ABSTRACT

This study was conducted with the aim of evaluating the school dental services provided by the School Dental Therapists in the Western Province of Sri Lanka. The evaluation was carried out in terms of five major dimensions namely, efficiency, effectiveness, adequacy, equity and quality using seventeen indicators. These indicators were validated using the consensual opinion of ten experts in dental public health.

The study was conducted in twenty school dental clinics selected randomly with population proportion to size to represent the three districts of the Western Province. The efficiency and effectiveness were assessed in all twenty clinics. The total population between 3-13 years of age and all School Dental Therapists in the Western province were considered in the assessment of adequacy and equity. The quality of the service was assessed after obtaining the required sample size for each of the nine indicators of quality from the twenty selected clinics and involved the use of several questionnaires and check lists. Data was gathered by visiting the school dental clinics and other relevant places.

The mean cost of providing care per dental visit was Rs.124.24. It was 1.25% of the minimum monthly salary paid to a permanent employee in the state sector. School Dental Therapists provided care to almost 95% of children in the target age group in those schools where a School Dental Clinic was located. Over 95% of the need for dental restorations, scaling and oral hygiene instructions of these children were fulfilled by the School Dental Therapists. However, only 65% of the need for deciduous extractions was met by the existing service.

It was revealed that roughly 70% of feeder schools had been covered through outreach clinics. About 56% of the children in the target age group were screened in feeder schools and of those screened approximately 90% received care for the identified treatment needs.

School Dental Services are not distributed in an equitable manner. The mean SDT: target population ratio was 1: 5084 in the Western Province. It ranged from zero to 1: 1425 at the DS divisional level.

The proportionate availability of manpower was not adequate in all three districts under study. Only about half the requirement of School Dental Therapists according to World Health Organization standards was met in the existing School Dental Service. The distribution of resources among the districts of the province as well as among DS divisions of the districts was not equitable. Colombo district had nearly 54% of the requirement whereas Gampaha district had only 40%. There were DS divisions with zero availability (0%) as well as divisions which had more than the requirement (128%).

The study revealed that 98% of dental extractions carried out were satisfactory. In contrast only 62% of dental restorations and 63% of scalings done by the School Dental Therapists were satisfactory. It seemed that some of the dental therapists were unable to assess the treatment need for scalings. It was also revealed that almost 17% of clinical records were inaccurate. A further 25% were incomplete.

Majority of the children who were exposed to dental health education activities conducted by the School Dental Therapists seemed to have positive attitudes towards oral health (mean score 65%) and good oral health habits (mean score 75%). They also possessed a sound knowledge in matters related to oral health (mean score approximately 60%).

Almost all the school dental clinics selected for the study had satisfactory physical facilities. However, the mean availability of surgical consumables was approximately 60%. Overall, the proficiency exhibited by the School Dental Therapists was satisfactory. Over 70% of the School Dental Therapists obtained a cumulative score over 70%. However there were important subject areas in which their knowledge was deficient. These included treatment options available at different stages of the carious

process, sterilization & disinfection, and the causes of restoration failure. The majority (80%) of the School Dental Therapists were satisfied about the physical facilities in the clinics. However 50% were not satisfied with the equipment and 80% with the delivery of dental materials and other consumables. 70% self rated their clinical work as very good and the rest of them as good or fair. Given the observed quality of their clinical work this indicated a certain degree of ignorance on the part of the School Dental Therapists about the required standard of clinical work.

More than 80% of the recipients of School Dental Services were strongly appreciative of several aspects of the service such as explaining treatment options, receiving appropriate treatment and advice, convenience and cleanliness of the clinic. However about 20% indicated that the dental therapist and assistant should have been more kind towards the patient. Approximately 30% felt that they had to wait longer than expected to receive care.

Finally, a large majority (89%) of the recipients of the School Dental Service were satisfied about the standard of care provided by the School Dental Therapists and approximately 92% were of the opinion that the School Dental Service should continue as at present without change.

On the basis of the results of the study it is possible to conclude that immediate resumption of School Dental Therapists training to fill the existing requirement and redistribution of School Dental Therapists from areas with excess manpower to areas without adequate manpower in the interests of equity should be carried out. Strengthening the facilities to conduct 'outreach dental clinics' to increase coverage and provision of surgical consumables in adequate quantities to maintain an uninterrupted service is recommended. Periodic in-service training programmes should be held for the School Dental Therapists to upgrade their knowledge and skills. Necessary changes should be made to the School Dental Therapists curriculum to incorporate current knowledge and skills in the state of the art techniques of prevention.