the CHWs were present in most visits and they showed to be close to the families, giving opinions and raising issues they seemed to know well:

The CHW shows up at will in the household to speak of her impressions on the care provided to C.

She reports that the mother could be closer, that she 'goes out' a lot and leaves her children with their grandmother. At that time, C's mother listens attentively, seeming to accept the advice. (Field diary, 08/03/2011)

These aspects indicated that the bond of children/families to the CHWs was stronger, these professionals stand out in the equipment FHC (Figure 1).

We emphasize that the constant presence of the CHWs during interventions may have influenced on the perception of a stronger bond on the part of families, something which could be characterized as an information bias. However, the fact that the CHWs should live in the location where she/he works allows the professional to know and interact with users, making it easier to take health promotion and provision actions. Furthermore, this close relationship with the community facilitates the access of CHWs to the inhabitants' households, strengthening the bond

to the user, so that awareness regarding their healthcare needs may be explored more closely, thus providing a better resolution of problems<sup>18</sup>.

However, by considering the CHWs' role as a link between the community, the FHC, and the healthcare network equipment, the weak links or those not observed in the eco-map may suggest a system's weakness, since the children's healthcare needs have not been met, according to families.

Authors point out that the CHWs' training is still insufficient taking into account what they should to<sup>19</sup>. Moreover, these professionals have cited difficulties related to intersectionality and scheduling of exams and appointments as barriers in the work process<sup>20</sup>, something which may be related to possible reasons why the link is weaker to the FHC and the specialized services.

Also considering the specialized services, the FHS must improve its ability to provide risk assessment and identify the need for a specialized assistance, but some authors suggest that there are still difficulties on the part of these professionals to realize which needs could be met at the primary health care level and those requiring specialized interventions<sup>21</sup>. This might explain the lack of link between some children participating in the study to the specialized services, but it also puts into question the amount of links that were initiated and discontinued, as in the case of A, F, and G.

Although studies addressing treatment dropout in children's mental health are scarce, Gastaud and Nunes<sup>22</sup> agree that some factors can predict this situation, including: socioeconomic status, source of referral, lengthy wait for care, geographical distance from services, child's age, mother's educational level, parental configuration, income, and family size. Although this study does not aim to analyze them in detail, the number of cases of treatment dropout observed in Figure 1 suggests that studies are conducted for this purpose, so that the Mental Health Policy is provided with means to establish strategies and connections that facilitate families' adherence to treatment at any level of care. To do this, the professionals working at primary health care should be related to the specialized services, mapping and solving potential barriers observed.

The education sector was subdivided between schools and nursery schools (Figure 1), because the latter ones provide a strong support for the mothers of B and F. We highlight the importance of professionals working at these sectors in identifying behavioral changes among children, they may ask parents to seek proper evaluation/treat-

ment<sup>23</sup>, thus becoming partners of healthcare professionals in this process. As in the case of F, where the nursery school's principal requested an assessment when noticing the child's difficulty in relating to others.

The project team evaluated the available network, complaints, and demands reported by family members and teachers, in addition to those perceived by the team itself.

Taking into account the healthcare needs, the complexity of demands, and the recognition of the relation to the support networks, the problems were identified and some goals were established along with the family, the healthcare professional team (FHC, CFHS, specialized services), and teaching equipment, so that the responsibilities can be divided and there is a co-management of care throughout the process.

This strategy favored continuity of care, as shown in the testimony below, during a visit to E's household:

*We parted talking about the child's referral to the team of CFHS and UNEDIN (Integrated Education Unit). (Field diary, 12/22/2011)*

The inclusion of other sectors, such as education, was key to deal with cases, in order to improve the problem-solving ability and taking into account the child's context and comprehensiveness.

*[...] D uses anticonvulsant medication in the morning and evening, which makes him sleepy in class time, so he was advised to change school hours. (Field diary, 09/13/2011 – Home intervention with D)*

*[...] The teacher says she is trying to implement the possibility that the child remains in the classroom to attend improvement classes in the afternoon, so that he does not fully 'fail' until it is possible to move him from the morning to the afternoon classes. (Field diary, 10/07/2011 – Conversation with the itinerant teacher of D)*

Thinking of primary care as a preferential gateway for individuals in the healthcare system and the organizing device of the healthcare network, the main feature of actions was the continuity of care, even in cases of referral, in order to provide the family with comprehensive care. They complied with the territorial principle, with operations agreed with the various healthcare policies aimed at providing families with bond and embracement seeking to meet their needs<sup>24</sup>.

The interventions contributed to expand and strengthen the healthcare network, so that there was an increase in resources, such as the inclusion of CFHS teams to support E and F, and

the specialized healthcare service provided to B; cases of resumption, such as the return of G to the school and the specialized healthcare service, and A's return to the latter. Furthermore, positive changes were identified in the intensity of bonds, such as in the relationship of C, D, E, F, and G with their nuclear family, and even the relation of D to the school (Figure 2). Below there are excerpts from the field diary representing some of these changes:

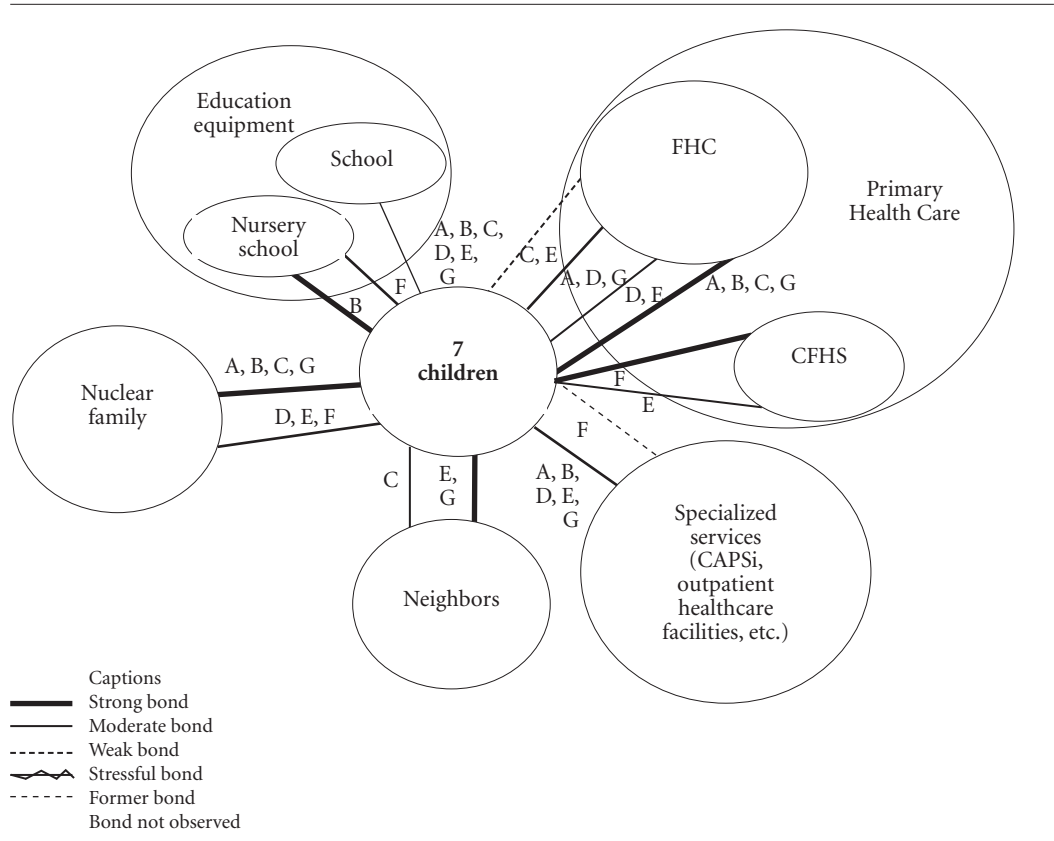
*We arrived at A's house and her mother and grandmother came closer, they told that A attended her first appointment with the psychologist to whom she had been previously referred. A's mother says that although 'fears' still exist, the child is better. (Field diary, 11/09/2011)*

*B's mother reports she has already started interventions with the psychopedagogue and the child shows improvement in reading. (Field diary, 01/10/2012)*

*During G's visit, the child shows up enthusiastic, prepares sentences correctly, and responds*

*to orders in a positive way. The child is attending school and undergoing speech therapy, according to the neighbor. The mother shows up glad to see the team, she remained in the room throughout the visit, unlike the early interventions, when she stayed for a few minutes. (Field diary, 03/28/2012)*

Among the roles played by the occupational therapist in primary health care there is the identification of skills and the stimulation of the subject's potential, thus providing children with greater independence and autonomy regarding their unique characteristics<sup>25</sup>. It was noticed that through the stimulation of each child's abilities, by means of interventions supported by the importance of playing, and also the training of psychosocial and cognitive abilities, mothers' expectation was modified when they realized significant improvements in their children<sup>26</sup>, such as the discovery of new skills. This may have led the quality of bond to be improved and, as a consequence, changes occurred in the relation to other network components, such as resumption or on-



**Figure 2.** Eco-map of relations among children with a history of psychic distress and their healthcare network after interventions. Recife, 2012.



set of specialized treatments. The excerpt in the field diary during an activity with *E* suggests a change in the perception of his family and neighbors:

*Insofar as he went from one step to another in the proposed activity, some neighbors, his mother and siblings, got closer and showed up surprised with E's evolution [...].* (Field diary, 12/22/2011)

It is also noteworthy the improvement of bonds with the education equipment, since it constitutes the environment where children experience social interaction and exercise their skills and citizenship for many hours over their day. The interconnection between the education and healthcare sectors, represented by teachers and the project team, respectively, enabled listening to the perceptions of each actor, promoting the discussion of cases and ways how to improve each child's skills in the learning process<sup>23</sup>. Thus, it was possible to make it easier to implement the student's role, such as in the case of *D*, after changing the class hours. This reiterates the importance of intersectionality in promoting the subjects' independence and autonomy.

### Final remarks

Primary health care plays a key role in promoting the quality of life of children undergoing psychic distress, and it may put the network of services required into practice, embracing and advising the relatives as for the actions to be taken.

Most children with a history of psychic distress participating in this study had stressful ties to the nuclear family and relationships of greater intensity and quality with CHWs and, regarding education, with the nursery schools, when compared to the specialized healthcare services.

The occupational therapist who is able to provide individuals with independence and autonomy, when included into the CFHS, has as one of her/his duties facilitating the relation between the child and support devices. The interventions

carried out had as highlights the strengthening of family bonds and the interconnection to health-care services, schools/nursery schools, something which may have favored the social inclusion process of these children. It is hoped that the results may contribute to the improvement of the services provided in the children's mental health field at the primary care level and, as a consequence, to the construction of a children's and young adults mental health policy coherent with the reality of each inhabitant.

### Collaborations

LC Tszesnioski defined the theoretical design and conducted data collection and analysis, and also contributed to text writing; KBG Nóbrega and VLD Facundes supervised all stages of the study and contributed to the final text; MLLT Lima contributed to the final text.

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