

# The Environmental Theme in Representations and Practices of Family Health Professionals in the Municipality of Manaus (State of Amazonas /Brazil)

## A Temática Ambiental em Representações e Práticas de Profissionais de Saúde da Família no Município de Manaus (AM/Brasil)

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## **Resumo**

Evidências científicas mostram que mudanças ambientais antrópicas aumentam riscos de exposição a diversas doenças. Na Estratégia Saúde da Família - ESF, tarefas com claro enfoque ambiental são prescritas indicando às equipes de profissionais que considerem esses aspectos em suas intervenções. O objetivo desta pesquisa foi conhecer representações e práticas de profissionais de Saúde da Família de Manaus (AM) sobre a questão ambiental e sua interface com a saúde pública. Os dados foram coletados por meio de observação participante e entrevistas semiestruturadas, e a análise qualitativa destes deu-se pela Análise de Conteúdo e Triangulação de Métodos. Resultados da pesquisa revelaram que a maioria dos profissionais não compreende o ambiente de forma sistêmica, mesmo tendo declarado que os fatores ambientais têm grande influência sobre a saúde humana; enquanto intervenções, as práticas educativas seguem metodologias tradicionais e são centradas na culpabilização do indivíduo e na simples transmissão de conhecimentos pontuais; o relacionamento dos profissionais com a comunidade resume-se ao atendimento individual e/ou coletivo. Concluiu-se que, para a ESF contribuir para o reordenamento do sistema, é fundamental o redirecionamento desse novo modelo de política de saúde para efetivar-se como prática social e ambiental.

**Palavras-chave:** Saúde Ambiental; Saúde da Família; Profissionais de Saúde; Promoção da Saúde.

## Abstract

There are abundant scientific evidences showing that the increased risk of exposure to diseases is a consequence of anthropogenic environmental changes. In the Family Health Strategy, tasks with a clear environmental focus are prescribed, indicating to the professional teams that they should consider these aspects in their health practices. The objective of this research was to study representations and practices of Family Health Professionals of Manaus - State of Amazonas, Northern Brazil - about environmental issues and their interface with public health. Data were collected by means of participant observation and semi-structured interviews, and the qualitative analysis was carried out through Content Analysis and Methodological Triangulation. The results showed that most professionals do not understand the environment in a systemic way, even though they recognize the great impact that environmental factors have on human health; as interventions, the educational practices follow traditional methodologies and focus on blaming the individual and on the simple transmission of knowledge; the professionals' relationship with the community is limited to personal and/or collective care. It is concluded that in order to the Family Health Strategy to contribute to restructure the system, it is essential to redirect this new health policy model so that it becomes effective as a social and environmental practice.

**Keywords:** Environmental Health; Family Health; Health Personnel; Health Promotion.

## Introduction

In Brazil, *Estratégia Saúde da Família* (ESF - Family Health Strategy) is included in the scope of the national health policies and has been gradually assumed by practically all the country's managers. It was created to incorporate and reaffirm the principles of *Sistema Único de Saúde* (SUS - Brazil's National Health System), and it essentially proposes to substitute the individual assistance model for a new healthcare model, with multiprofessional teams, defined territory, enrolment of the clientele, and focus on the integrality of the health actions, such as promotion, prevention, recovery and readaptation. Official documents (Brasil, 2001, 2006) that regulate the ESF prescribe tasks with a clear environmental focus, indicating that the teams of professionals should consider these aspects when choosing the health practices to be implemented. The family health teams are expected to know the reality and to identify sanitary and socio-environmental problems of their catchment area, in order to better develop the local planning.

Some obstacles to the consolidation of the ESF have been described in the literature. One of them is the quantitative and qualitative lack of adequately prepared professionals to deal with the attributions required by the new model. It has been identified, among the health professionals, difficulties in the articulation between clinical and public health activities, which makes the latter be partially incorporated (Escorel and col., 2007). It should also be highlighted that the environmental issue is rarely approached by the ESF teams, a deficiency that stems from the very conception of environment that the Strategy has and which is expressed in its norms and guidelines (Ianni and Quitério, 2006).

Knowledge of the health determinant and conditioning factors is indispensable to those who perform activities in sanitary districts, healthcare units that are defined according to territorial aspects. In this sense, the interactions among men, the environment and health should be considered due to unbalance processes in the ecosystems that interfere in the dissemination of diseases (Patz and col., 2004), and also due to the fraction of risk that can be attributed to environmental factors for many

diseases that attack human beings (Prüss-Üstun and Corvalán, 2007). Understanding the environmental issue, in its totality and complexity, is one of the presuppositions in the search for intervention practices beyond those which cure and prevent diseases. In this way, healthcare professionals would be gradually closer to the Health Promotion precepts, developing practices which are less individual and more collective, less assistentialistic and more participative, so that individuals are strengthened as social subjects and are able to assume control over their health and its determinants, in a continuous search for better life conditions.

The city of Manaus, in the State of Amazonas, Northern Brazil, the largest urban nucleus of the Amazon region, is included in a scenario of intense economic and population growth, which produces substantial environmental changes that characterize a worrying sanitary situation, with relevant influences on the health of its population (Freitas and Giatti, 2009). Thus, this metropolis is an important place for this study, which interacts with the ESF's prerogative of expanding and meeting the intra-urban specificities of large cities (Escorel and col., 2007). Nevertheless, the global challenge of providing social equity and justice in a world under constant changes and with serious inequalities indicates the need of a process of evolution, adequacies and universalization of Primary Health Care (WHO, 2008).

In view of this scenario, this study aimed to investigate representations and practices of Family Health professionals of *Distrito Sanitário Sul* (DISASUL - Southern Sanitary District) of Manaus, State of Amazonas, Brazil, about the environmental issues and their interface with human health. Our purpose is to identify if such representations and practices are compatible with a change in the hegemonic assistance model, and in what way they enable interventions that focus on specific socio-environmental determinants within their action fields.

## Methodology

The research subjects were doctors, nurses, dentists and nursing technicians working at six units representing the four districts of DISASUL, from a

universe of fifty-three *Unidades Básicas de Saúde da Família* (UBS - Primary Family Healthcare Units) belonging to the DISASUL of Manaus (Amazonas), one of the four urban districts of the Municipality. DISASUL was chosen because it presents: better coverage indexes of urban infrastructure services; better disposition of the health services of the assistance network; higher number of inhabitants; catchment areas under an environmental intervention process (restoration of degraded areas); and spatial distribution of the health units compatible with the available logistic resources. Among the criteria to select the units, the following were considered: period of time of unit's implementation/functioning (the first and the last units that were installed), complete formation of the team, catchment area in consolidated neighborhoods and in expanding neighborhoods under an environmental intervention process (sanitation works), and/or with population exposed to environmental risks (wetlands), and teams that have been working in the ESF for a long time.

Field research was carried out between November 2006 and September 2007. For a better apprehension of the reality, we adopted an exploratory, documental and descriptive research design. The data collection instruments were semistructured interviews and participant observation, with use of field diary, camera and audio recorder (Yin, 2005), in the catchment areas of all the selected UBS. The topics of the interviews with the health professionals were: 1) Inclusion and qualification in the ESF; 2) Representations about the environment; 3) The relationship between health and environment; 4) Multidisciplinarity and intersectoriality in the ESF context; 5) The environmental issue as a public policy; 6) Bonds between Family Health professionals and the community; and 7) Health education as a practice in the ESF.

We decided to employ a qualitative approach to the data associated with the Social Representations Theory which, according to Jodelet (1989), aid not only the way of interpreting, but also of intervening in the reality, as they are socially constructed forms of knowledge. Souza and Zioni (2003) argue that the Social Representations Theory has been widely used in research associated with environmental sanitation, as it enables a greater understanding of the

man-environment interface, based on the interpretation of the meanings that the subjects construct in their relationship with the world.

The results obtained with the research instruments (interviews and participant observation) were jointly analyzed through the process of Methods Triangulation, which enables to interpret the reality by means of the combination of different investigation techniques (Minayo and col., 2005). This type of analysis allowed the identification of central themes for discussion, which were in turn categorized through the identification of convergent and divergent ideas (Bardin, 2008) captured by means of the different instruments, in terms of the health and environment relationship and its incorporation into the professionals' practices.

This research received a favorable opinion from the Research Ethics Committee of *Fundação Universitária Ibero-americana*, registered under no. 2007/01, as established by Resolutions no. 196/96, no. 251/97 and no. 292/99 of the National Health Council.

## Results and Discussion

Overall, twenty-two health professionals were interviewed, which corresponds to 88% of the total number of professionals working at all the selected UBS. The joint analysis of the results concentrated on four themes: 1) Representations about the environment; 2) The relationship between health and environment; 3) Health promotion; and 4) Social participation, presented on Table 1.

The first theme to be treated, the Family Health professionals' representations of environment, enabled the construction of three categories: a) Those who define the environment as a set of elements of the physical environment and of living beings, including the human species, interacting with one another and with their surroundings (Biosphere) - 69%. The following examples show this: "*The environment is the place we live in*"; "*It's the space of our relationships, of the human beings with the other living beings and with inanimate factors*"; "*It's the physical place plus the people who live in it*". b) Those who offer greater amplitude to the matter by including, besides the biotic and abiotic factors, the

social institutions and their relations (Sociosphere) - 4%, like in the following example: "*It's the place in which we live. It's the way and the customs of each individual. Each community has its environment, which is different from the others. It's the way of living*". c) Those who highlight that the environment is threatened, deteriorated by contamination or by the inadequate handling of the natural resources (13%), like in the examples: "*The environment is polluted. Dirty streets and creeks full of garbage. There's a lot of noise, too*"; "*Both the external environment (neighborhood) and the internal one (inside the homes) are unhealthy. Here, it's common to find dirty homes, people using water from the polluted creek, not to mention the sewage running on the street in the open air*".

These representations call attention to a definition that, according to some theoreticians, coincides with a systemic focus (Funiber, 2002), in which the environment is formed by three spheres or systems: Biosphere, Sociosphere and Technosphere.

In the first one, Biosphere, the human being is included. This large system of functional and interdependent parts encompasses the low layers of the atmosphere, the upper strata of the lithosphere and of the hydrosphere, and the living beings, interacting with one another and with the surroundings. The second one would be Sociosphere, the artificial system of institutions developed by the human being to manage the relations between the community and the other systems. It is formed by the political, economic and cultural institutions of the society - it has been evolving throughout the centuries and it relates to the other systems, particularly with Biosphere, by means of concrete structures. Some of these, in turn, constitute Technosphere, which encompasses the human settlements, industrial energy centers, transport and communication networks, canals and waterways, agricultural farms, etc. It is a system under immediate human control and its history is recent. In spite of this, in certain occasions, Biosphere makes evident that it controls Technosphere, by means of the so-called natural catastrophes, whose effects are devastating to many human settlements.

Concerning the health and environment relation - the second theme in the organization of this text -

**Table 1 - Selected themes and the main categories constructed by the Triangulation of Methods**

Analyzed themes	Categories
1) Representations about the environment	a) Biosphere (physical elements and living beings)
	b) Sociosphere (physical elements, living beings and social institutions)
	c) Association with deteriorated environment
2) Relationship between health and environment	a) A healthy environment is important for people's health.
	b) Absence of basic sanitation and the inhabitants' lack of environmental education were the most frequently cited environmental problems.
	c) Habitability conditions, exemplified by stilt houses, were identified as another risk factor.
	d) The majority of the UBS did not have a specific place for external storage of the solid waste that was generated.
	e) In the majority of cases, inadequate disposal of garbage in areas adjacent to the UBS buildings was observed.
	f) Infectious and parasitic diseases were unanimously declared as having a socio-environmental origin.
	g) The Family Health Professionals showed that health surveillance actions are not part of their routine.
3) Health promotion	a) The presence of a multidisciplinary team was demanded by the majority of the PSF.
	b) The rootedness of the assistential model targeted at curative practices was perceived in the PSF's routine.
	c) Elements belonging to the Ecosystem Approach to Health were identified, although by the minority, of the subjects.
	d) The need of a professional from the environmental area was cited by some PSF and nobody mentioned the education professional.
	e) Public insecurity was highlighted as one of the major problems faced by the PSF.
	f) Construction of health care units for referral and counter-referral was also requested.
	g) The sanitary interventions that already exist in some of the UBS areas (water supply network, public waste collection and paved streets) were not remembered as positive points of the neighborhood.
	h) All the interviewees demonstrated that when educational actions are executed, they are represented exclusively by individual orientations and/or collective lectures.
	i) Malaria and dengue control actions were not performed by the PSF, as they alleged that it is the responsibility of <i>Fundação Nacional de Saúde</i> (FUNASA – National Health Foundation).
	j) The paths indicated for including environmental actions in the Family Health Strategy were: formal and not formal educational processes, improvement in the public services, specific professional qualification, multidisciplinary and intersectoriality; some of the subjects were not able to contribute to the discussion.
4) Social participation	a) To the majority of the PSF, the community is not concerned about the environment.
	b) The PSF's relationship with religious institutions was limited to the utilization of the churches' physical space for sporadic meetings.
	c) Interaction with the school was restricted to vaccination campaigns.
	d) With the organized society (neighborhood association, clubs, etc.), the relationship was almost non-existent.
	e) It was perceived that the PSF have difficulties in mobilizing the community for attending events.
	f) The educational actions aimed only to modify behaviors considered inadequate, by means of lectures. These lectures focused on the prescription of treatments, conducts and on changing attitudes, centering on the simple transmission of knowledge.
	g) The themes that were the object of the community meetings were defined unilaterally by the PSF.

we identified, in the representations of all the research subjects, the understanding of health in a broader context and in a more comprehensive approach to its different determinant and conditioning factors. Generally speaking, they explained that the existence of a healthy environment is important for people's health. When they talked about the justification of such assertion in the interviews, the answers were divided into many contributing factors, like food, basic sanitation, education, work environment and housing. Some professionals emphasized that the improvement in the population's quality of life presupposes a healthy environment, like in the following extract: *"It's not only important. It's a vital need so that you have good life conditions"*.

These data strengthen what Giatti and collaborators (2007) have shown: to improve the health of populations that live in precarious sanitary conditions, other particularities, like those referring to environment, values, customs and sanitary practices, configure a peculiar set of determinants.

Similarities to world problems (OMS, 2007) were also recognized by the interviewees. They mentioned the lack of basic sanitation as one of the greatest challenges in their areas of coverage, and illustrated this problem through lack of a sewage disposal system, inadequate handling of solid waste and deficiency in the neighborhood's water supply.

Despite the respondents' concern for sanitation, the majority did not know about the destination of the sewage and the quality of the water that was available at the primary care unit at which they worked. It was also observed that the health professionals ignored that water quality surveillance is a competence of the health sector and should be monitored as recommended in Directive 518/2004 of Brazil's Ministry of Health.

Unfavorable habitability conditions, exemplified by stilt houses, were mentioned by 18% of the interviewees, and we observed the existence of dwellings installed in floodplains (margins of the creeks) in the areas of study.

The pollution of the creeks was also mentioned as being caused by the inadequate handling of solid waste, performed by the community dwellers themselves. However, at all the UBS that had backyards, we observed high vegetation and accumulation of

garbage. In addition, the major part of the common waste that was generated, although it was adequately packed in plastic bags, did not have a specific place for external storage (dumps). As for the disposal of the health services' waste (perforating and cutting materials and those that produce biological risk), it was precarious and unsafe: although it was stored in cardboard boxes, it was transported, almost always, in the professionals' private cars to the closest reference unit, endangering the health of the people who handled it.

Among the interviewees, 13% mentioned noise pollution and air pollution as environmental problems. These answers came from professionals working at UBS located near streets with intense flow of public transport vehicles, and this was the major cause of these problems. Urban burning was another example of air pollution, referring to the presence of smoke caused by burning domestic garbage, the final destination of waste practiced by some dwellers at the backyard of their homes.

Among other evidences obtained by participant observation, and in agreement with the results of the interviews, we highlight irregularities found in the existing sanitation systems, such as: the intermittence in the public supply, negatively affecting the quality of the water supplied to the population; the distribution, by the public network, of untreated water; water loss through leakages and clandestine connections; disposal of fresh sewage in water collections that cross the neighborhoods; and shortages in the urban rainwater drainage system, favoring uncontrolled floods with the consequent proliferation of endemic vectors.

The other determinant and conditioning elements that were cited were: the deficiency of the urban transport system, present in the answers of all the health professionals, except those who worked at UBS that were located near downtown, where public transport was mentioned as a positive point (40%); negative aspects of the urbanization of the neighborhood (32%); absence of leisure areas (14%); and occupation of risk areas like margins of creeks and lands with high slopes (9%).

Still regarding the attempt to know and interpret the health/environment relationship, this study identified which aspects of the neighborhood were

more valued by the research subjects, like the local socio-environmental conditions or the offer of social equipment. To achieve this, the answers given in the interviews were separated in two categories: professionals who worked in UBS that were adjacent to the town center and professionals who worked in UBS located in the periphery of the city.

Thus, when asked which positive points of the neighborhood could be attractive to new dwellers, the first group predominantly mentioned criteria that concerned spatial location and availability of structure for commercial activities and services. Almost all (73%) the interviewees of the UBS near the town center mentioned the fact that the place is near a commercial center. In this group, for the same reason, the following were also elected: the existence of reference health units (60%); the good and diversified public transport system (40%); and the presence of schools with all the teaching levels (33%).

In the periphery group, the positive points that were mentioned were: the tranquility of the place (71%), the community inhabitants' receptivity and participation (57%) and the presence of the UBS (33%).

It is important to highlight that the sanitary interventions (water supply network, public waste collection and paved streets) which already exist in some areas of the UBS were not remembered as positive points by the health professionals, even though they are considered by these professionals as fundamental to the improvement in the quality of life.

Among the diseases related to environmental conditions, parasitosis was mentioned by 68% of the interviewees. Other diseases that were cited were: diarrheal diseases (59%), dermatosis (27%), respiratory infections (23%) and hepatitis (9%). The incidence of respiratory problems, favored by the local climatic factors (hot and humid), was indicated only as one of the consequences of the urban burnings, but it was not associated with the pollution caused by motor vehicles.

Although their incidence is high in the municipality, only 14% of the interviewees mentioned malaria (incidence in the North, East and West zones) and dengue as environment-related diseases. Despite

the fact that it was instituted in the national scope, the dengue combat program was not perceived as an effective action in the ESF DISASUL, even in view of the accumulation of garbage in many places of the catchment area, including areas adjacent to the UBS. The professionals alleged that it is the responsibility of *Fundação Nacional de Saúde* (FUNASA - National Health Foundation).

Tuberculosis, leishmaniasis, leptospirosis, schistosomiasis, sedentariness and hypertension were mentioned only once each. Hypertension was mentioned in view of the fact that the affected individual is also exposed to environmental and psychosocial problems, in this case, to the problem of noise pollution.

As a cause for these diseases, lack of hygiene (sanitary conditions) was stated by 9% of the professionals. Although not very representative in percentage, this condition was frequently reported in other moments of the interviews, as shown in the following example: *"Another problem is lack of hygiene. We've been approaching (personal) hygiene frequently. In some cases, we find feces spread in the house or on the walls". "Dirty water tanks. We're not the sanitary surveillance, but we explain these things"*.

When we analyze the representations about the environment and the health-environment relations that were expressed, we understand the multifactorial aspects of exposure that affect the inhabitants of the studied region. In this sense, unlike biological systems in which an ordinary complexity is configured, the social, technical or mixed systems extrapolate any mechanistic or functionalist order as a result of elements like representations, conscience and morality, that is, subjectivities that are capable of granting the highest level of complexity; therefore, inherent in the humans' relations with the environment and with their own health (Porto, 2007).

Thus, socio-environmental and health issues require the overcoming of explanatory models based on linear and reductionist causalities; likewise, we need processes of intervention and control of environmental risks that are capable of associating participant knowledge production with management and governance policies, also amplified in the

society (Ravetz, 2004; De Marchi e Ravetz, 1999).

The Ecosystem Approach to Health has been a relevant orientation to a broader understanding. It has also been described as a transdisciplinary proposal in the sense that it has in its wake the prerogative of joining research subjects and their knowledge in a collaborative way with researchers, in the process of knowledge production and in intervention dynamics targeted at the Health Promotion of populations submitted to peculiar situations and exposed to risks associated with unbalances in the ecosystems (Lebel, 2003).

In this sense, and considering the relevance of the ESF due to its objective of providing a model of integral care, it is possible to understand that, to promote health and prevention in light of the challenges of environmental health, there is a clear correspondence of this strategy with precepts of an Ecosystem Approach to Health. To Minayo (2002), this kind of interpretation requires from professionals a broad understanding of the different and complex factors that determine and condition health; however, it was identified among a minority of the representations captured through the interviews with the subjects of this study. In turn, regarding the integral application of the Ecosystem Approach to Health, we highlight its indispensable character in terms of interventions and dialog/participation of the subjects of the socio-environmental situations.

Within this premise, the analysis undertaken here was expanded beyond the representations about environment and health/environment relations, in view of the fact that health promotion and participation - the third and fourth themes approached in this text and presented on Table 1 - should be elements of great relevance concerning the integrality of territory-based healthcare.

In the collected testimonies, the disarticulation of the health actions practiced in the ESF is emphasized, because even though the professionals know that these actions should be performed according to the integrality principle, they showed that the health surveillance actions are not part of their routines. Escorel and collaborators (2007) argue that intersectoriality is a new challenge for the ESF, as it still is disadvantaged compared to individual demands for assistance. These authors also highli-

ght that, unlike more specialized professionals, the community agents present an action that is directed at interlocution with other sectors of the municipal government for problem solving, as they are closer to the community and to its reality.

The participation of other professionals in the ESF was considered fundamental by the majority of the interviewees, among them: the social worker (68%), the dentist (45%), the physiotherapist (41%), the psychologist (27%), the nutritionist (9%) and other specialized doctors (9%). These categories would meet the demand for specialized services generated by the primary care actions that are developed. Only 23% mentioned the professional of the environmental area, who would be necessary due to the scarce specific knowledge that the interviewees said they have, as can be seen in the following testimony: *"I have knowledge in my area, in the things I've learnt... But if I have to talk about the environment, basic sanitation... I don't have this support..."*. And, although the action of an education professional was not suggested, this need was represented in examples like: *"That safety of going to the community and being able to transmit what's best for them. I haven't had this guidance. I can talk to them, but will they absorb it?"*.

It should be highlighted, however, that the mere existence of professionals from diverse areas or specialties in the (multidisciplinary) ESF team does not guarantee an intersectoral action or, going further, as is expected from the Ecosystem Approach, a transdisciplinary action - to achieve this, it is necessary to develop articulated participant interventions of these different areas, in an attempt to understand and face socio-environmental and health problems of a complex nature.

Regarding the educational processes and the concern about "transmitting information", mainly about hygiene habits, demonstrated in the health professionals' statements, they have their origin, according to Meyer and collaborators (2006), in the sanitary practices that became hegemonic in the 20<sup>th</sup> century based on classic models of explanation of the health-disease process. It was believed that hygiene practices and regulation of behavior, many times in a way that focused on blaming the individuals, would be enough to prevent risks and achieve



wellbeing, as if the risk factors were circumscribed only to the behavior of each person.

Thus, Health Promotion emerges as a guide for the ESF actions, and Health Education, in turn, as indispensable to their implementation. And, when characteristics of the educational actions developed by the family health professionals were analyzed, activities represented exclusively by individual orientations and/or collective lectures were identified, following a reductionist conception directed at disease prevention. The theme used by them was always in agreement with the priority programs established by the Ministry of Health (arterial hypertension control, Diabetes Mellitus control, children's health actions, women's health actions - prenatal assistance and family planning -, tuberculosis control, endemic diseases control - malaria and dengue, among others).

These data lead us to infer that the ESF implemented at DISASUL is only a differentiated form of assistance, based on the forms of financing of the several health programs. This situation, which was already detected by Serrão and Gomide (2004) in other studies, end up producing a new fragmentation of the sector.

Besides focusing on the disease, the education that is practiced follows a traditional model of knowledge imposition on the patient. According to Besen and collaborators (2007), this practice of verticalized education unfortunately can still be found in the health professionals, who use the educational activities to transpose to the group the individual and prescriptive clinical practice. They treat users in a passive way, transmit technical knowledge about the pathologies and about how to take care of health and do not take popular knowledge and the population's living conditions into account. To Alves and Aerts (2011), the health education that is recommended by the ESF should be a social practice centered on the problematization of everyday life, on the valuation of the experience of individuals and social groups and on the reading of different realities.

Therefore, it can be deduced that the provision of the educational health practices has been one of the great challenges to these professionals: *"...We give lectures here at the little house. Brazilians are not much attentive to this, they don't participate*

*in lectures. So, when the room is full, we start the lectures by approaching the programs. Because, if we announce this, nobody comes"; "It's very difficult to bring people to the lectures. The nurse has arranged gifts, even snacks"; and "...In addition to the individual orientations given at the little house, we do this at school. At the schools we have a public, many youths, adolescents..."*

Directly related to the educational practices, another two challenges were preponderant: the inclusion of the environmental theme in these interventions of educational character and social mobilization aiming at participation. Participation is understood here not in a passive way, in which users are merely "listeners/spectators" or "informants", but, according to Valla (1998), as actions developed by different forces and social groups, which have a strong influence on the processes not only of formulation, but also of execution, inspection and evaluation of public policies and/or social services in the areas of health, education, sanitation, etc.

All the health professionals agreed that the environmental question is fundamental to achieve the objectives of the ESF. Thus, we attempted to learn what would be, in their opinion, the necessary mechanisms to include this theme in the exercise of their activities. According to the obtained results, it was possible to construct six categories: those who indicated that it would be through an educational process (27%); those who claimed greater efficiency in the public services (9%); those who felt the need of specific qualification (9%); those who viewed the environment as a specialized area - need of a specific professional (19%); and those who thought it would be by means of multidisciplinary and intersectoriality (18%); finally, some subjects recognized the problem but did not feel capable of contributing to overcome it (18%): *"...There is no formula, but the environment is very important." "...we provide health education, but we can't reach everybody. You work and have little return. It's difficult to make a program to reach everybody"; "...Trying to raise the awareness, which is the most difficult thing. We've been trying to do this for seven years but we still can't"*

Another concern is that, in the opinion of 50% of the professionals, the inhabitants of the catchment

area were not concerned about the environment, as can be seen in the following examples: *“the population is not interested in disposing of garbage properly. They leave it in the open air”*; and *“...They are so used to sleeping in the midst of bad smells, in the rottenness, that they think it’s natural”*.

One third of the professionals alleged that a reduced portion of the population takes care of the environment where they live: *“...The people who live in the urbanized area of the neighborhood (better infrastructure) are concerned about organizing the waste. These people had the opportunity of acquiring more information... have a higher level of schooling, too. But the people who live down there (the inhabitants of the stilt houses) get sick more frequently than the people who live here...”*. Divergent opinions also dichotomized the answer, classifying people who know about the problem, but do not take action to solve it.

Still about the community’s behavior, we asked what would be the consequence of this position, and direct implication on people’s health status was the answer of 73% of the group.

It is possible to visualize a set of parameters that guide the professionals’ generalized thoughts, corroborating what Minayo (2002) calls the blaming of the victims. That is, the population that suffers the health problems caused by the lack or inefficiency of the State’s interventions ends up being blamed for the social and environmental degradation in which they live. In fact, the situations they undergo and experience, even though they undoubtedly have the population’s collaboration in the dynamics of the factors that intensify them or contribute to the solution of the problems, derive from much more complex and broader issues that, generally, include power groups, political processes and economic interests. This situation strengthens the importance of the development of socio-educational interventions that favor mobilization and participation.

As for the spaces used for this purpose, in an attempt to investigate the relationship between the ESF and the community and its organizations, we found that the churches used to be occupied as places for the community’s meetings. The interaction with the school was restricted to vaccination campaigns. The use of these spaces was not offered for

community interaction. *“...Our relationship is in the vaccination campaign.”*; *“The principal even asked me for this support... she left the field wide open for our work. She said she thought it was interesting to develop...”*.

With the organized society, the relationship was almost non-existent. The reasons varied: *“I got to know that there was a neighborhood association because of a complaint against the little house... We have no access to these people... They don’t come to us to any activity”*; *“...To me, there is no neighborhood association, because I’ve never seen anybody come here to talk, to complain. I admit that I haven’t been going to the community very frequently, because a patient may arrive and there will be no doctors to assist him”* - the doctor allocated at that UBS assisted patients twice a week in only one period of the day. Therefore, it can be perceived that community-based and social mobilization actions need to be strengthened, in view of their relevance to popular participation - an indispensable foundation for Health Promotion, incorporating the socio-environmental issues into the perspective of integral healthcare by means of the ESF.

## Final Remarks

The difficulty that a large part of the health professionals have in understanding the environment in a systemic way, as well as in having a broader view of the health/environment relations, is intensified regarding the demands for ESF to intervene in the environmental health determinants, mainly if we consider the level of sophistication that is necessary to deal with the complexity that is inherent in the socio-environmental systems. In this text, we adopted the reading and the proposal of the Ecosystem Approach to Health, and we incorporated elements that are inherent in Health Promotion and subjects’ participation as necessary for intersectoral interventions.

Thus, it was possible to show that, although the principles that constitute the ESF are targeted at such interventions concerning prevention and Health Promotion, both the professionals’ representations and the inadequacy of the identified practices denoted little contribution to changes in

the hegemonic assistance model and, consequently, the need of specific qualification to understand the socio-environmental relations and to intervene, specially by means of educational methodologies of a participant nature. For educational practices, the need of the action of education professionals was highlighted. Another important point is the evidence that revealed a demand for the creation of partnerships with sectors connected with the environmental issue. This situation showed a total lack of articulation between the ESF actions and the actions of health surveillance and of other instituted sectors of the municipal government.

This makes us infer that, within the studied context, the reformulation of the Primary Care model implemented by means of the ESF still remains restricted to the organizational and financial structuring of the sector. Little is invested in the theoretical and methodological background of the professionals. Thus, it is agreed that the ESF has advanced only in the perspective of the improvement in the populations' access to assistance and to medical care (Escorel and col., 2007; Carneiro and col., 2007; Gil, 2005). This undoubtedly denotes, according to Teixeira (2002), the need to establish mechanisms of interinstitutional diffusion and cooperation that contribute to establish closer relations between academic centers and governmental agencies in several levels, especially in the State and municipal scopes.

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