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The Dentist and the Missions

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In 1962, the authors established a permanent dental clinic at Alpha Orphanage in Jamaica at the invitation of the Sisters of Mercy. Until that time there was no regular dental care for the 600 children at the orphanage — only emergency extractions were performed — due to a critical shortage of dentists and complete lack of dental facilities.

The situation at the orphanage was typical of conditions throughout Jamaica where the dentist-population ratio is 1:19,000 compared to 1:1,500 in the United States. With this kind of imbalance, the local professionals cannot possibly provide all the dental care and treatment required by the population despite their sometimes heroic effort. Since the Sisters of Mercy could not provide the services either, their only recourse was to seek help outside Jamaica. The most logical source of help was the neighboring U.S.A. with its favorable dentist-population ratio, and so the invitation was extended through the Catholic Medical Mission Board.

When Vatican Council II emphasized the role of the laity in the life of the Church, it called on us all — not only the religious — to be "witnesses of Christ" and "brothers to all men." This gave us a new insight into problems such as those of the Alpha Orphanage: medical mission work clearly fits the Vatican II concept of the "people of God." When the dentist or physician affiliates with a missionary endeavor, he has an unusual opportunity to be a witness to the teaching of the missionary. By his example, the Christian ideal of brotherhood is made clear to the local population — an example is worth a thousand words. It is in this context that the teaching of the missionary converges most effectively with the reality of mission life.[1]

St. Teresa's Dental Clinic, as the dental mission at Alpha Orphanage is now called, was established in a farm shed that had been cleaned,

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This article, a documentation of a program started a decade ago at Alpha Orphanage, Kingston, Jamaica, was submitted to the Linacre by Thomas M. Check, D.D.S. He lists as his co-authors: Hugh V. Day, D.D.S., Sister Mary Damian Reinbolt, R.S.M., R.N., and Sister Marie Therese, R.S.M.

painted and converted into an infirmary by the Sisters of Mercy. In the first year, our dental equipment consisted of an old barber chair, overhead electric bulb, a portable dental engine and a few basic instruments and supplies. We conducted the clinic for two months during which we provided the most necessary treatment and began the DMF survey (more on this later).

In the second year various benefactors in the Philadelphia area cooperated in furnishing us with a pump chair, Ritter D unit, Castle light and supplies. We brought along our own operative and surgical instruments. It was at this time that the second DMF survey was completed and the annual increment of dental decay rate determined.

In the third year the clinic acquired new high-speed equipment, a mobile dental cabinet complete with supplies, and operative and surgical instruments which will remain permanently at St. Teresa's. This completely inventoried dental facility now needs only a pair of professional hands and a replenishing of the expendable dental supplies to continue the care of these children. (The inventory list is available from the Catholic Medical Mission Board as a guide in setting up other dental clinics.)

At this stage of development, the annual work of the Clinic requires only a few weeks of professional time which is provided by interested dentists from the United States and by Jamaican dentists who serve a few days each month. We have found that the cooperation between the two groups of dentists promotes an exchange of ideas which leads to a better understanding of the local dental care problems and of the work of the mission while fulfilling the primary goal of providing excellent care for the needy children of Alpha Orphanage.

Dental Care

During the first two years our primary objective was to measure the prevalence of dental caries and the annual increment among the children of the orphanage in order to plan an adequate program of dental care. We followed a procedure developed by the World Health Organization and described in its technical report series 242 (1962).[2] The WHO recommends that public health surveys of this type be carried out with basic equipment: plane mouth mirrors, sharp probes and natural daylight where possible. Radiographs are not recommended because it is impractical to make x-ray units standard equipment.

In 1962, we examined all the children and determined the DMF age-specific index (i.e. the average number of permanent teeth per person that are decayed (D) missing (M) or filled (F); the DMF index is a quantitative expression of the lifetime caries experience of the permanent teeth). We made the same study on the same children in 1963 and thus were able to determine the annual increase in tooth decay per child. This figure, which is called the annual increment, was 1:13 (1963 average DMF of 5.12 *less* 1962 average DMF of 3.99).

The incremental care program is a method for measuring the accummulated needs of a given population at the beginning of an organized effort and of managing the increment of need over a determined period. Designed by public health experts, the method utilizes best the available dental man-hours for clinics and institutions.[3] On the basis of the DMF survey at Alpha Orphanage, we were able to determine that about two months of clinic time a year would provide all the children with initial and incremental care as long as they are at Alpha Orphanage. This care would raise their oral health to ideal standards of progressive restoration as carious lesions appear.

During the most recent two-month clinic period (a month each by two of us) there were: 1,368 patient visits, 820 teeth restored, 321 teeth extracted and 35 oral surgery procedures. The surgical procedures were done by general practitioners who involved themselves in the need of the orphans.

Local Factors

A dentist who decides to serve in a dental mission must not only be capable of living and practicing successfully in his own environment but must also be able to adapt to the environment of the mission locale. An intimate knowledge of the local clinical factors is necessary if the treatment program is to be successful. Furthermore, the dentist should be aware that, at the mission, he will be open to observation by many and will be subject to criticism as well as approbation. His personal conduct will be examined as carefully as his professional skill and judgment and much will be expected of him.

In a more practical vein, here are some of the important preparations that he should make before starting a dental mission:

1. Obtain approval of a temporary licensure from the Minister of Health.
2. Conduct a survey of the existing facilities to determine the availability of a clinic building, basic dental equipment, dental supply house, source of water, waste disposal facilities, electrical supply (voltage and frequency), living quarters.
3. Where there is a shortage of equipment, make arrangements to acquire the most simple and functional type possible since repairs and replacements may be difficult to obtain.
4. Find out if auxiliary personnel can be recruited from the mission or local area.
5. Determine how much time the establishment of the dental mission will require and be prepared to make the commitment before starting the endeavor.
6. Learn as much as possible about the area and its culture (a search will usually uncover much good reading on the subject) to avoid many minor irritants that would otherwise challenge your capacity to adapt and your effectiveness as a professional.

7. Learn about the natural factors of the area — climate, humidity, rainfall, altitude — to determine the best time of year for the performance of the dental care program.

8. We strongly recommend that you work through a sponsoring agency and employ all the services and information available from it. The Catholic Mission Board (10 West 17th St., New York, N.Y.) has assisted in placing many individual professionals in mission hospitals and clinics throughout Central and South America, Asia and Africa. Under their sponsorship, about 100 dentists have done mission work in the last 10 years; individuals have served for periods of two weeks to two years, including many repeat visits.

9. You should have a clear understanding with all cooperating parties about financial responsibility for equipment, supplies, transportation, lodging and meals.

10. Don't attempt dental mission work unless you enjoy good physical and mental health.

Because it serves a controlled population group, St. Theresa's Dental Clinic is not completely typical of dental missions. Most are general clinics, open to all in a certain area: the dentist sees patients who walk into the clinic for help and may never see them again. Under these conditions, the main objective is the relief of pain and infection and instruction in preventive care; DMF surveys, restoration of carious teeth and replacement of missing teeth are refinements which cannot always be carried out. Nevertheless the ten preparations outlined above apply equally well to both types of clinics.

Fulfillment

The work that we perform at St. Teresa's Dental Clinic has contributed greatly to our own sense of personal fulfillment, both as Christians and as dentists. It is a reflection of our heritage that professional men — especially those from an affluent society with a spiritual tradition — care enough to leave their own to help the needy and thus become effective witnesses to the ideals of the Fatherhood of God and the brotherhood of man.

The establishment and consolidation of St. Teresa's Dental Clinic would not have been possible without the cooperation of Alpha Orphanage, the sponsoring agency, and generous organizations, dentists and supply companies. The Jamaican Ministry of Development and Welfare, the Minister of Health in Jamaica, the Jamaican Dental Society, The United States Ambassador to Jamaica, and the Dental Health Division of the Pennsylvania Department of Health (statistical analysis) were all helpful in the success achieved so far.

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