SOCIAL REPRESENTATIONS OF HYGIENE AND EXCRETES DISPOSAL – THE CASE OF ECOLOGICAL DRY TOILETS INTRODUCTION IN QUIBDÓ AND TUMACO – COLOMBIA-

Claudia Liliana Delgado Rodríguez Street 160 Nº 73-32 Bogota - Colombia <u>claulidel@hotmail.com</u>

Abstract

The research identifies and analyzes how the social representations of the Colombian Pacific Coast communities, more exactly, that the inhabitants of the neighbourhood named Brisas del Poblado which is located in the Quibdó municipality and the inhabitants of the neighbourhood named Candamo which is located in Tumaco municipality, orient and organize their individual, familiar and community behaviours in order to dispose their excretes. The research is done since the installation of dry ecological toilets – Ecosan- in projects executed by two NGO's in Quibdó and Tumaco. The research determines that it must be understood the communities logical thought before starting the projects execution about intervention in basic sanitation and hygiene promotion , which allows the social promoters, to design a training process about sanity and begin objective processes that let people evaluate between traditional, new and different options (toilets, higyenic habits, etc.).

Keywords: Colombians Pacific Coast communities, excretes disposal, hygiene, projects of intervention, social representations.

Introduction

Quibdó and Tumaco are two areas located in the middle north and middle south of the Colombian Pacific Coast respectively; Tumaco is the second town in Nariño and the second harbour in the Colombian Pacific Coast. It has a 4.000 mm of annual rain average. Quibdó is the capital of the Chocó department and it has a high precipitation of 8.262 mm per year. The neighbourhood of Brisas Del Poblado y Candamo are mainly inhabited for refugee families and were conformed about eleven years ago. The Candamo neighbourhood1 is located in a low tide zone, and among the mangrove swamp. Candamo was inhabited by 375 families when work field was done in the year 2006. The neighbourhood Brisas del Poblado in Quibdó was inhabited by 181 families and 176 houses when the field work was done¹. Brisas del Poblado is in a changeable topography zone that have low hills trough tree stream named La Cascorba, Buen Año and the Cascorbita. The system of the hills protect the area of flood, but the 62.3% of the houses are built on a high risk zone of collapse (Plan, 2003-2006). The excretes disposal in both neighborhoods is realized into open field, in the streams or in the colloquially denominates "voladores" - fliers, which are plastic bags or news papers in which people are used to put the excretes and then trough it to the field or to water sources.

The plans of intervention of the NGO which have been executed for basic sanitation projects in the neighborhoods named Candamo and Brisas del Poblado were designed since the approach called "Housing and Healthy Environment"² which belongs to PAHO/WHO, that has been implementing in different countries in Latin America and The Caribbean.

¹ The field work of this research was done between august and october 2006.

² This strategy indicates that home is the facilitator entity for fulfilling a group of specifics functions for the person and his/her family: Protect them against the climate in clemencies; warranty the security and protection; facilitates the resting; allow the use of the senses to carry out the cultural manifestations; implement the store, processing and consumption of food; provide resources for personal hygiene, home cleaning and sanitation;

The project of intervention in basic sanitation, in the Candamo in Tumaco, was made by "*La Asociación Luna Roja*" -the Red Moon Association-. According to collected data in the field work, the project consisted of the installation of dry ecological toilets in the totality of the houses of the neighborhood. The previous, with the objective to promote the suitable disposition of excrete; nevertheless, the users did not feel comfortable with the ecosanitarios. Little by little the families stopped using the ecosanitarios because, according to the declared in the interviews, the community did not adapt to its operation, they did not find a suitable way to wash them, the users did not tolerate the smell of the excretes stored. In some houses the ecosanitarios were settled outside the house, which caused embarrassment and fear when they were used; in the same way the material - fiber glass- is not known in the zone and whenever they were damaged, the users did not know how repair them, and there was not a place to dispose the organic fertilizing resulted from excretes stored in the ecosanitarios.

The International NGO Plan³ made the intervention in basic sanitation in the neighborhood Brisas Del Poblado. The organization settled out to construct Familiar Sanitary Modules - MOFASA-, in which alternative technologies for the disposition were gotten up of excrete with dry ecological toilets, homemade purification of water for human consumption with Ceramic Filter and Lorena cooks - constructed with mud and sand, that's why it's name. Tanks for rain water storage were also incorporate, fat tramps, laundry, bathroom to shower, inn of kitchen and cupboard. These three components were constructed in wood, - please keep in mind this construction material for the later analysis of the research - and are used for washing hands, storage and preparation of foods. Plan International initiates the intervention with reference units - pilot models -, that oriented the organization on the relevant of the intervention, the acceptance on the part of the families, the technical specifications to consider and the processes of participation of the community (Plan, 2006: 2). This caused that the organization decided to construct four models of reference. Six months after constructed the reference models, the construction of the other components of sanitary modules - MOFASA- was made in the remaining houses without the dry ecological toilet. In Brisas Del Poblado rejection to the ecosanitario appeared during the first weeks of its installation, due to the presence of smell to fecal feces. It is precise to clarify that this technical fault was solved.

The objective of this research was to identify and to analyze how the social representations of the communities of the Pacific coast, more exactly the inhabitants of the neighborhood Brisas del Poblado of the municipality of Quibdó and the inhabitants of the Candamo neighborhood of the municipality of Tumaco, orient and organize the individual, familiar conducts and communitarian for the disposition of his excretes. To determine if daily knowledge, the relation with the environment, and the perception of the development, influence in the disposition of the excretes. To evaluate which of the categories and variables have greater incidence in the disposition of the excretes them. To determine what motivates and generates demand of the individuals, families and the community to adopt systems of disposition of the excretes. To establish, from the anthropology of the development, a methodologic route that considers the social representations as essential element in the process of adoption to disposition excrete systems.

Methodology Frame

The exploratory qualitative methodological focus was chosen to carry out this research. The ethnographical method was used to approach communities and learn about the settlements in both neighbourhoods, the social representations of everyday knowledge, the relationship

help to get better sick people, take care of ancients and disabled; procure the development of the children, and promote the development of the balanced familiar life.

with environment and the perception about the development related to excretes disposal. The field work was carried out in the second semester of 2006 in Quibdó and Tumaco; 23 indepth interviews were applied to users, NGO's officials and two focus group interviews were applied to users in both neighbourhoods; the information collected was about the environment in which neighbourhoods' inhabitants live: houses characteristics, streets, ecological dry toilets conditions and inhabitants –children and adults- and their everyday activities, laundry, kitchen utensils and daily bath in the river.

This investigation works with the concept of social representation of daily knowledge, the relationship with the environment and the perception of the development, through three dimensions: first, the concepts that the interviewed people use; second, the affirmations, hypothesis or premises of the interviewed people in relation to daily knowledge, the relation with the environment and the perception of the development, and third, explanations or models that explain on the water, the hygiene, the health and the house, in relation to the disposition of excretes, according to each one of the users of the ecosanitarios and promoters in Tumaco and Quibdó.

Results and Discussion

Next some of the results obtained in the analysis of the social representations of hygiene and disposition of excrete in users and promoters of the dry ecological toilets, from three central categories: daily knowledge, relationship with the environment and perception of the development. For effects of the analysis and results of the research we need to have present that the two communities were intervened previously, through the projects of basic sanitation that were described.

The neighbourhoods Brisas del Poblado in Quibdó and Candamo in Tumaco are located in geographic zones which topography makes difficult economically and technique the provision of the services of aqueduct and sewage system through public networks. What implies then that the inhabitants resort, since they have done it traditionally, to the water sources - small streams in the case of Brisas del Poblado and underground hole in Candamo. These sources are used by the inhabitants for the domestic activities: bath, washing clothes and utensils of kitchen, disposition of excretes, garbage and recreation. These small water sources do not have the volume of the great rivers to support the organic load that the inhabitants of the districts deposit to them daily, so that a high degree of contamination appears and the sources become transmitters of diseases for children and adults.

Another way to dispose excretes and garbage is into open field, which attracts rats to households, and snakes after them. Rats, transmit diseases and snakes, kill people with the mortal venom. The relationship *excretes* \rightarrow *rat* \rightarrow *snake* is not part of the traditional and daily knowledge for those inhabitants. However, users and social promoters in Quibdó did not explicitly state that the rejection to ecological dry toilets was due to excretes storage in households and that it attracts rats and snakes; The rejection is related to excretes unpleasant smell and its handling when they mix excretes with drying material. Users recurrent statement is "the snake eats excretes" and the explanation above allow us to conclude that the ecological dry toilet is not a viable alternative solution for Brisas del Poblado inhabitants. In Tumaco, ecological dry toilets rejection is not due to inhabitants resistance to the unusual; rejection is generated due to something that could not be included in their day by day living; it is about a practical problem, not exclusively symbolic.

Social representation about "the water clean everything", elaborated in the western society since century XIX, is also a social representation in the Colombian Pacific Coast, in agreement with observed in the field work and an affirmations analysis, explanations and concepts of users and social promoters, and the exposition of investigators Mosquera and

Aprile-Gniset. This region is a water civilization, which prevents the restoration of the dry cleanliness of the Middle Age, valid around the middle of century XVIII, between the inhabitants of that region, as it demands the principle of the dry ecological sanitation.

It was also determined that historical evolution of smell perception is not strange to Quibdó and Tumaco inhabitants. They are intolerant of excrement smell that excretes storage tanks can bring along in households. The manipulation of excretes at the time of shaking them with the drying material, like recommendation for the suitable maintenance of the dry ecological toilets, seemed to enter in contradiction with "Pasteur principle" of the existence of microorganisms and pathogenic agents - present in the excrements – causing confusion in the information that the users have received in training process in basic sanitation. The aversion to the contact with excretes of users in Quibdó and Tumaco, prevents against ecotoilets' cleaning and maintenance, therefore it deteriorates and is no longer used.

The intervention projects in different thematic areas in Candamo and Brisas del Poblado neighbourhoods, have incorporated conceptual categories in the social representations of the users like: bacteria, microorganisms, contamination, hygiene and suitable disposal excretes. Slowly, the people "objetivan"³ and "anclan"⁴ these categories and acquire structure and image of the body cleanliness and the house cleanliness, doing emphasis in the kitchen and the bathroom, spaces that from the hygienists campaigns of century XVIII were included in the deodorized and cleanliness of the houses in the western society.

We affirmed that the incorporation of the concepts is a slow process because the analysis determined that the social representation of cleanliness and corporal cleanliness for the inhabitants of this region is materialized in the clothes that are brilliant, in the external aspect, without including the physiological processes. The slowness of the process is due for insufficient economic income that the inhabitants of Candamo and Brisas del Poblado perceive to acquire the variety of products that requires an optimal corporal and house hygiene. For this same reason the houses can not be constructed with the suitable spaces, as it expresses the Strategy of "Housing and Healthy Environment" proposes to PAHO/WHO.

Hygiene and cleanliness are agents of change in social representations of the communities. The corporal cleanliness and the physical space cleanliness has transformed the imaginaries of city, with the inclusion of technologies that canalize and drain the water, taking it into the house, distributing it by the different spaces and extracting it when it has been used. The cleanliness that moves away the microbe penetrates the sphere of private space, for the cleanliness of the most secret, with the inclusion of the bathroom in the house in 1880. The daily practice of optimal hygiene, corporal cleanliness and physical space cleanliness, require public infrastructure works that stimulate the ordering of the cities; public networks services require of routes for their installation and it order the distribution of the houses, because it favors the circulation and the access to them. In Quibdó and Tumaco, the National State and the Local Governments do not provide to the inhabitants of public services of aqueduct and sewage system that are required in urban zones to favor the hygiene practices. The availability of services to supply water and disposal excretes, with public networks services, transforms habits and practices of hygiene and corporal cleanliness and house cleanliness, among others, because: it facilitates washing of clothes and utensils

³ "objetivación": It puts in particular what is abstract. It presents/displays in images the ideas, and reabsorbs an access of meaning, materializing them. By means of "objetivación" the invisible becomes perceivable; the abstract is structured in form and image and becomes interchangeable socially.

⁴ "Anclaje": It watches the social rooting of the representation and its object; it allows transforming what is strange in relative, doing it intelligible what is habitual. It makes possible to incorporate the strange in a network of categories or preexisting meanings

⁵ Ibid.

kitchen; it guarantees safe water for consumption and food preparation; it stimulates corporal hygienic habits like: to bathe, to wash hands, to brush teeth and it changes the conducts to disposal excretes. Leading to *"anclaje"*⁵ of the concepts of comfort and privacy.

Comfort and privacy are concepts that the users of dry ecological toilets in Candamo and Brisas del Poblado neighbourhoods have incorporated from projects in basic sanitation. Women showed to feel like more comfortable when making domestic tasks as washing clothes and kitchen utensils, and preparing foods in any hour of the day, which was possible when having water in the house with the storage tank. Men, women and children affirmed to feel comfort and privacy when they has been able to disposal excrete in dry ecological toilet and no more in open field or in the river, as also to bathe in bathroom, behind with closed doors, without feeling observed nor threatened. Hygiene promotion projects and basic sanitations projects must include these categories in the intervention in communities that present similar geographic characteristics of populate and similar institutional conditions to Candamo and Brisas del Poblado neighbourhoods.

The data analysis permits to determine that the promotion in hygiene and the modification of hygienic habits is most successful with children. First, they feel proud for the elements that have been incorporated in their houses, inviting others children to use them, which shows them like appropriate multipliers of new knowledge; O the other hand, children are in formative stage, they have time and motivation to learn and this let them possible to incorporate the new knowledge to the network of categories that are beginning to construct. School education would contribute in the process of "*objetivación*"⁶ and "*anclaje*"⁷ of new hygienic habits in children of the region. Teachers play an important role teaching basic scientific knowledge, which are necessary to understand why? and how?, they must carry out the diverse daily hygienic activities: To use the toilet - anyone of the alternatives - and wash their hands, fundamental actions that affect the reduction of diarrhea.

Teachers must have an active participation in hygiene campaigns in these communities, accompanying to children in the incorporation of hygienic habits. Historical data since century XIX, briefed in the investigations carried out by Vigarello, Corbin and Pedraza permit to conclude this asseveration: *to learn hygienic habits in school environment, will allow to spread them in the private space*. In the case of the Colombian Pacific Coast, in the house and the family of each boy.

Likewise, the analysis determined that the users in Quibdó and Tumaco feel under pressure in the face of the inference, because there is saturation of the received information in workshops done by different nongovernmental organizations – NGO in the projects of intervention. The received information is confused with the traditional knowledge: although some mothers in Candamo and Brisas del Poblado relate water sources contamination - by excretes and solid waste disposal - with diarrheic diseases, spots in the skin and vaginal infections, they apply traditional practices to cure the diseases (for example: baths with medicinal plants, prayers or the use of scapulars and many other practices) in order to cure illnesses. Additionally, the community select the information; because the people receive information that they wanted and the information that contributes to benefit them; they filter the information according to the traditional knowledge and that they consider detrimental, as it is the storage excrete of dry ecological toilets. For example the communities attribute the presence of vectors (rats, cockroaches and flies) in the house, spots in the skin and vaginal infections to the storage excrete of dry ecological toilets. This is another one of the reasons because the users in Tumaco stopped the use of the dry ecological toilets.

⁶ Ibid.

⁷ Ibid.

Conclusions

The saturation of information and specific localization between the users, allow to conclude that projects for intervention in sanitation and hygiene promotion, are necessary to do a previous study about the community culture, that allows to understand the inhabitants logic of thought and their traditional and daily knowledge. This, because the projects should not be disruptive, the projects should contribute to solve the specific problems that people must face daily.

Users in Quibdó and Tumaco do demand public services and basic sanitation for personal, household and environment hygiene. However, in the two intervention projects it is evident that since the formulation fase of the projects they did not developed a study which would have investigated about the culture, the traditional and everyday knowledge and their relationship with environment. Even so, there are differences in this sanitations intervention with dry ecological toilets. In the neighbourhood Candamo case, the "Asociaciòn Luna Roja" - Red Moon Association- made an intervention with all the inhabitants of the neighbourhood, without to estimate the acceptation and adaptability; in the neighbourhood Brisas del Poblado case, the NGO Plan International installed only four pilot dry ecological toilets, with the target to evaluate and to decide if it was possible to replicate this solution in all houses of the neighbourhood.

Study results establish that in order to satisfy these needs, it has to start from a community requirement and in a second place, it is necessary to consult with the community about which will be the more suitable need satisfier and of more adaptability. To understand the logics in community members thoughts allow to project's promoters of basic sanitation intervention and hygiene promotion to do "*anclaje*"⁸ in the ways of how people conceive health, illness and hygiene. This will allow them to design an education process about healthiness and start "*objetivacion*"⁹ processes which mediate in the utilization of traditional satisfiers, the new and the different ones.

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⁸ Ibid

⁹ Ibid

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