

## Strategies to implement a burn program in developing countries

### Guatemala experience, Roosevelt Hospital

#### Abstract:

To create an integral burn program in a developing country the active participation of different organizations is vital. This includes government programs as well as private companies and NGO's who should work together. In our country, burns are secondary to other health pathologies that are the major causes of most morbid-mortality cases. It is mandatory to unite several factors to solve burn problems and it is easier to get the interest of several participants if the responsibility of burn care is shared between the public and private organizations. In this paper we will present the strategies that were useful to us, in our public hospital, to start a burn program. We recommend making decisions based on the resources and strengths of every country.

#### History:

In Guatemala, diarrhea, malnourishment and respiratory tract infections are the main causes of death in the pediatric population. Burns are secondary and they receive little attention from the government health authorities. Roosevelt Hospital is the 2nd largest public hospital in Guatemala and is located in the capital (Guatemala city). The hospital is a national reference center. Even though it has 1000 beds the hospital didn't had a burn unit before 2009. After returning from my Plastic surgery training in Rio de Janeiro, I started working at the Pediatric plastic surgery ward where most of the burn children were admitted for care. The children that survived were followed up at the out- patient clinic. Most of the burn patients developed scar burn contractures because of secondary healing and the lack of a burn rehabilitation program in Guatemala. A tremendous amount of resources were spent for the continuous repair surgeries that every patient required.

After a visit to Nicaragua, where a pediatric burn rehabilitation program (Aproquen) was functioning at that time, I came back to Guatemala with the idea to start a burn program similar to that. I had the opportunity to meet Rick Sieller, who had assisted Aproquen with the development of the burn rehabilitation clinic. At the time, Sieller was working with Physicians for Peace (PFP). Rick Sieller later left PFP and started his own Foundation called: International Children and Women Burn Foundation- [www. IWCB.org](http://www.IWCB.org)). Sieller made a site visit to Guatemala City and to Roosevelt hospital and evaluated the resources, personnel, and the local conditions assessing the overall probability of success. Sieller decided to start a similar program in our country.

, Why it was important to start with the rehabilitation clinic?

1. The burn clinic could be implemented at an outpatient facility next to Roosevelt hospital
2. It didn't need a big facility
3. Rick Sieller gave us a support with the equipment and supplies to start the clinic and Sieller committed ongoing clinical and non-clinical support.
4. The human resource needed was small and we could handle the work schedules
5. There was an offer to finance the salaries of 3 persons to start the program

Fortunately, there was a big facility next to Roosevelt Hospital which the outpatient pediatric clinics were held. Different specialties had out-patient services and patient follow up there. It was decided to use an available physical area on the grounds to start a burn rehabilitation clinic. The Patronato, a private organization, provided an initial investment to remodel the 1<sup>st</sup> rehabilitation clinic for burn patients in Guatemala. The fact that the clinic was next to the hospital but not inside the hospital gave us the chance to receive patients not only from Roosevelt hospital but from different hospital and outpatient centers that knew about our opening. Other organizations that provided funding were UNICEF and the Pantelon Foundation. No government assistance was received for this program. The most important aspect of this burn clinic was the fact that it was the first program for burn rehabilitation within the country and after 8 years it still remains as the only program in Guatemala specialized in burn rehabilitation.

In our experience, it was very important to start with a rehabilitation program. The program was an affordable project and the budget to keep it going was not as high to an acute burn unit. It was also not less important. A burn clinic can offer different types of therapies: pressure garments, splints, physical therapy, ultrasound, occupational therapy, changing dressing clinic, psychological sessions, academic and recreational activities. With this clinic and program, we were able to make significant changes in our patient's lives and the results enabled us to look for more donors. The outcomes are very important for everyone. Maintaining the data, database and photos of every patient is mandatory and Sieller helped us with this.

With time, more therapies were added to the clinic, and more patients demanded our services. After 3 years of work at the clinic, we had an opportunity to open a burn unit program. We decided to build a pediatric burn unit, why pediatric?

In our country 2/3 of all the burns occur in children under (Roosevelt Statistics) 14 years old, and 80 % of the cases that come to the hospital are moderate cases. The percentages have changed with time, and actually 1 out of 3 cases now needs an ICU facility when admitted. With the data at hand, we started to plan the project of a pediatric burn unit at Roosevelt hospital. There wasn't any physical space available but a strategic area at the Pediatric building was established.

This second project was divided in 3 phases: Construction, equipment and functioning.

Construction:

It is very important to make a plan of needs, in this way the burn unit can fulfill the demand of beds and medical attention. It is very important its location and needs to be have close access to the emergency room. It is also very important to have the burn unit next or inside a General hospital. This is vital because many services of the hospital will be used for the burn patients and should be provided by the hospital: X-rays, laboratory, Blood Bank, Laundry and kitchen for example.

The funds to build this unit came from private companies, national and international, private foundations. As we looked for funds, we presented the project to a national contest sponsored by Fondo Unido de Guatemala (United Way) and Amcham (American chamber of commerce). At this

contest, we won the competition and a Gala dinner raised the first 40,000 dollars to start the building.

At the same time the Guatemalan children Burn Foundation was created to look for more funds and to support prevention and awareness programs within the population. This burn foundation established a close relationship with the Patronato from Roosevelt hospital, in this way a civil organization could provide funds to a public hospital program with the security of a good use of the funds. The Roosevelt Patronato is a private organization with many years of experience and “trustworthy” within the medical grounds, it works within the hospital, and it is able to receive funds from private companies and international foundations, that want to collaborate in health programs within the hospital but doesn’t want to give the funds to the government authorities directly. The Patronato works as an organism that administrates the funds and has external audits and is in charge to inspect that the funds be executed with transparency.

No government support was given to the construction of the building.

Equipment:

To equip the burn unit a national campaign of fund raising was done by Exxon mobile, through the donation of 5 cents of quetzales per every gallon of fuel sold. This campaign was maintained 2 month and the money raised were sufficient to equip the whole burn unit.

This was an effort between the civil society and a private company and was successful.

Function:

This phase it is vital because it is necessary to ensure the continuous work of the burn unit. Through a legal document and with the approval of the government health authorities, a government Agreement was made and reached, where the Public health Ministry compromises to hire the human resources and to supply all the materials needed to treat the burn patients. This document was signed just before the construction began; and it was a demand of the sponsors of the building.

**It is also very important to make an operational budget (personnel, supplies, and maintenance)**

This is given to the Hospital authorities, so they can include it with the whole hospital budget. It is very frequent that in our countries that the public hospitals have trouble covering all the hospital needs with the budget assigned. That is why is very important to keep the private companies support through the Foundation and the Patronato because the continuity of the burn unit cannot be at risk.

Finally: A board of directors was created with representation of the children burn foundation, the Patronato (administrator) and the hospital. This enables the Board to make decisions that benefit the burn unit and to keep some support external to the hospital.

1. If possible, start a project whose budget could be reached without difficulty. Trying to create a burn unit, to equip it and to keep it going is a major task. If we have limitations with the budget it is wise to start other programs such as prevention, rehabilitation and training activities. Get early results and gain experience.

2. Data Base: Without a database, it is impossible to know exactly what the problems of burns in our hospitals or our country is. The donors need to know what the real problem is and they need facts and statistics. When implementing any program, it is vital to keep the data base current and accurate and a photographic archive of every patient. It is through good results that we will be able to get more sponsors.
3. It is necessary to ensure the participation of different organizations to aid with the treatment of burns. The government will not take care of burns solely because it is not a priority in its health programs. If we can convince the different organizations that this responsibility can be shared, it will be easier to achieve this goal.

To create board of directors or an administrative council is valuable because the program is the result of collaboration and different organizations can provide useful solutions for the administration and sustainability of the program. Decision making responsibility is also shared.

The existence of any burn unit cannot be vulnerable to political changes or, hospital budgets. This situation is common and in many countries. Legal documents are vital to guarantee the existence of the burn unit.

You must unite the program of acute burn care with the rehabilitation program. Every country has its own characteristics , and it is possible to integrate more than one program at the same place, and in this way a team can be created and make efforts to work together with one mission.

Look for people that have suffered burns. It is incredible, but only burned people and those that care for them, can understand the real problem of burns. If any of these people have any political, economic or social positions, it would enable them to help. It is important to take advantage of this fact.

They will always help in any way, look for them.

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