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Dental Treatment of Migrant Farmworkers

DENTAL TREATMENT OF MIGRANT FARMWORKERS

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There is a peninsula of land extending southward between the Chesapeake Bay and the Atlantic Ocean. It is made up of portions of three states, Delaware, Maryland, and Virginia and is referred to as the Delmarva Peninsula or the Eastern Shore of Virginia. Virginia makes up the southern part. The communities were very isolated until the two bridges were constructed, one crossing the Chesapeake Bay from Annapolis, Maryland and one crossing the mouth of the Chesapeake Bay from Norfolk, Virginia.

The southern part of this peninsula has one main road, Route 13, and remains quite isolated, especially off this road. Migrant farmworkers and their families, while following the maturation of crops on the east coast, pass through this region during late June, July, and August.

A mechanism for providing dental care for migrant farm workers and their families has been in operation for two years on the Eastern Shore of Virginia. The program has been made possible through the cooperative efforts of the eastern Tidewater Area Health Education Center (WTAHEC), a division of the Eastern Virginia AHEC, the Delmarva Rural Ministries, the Medical College of Virginia/ Virginia Commonwealth University Dental School (MCV/VCU), the Old Dominion University School of Dental Hygiene, and the Virginia State Health Department, Division of Dental Services.

Dental students would not be treating migrant farm workers on the Eastern Shore of Virginia were it not for AHEC involvement. Dr. James Kennedy, the previous Dean of Medical College of Virginia/Virginia Commonwealth Univ. School of Dentistry, had a desire to have dental students do an extramural rotation with the Eastern Shore migrant population. The school, however, was not in a position to finance that project. Through the involvement

Photo Courtesy UNHCR

of the Area Health Education Centers Program, the project became a reality. Dr. Edward Haskell, Director, and Dr. Steven Zucker, Deputy Director, not only provided financial support for the project, but through their enthusiasm and guidance, caused the program to become operational. AHEC personnel, especially Mary Ann Moore of the Western Tidewater AHEC, coordinated the numerous activities. This report deals only with the dental portion of the program, but it should be noted that the entire project with the migrant farmworkers and their families also involves dental hygiene, medical, nursing, pharmacy, and medical technology students.

Because of the AHEC guidance, the dental students not only treated a needy population different from the patients seen in the dental school clinics, but had an opportunity to benefit from the interdisciplinary experience of interacting in this effort with the other health related disciplines, and gaining an appreciation for each other's role.

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TABLE 1

The Numbers and Percent Composition of Dental Services Provided to Migrant Farmworkers and Their Families According to Age (Child or Adult) and Sex, by MCV/VCU Senior Dental Students on the Eastern Shore of Virginia, June-August 1983

	Age	N Records	Exam + OH	%	Fill	%	Ext.	%	Ext. + Fill	%	TOTAL %
Female Child	2-17	39	20	51.13	15	38.46	3	7.69	1	2.56	99.84
Male Child	2-17	40	25	62.50	8	20.00	7	17.50	0	0.00	100.00
Female-Adult	18-60	45	5	11.11	12	26.67	26	57.78	2	4.44	100.00
Male-Adult	18-61	90	16	17.76	13	14.44	59	65.561	2	2.22	100.00
TOTAL		214	66		48		95		5		

Key: Age =Age range in years
N Records =Number of records examined
Exam. + OH =Examination plus cleaning/education only
Fill =Filling/Amalgam or composite
Ext. =Extraction
Ext. + Fill =Extraction plus filling

Note: Numbers are for patients receiving a type of treatment and does not take into account the numbers of procedures provided for each individual.

This rotation proved to be, and continues to be one of the best, if not the best, site in the Senior Extramural Program, and would not be in existence without the effort of the Director and Deputy Director of the Virginia AHEC Program.

Dental Clinic

The dental clinic is a two operator trailer owned and operated by the Division of Dental Health, Virginia State Health Department. The trailer and the Division of Dental Health staff dentist operate on a nine month schedule. The trailer is moved from school to school, treating the children of this rural, somewhat isolated community.

The three month summer migrant program made use of an otherwise idle trailer, as well as providing a welcome income to the staff dentist who has a nine-month salary contract with the state. The Delmarva Rural Ministries (DRM) financed the rental of the trailer and purchased the supplies. The staff dentist's salary was provided by the Western Tidewater Area Health Education Center (WTAHEC), through federal funding to the Area Health Education Centers Program (HRSA Cooperative Agreement #5U76PE0 0054).

Student Support

Students were provided housing through DRM and a food and travel allowance through WTAHEC. This allowed students to choose the experience based on their interest, rather than an externship site which is closer to the university. The housing arrangements allowed dental, dental hygiene, medical, nursing, pharmacy, and medical technology students to interact and better understand their interdisciplinary roles in providing care for the migrant population.

Population

The migrant population on the Eastern Shore of Virginia by race and sex for 1983 was described in the Delmarva Rural Ministries/AHEC Project 1981-1983 report. The percent composition by race and sex were black American, 45.29% (31.95% male and 13.34% female); Mexican American, 27.22% (17.09% male and 10.13% female); Haitian, 22.54% (14.00% male and 8.54% female); and other, 4.95% (3.42% male and 1.53% female).

The total numbers of the migrant population on the Eastern Shore of Virginia were black American, 1,511; Mexican American, 908; Haitian, 752; and other 165; with the total being 3,336.

Results of Review of Treatment Records

Treatment records from the 1983 summer dental student rotation were examined (*See*, Table 1). Of the 214 records reviewed, 39 (18.22%) were from female children (age 2-17 years); 40 (18.69%) were from male children (age 3-17 years); 45 (21.03%) were from female adults (age 18-60 years); and 90 (42.06%) were from adult males (age 18-61 years).

The types of treatment performed were divided into examination and cleaning only, cleaning being scaling and/or rubber cup prophylaxis, and oral hygiene education (Exam and OH); examination and filling of cavities with amalgam and/or filled resin, with oral hygiene services and education performed if time and personnel available (FILL); extraction of tooth or teeth for cavities or peridontal disease, with oral hygiene services and education provided if time and personnel available (Ext.); and patients receiving both fillings and extractions plus oral hygiene services and education if time and personnel available (Ext. + Fill).

The distribution of type of treatment by age/sex groups was examined. Of the 39 female child records examined, 20 (51.13%) were Exam + OH; 15 (38.46%) were Fill; 3 (7.69%) were Ext.; and one (2.56%) was Ext. + Fill.

Of the 40 male child records examined, 25 (62.50%) were Exam + OH; 8 (20.00%) were Fill; 7 (17.50%) were Ext.; and none (0.00%) were Ext. + Fill.

Of the 45 female adult records examined, five (11.11%) were Exam + OH; 12 (26.67%) were Fill; 26 (57.78%) were Ext.; and two (4.44%) were Ext. + Fill.

Of the 90 adult male records examined, 16 (17.76%) were Exam + OH; 13(14.44%) were Fill; 59(965.6%) were Ext; and two (2.22%) were Ext. + Fill.

The records for the children examined showed that over half required only cleaning while the remaining required fillings or extractions. The female children required a greater percentage of fillings and fewer extractions than did their male counterparts.

With the adults, the females again required more fillings and fewer extractions than their male counterparts, but for both sexes, the majority, about two-thirds of those seen in the clinic, received extractions. The percentage indicates that adults, especially males, came to the clinic primarily for emergencies, while the children were seen more for examinations before experiencing dental discomfort. Screening examinations were conducted in the Day Care Centers and may account, in part, for this. The figures presented do not include those screenings, but only the children actually seen in the dental trailer clinic.

Dental Student Viewpoint

The WTAHEC program to provide dental care to migrant farmworkers was an extremely valuable experience for both the migrant people and the participating dental students. Due to poor oral hygiene habits and poor dental education, the treatment for the adults was essentially emergency care, *i.e.*, extractions. Happily, however, the preventive techniques and good oral hygiene habits taught to the children should make the future more hopeful.

Two days a week children ages 3 years and older were brought to the clinic from the Day Care Centers for examinations, oral hygiene instruction, and restorative treatment. These children had been seen by dental hygiene students and referred to us. On the whole, the English spoken by these children was much better than the adults. I only encountered one child who did not speak English. This four year old Haitian girl was so frightened that she would not even get into the dental chair. I tried comforting her and even let her older sister accompany her, but it was to no avail. Her fear was heartbreaking, but even more unfortunate was her leaving without treatment. In such a circumstance, I feel a parent would be very beneficial for helping to establish trust and to serve as an authority figure.

The children were usually well behaved and really enjoyed the extra attention. It was frustrating that we had no satisfactory way to reach the parents. The only means of communicating with the parents was by a note sent home with the child. We had to hope the note got to the parents and that the parents would read English. Thus, follow-up with parental support was minimal, at best.

The real shining light of this program was the care the children received. They were seen by dental hygiene students and dental students. They were given tooth brushes and oral hygiene instructions. The transportation provided for the children was reliable and could be called upon at any time to take the children back and forth. This kind of attention and dedication can help prevent what we frequently saw in the clinic when treating older children and adults. For example, there was a 14-year old boy who needed all but two teeth extracted from his mouth. Although this case was extreme, he was certainly not unique in his oral hygiene habits. Prosthodontic treatment is only available to these people through private dentists. It is, therefore, likely this boy will never be able to afford the dentures he so badly needs for esthetics and function.

The adults came to the clinic not so much to get their teeth fixed but, rather, to get them pulled. When confronted with alternatives to extraction, the majority of the patients were very interested. Due to the lack of equipment and manpower, we could not provide any endodontic (root canal) services, and therefore, did not save many teeth.

Another problem we encountered was the language barrier. Often the adults could not read English and did not understand the medical terms on the history form. Therefore, we never knew if the medical histories given by the adults were accurate. The possible danger here is obvious.

From my experience I would make several recommendations. First, I found it difficult to provide care for a population about which I knew so little. Improving oral hygiene involved a change of habits. Knowing so little about these people and their lifestyle made it difficult to know where to begin. I think the dental students should visit the camps to do screening for adults and follow up with parents of the children screened. This would help acquaint the students with the migrants and begin establishing some trust. Also, I would recommend that all the children three years and older in the Day Care Center be seen in the clinic for screening by the dental students. This exposure is good for the children and it may facilitate early diagnosis of health problems. Additional funding would greatly aid the delivery of quality health care in the form of better equipment.

Recommendations

1. Although an orientation to the migrant population was provided, the student felt that more of this was essential. Improving oral hygiene involves a change of habits. The more known about the lifestyle of the people, the greater the chance of success in changing habits.
2. Dental and dental hygiene students should visit the camps to understand the population better, to perform screening examinations for the adults, and to follow up with parents of the children seen in the clinic. This would also help establish rapport with the adults and trust with the children. More adult patients would, hopefully, be seen in the clinic while teeth were still restorable. More adults would receive oral hygiene education.
3. All children three years old and older should be seen in the dental trailer clinic by dental students. This would provide a more thorough examination than can be done in the Day Care Centers, and identify cavities at an earlier stage. This early diagnosis and treatment would reduce the number of deciduous teeth lost to decay, and the subsequent malocclusion resulting from loss of space maintaining teeth.

Conclusion

The dental student extramural rotation on the Eastern shore of Virginia with migrant farm workers and their families provides a valuable health service to the children and adults of this population while also providing an important and unique educational experience which could not be provided within the school. **m/t**