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Health System Planning. A methodology to locate Social and Health Structures in Developing Countries

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Abstract

The subject of this research is the identification of an experimental method to locate social-sanitary structures in some countries with situations of great emergency. At the beginning, this research analyses the collection of some data related to main characteristics of emergency areas, such as population density, health care facilities, environmental situations, proximity of the rivers, availability of infrastructure, settlements, floods and characters of the site.

Through this experimental method, each data allows to realize a map, which shows the places where are located the areas with major problems related to that specific factor. The results of each map can be compared and summarized into a complete table that allows to realize a final map with the worst situations of each areas (“stress” areas), that require priority interventions.

Finally, by recognizing a long-term strategy, this research identifies a precise case study to verify this experimental method.

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1. Introduction

The health system planning based only on the construction of the building (typological space, dimensions, construction techniques, materials, etc.) would give too poor results, since the health facility will fail to function properly if we do not take into account other surrounding factors. It is therefore necessary an integrated planning process that takes into consideration the diseases to be treated, the area of influence of the health facility, the resources available on site, the quantity and quality of the medical staff. These main factors will have to be arranged

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through a methodology that links each of them [7]. A plan for health facilities is an integral part of a global health strategy; it should also be developed in relation to multi-disciplinary approach of national planning. The principal functions of planning are the allocation, organization and evaluation of resources (human, technological, physical), which are defined equally for all areas. The development of inappropriate buildings is often due to the lack of well-documented guidelines; this absence hampers the work of architects and planners [4]. The lack of the current system can be summarized in these steps:

- the planning is based on arbitrary priorities with little foresight in programming and to the health facility management methods;
- health facilities are built without proper planning as a response to an immediate need.

The construction planning process is therefore uncoordinated and requires an integrated design [8]. However, the production of the most relevant publications has led to a beneficial effect in the way of thinking, therefore now there is a more solid basis for establishing advanced guidelines, which help to plan logically, easily identifying problems and solving them rationally.

2. Research objectives

The objective of work is to define a methodological criterion for locating the Health Post network in rural areas of the Third World (Fig. 1).

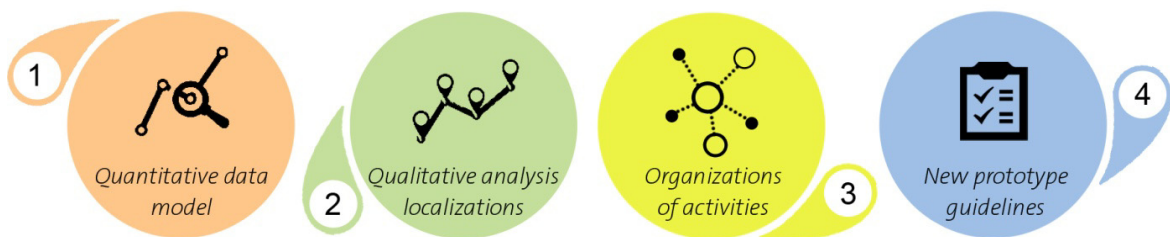


Fig. 1. Methodologies for health system planning

- A settlement strategy through quantitative data to locate Primary Health Care facilities on the rural areas of developing countries.
In this field it is important to identify the area to work on; collect data about the disease characteristics, the population density, the health care facilities, understand the environmental situation, etc. in order to extract quantitative data.
- A locating process through qualitative choices.
The numerical data obtained should be considered for locate the health structures from a critical approach that evaluate the quantitative data through the qualitative choices: proximity of the rivers, settlements, floods, characters of the site, availability of infrastructure, etc.
- Methods to identify the activities, functions and cultural local habits.
Before describe the prototype construction, it is important to define the catchment area of the health facility for identify the different activities to be performed inside, according to the population that revolve around to the health post. We should also understand local cultural habits to figure out how to organize the internal and external spaces of the centre.

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