

SUMMARY.

The aim of this study was to test the effectiveness of the use of Glass Ionomer Cement (GIC) in out-reach dental clinics. Study design was the comparative longitudinal evaluation of the two restorative procedures.

Three School Dental Therapists (SDTT) were randomly selected according to their working experience and they were given a training for the use of GIC. Following this, they were instructed to conduct out-reach clinics. One group of children were treated with GIC and the other group was treated with Amalgam. These treated children were followed up for period of six months, and re-examinations were made in one, three and six monthly intervals. The quality, the durability, the occurrence of post-operative complications of these restorations and the work outputs of two restorative interventions were taken as measurements. Moreover, the cost for restorations, the assessment of logistic difficulties and the fulfillment of the operators expectations by the use of GIC were used as indicators to test the effectiveness.

SDTT were able to place GIC restorations as similar as Amalgam restorations in terms of the quality, the durability, and the absence of post-operative complications. Further, with the use of GIC, they were able to produce more work out-put than the use of Amalgam. Accordingly, GIC seems to be the more efficient restorative material. The cost for a GIC filling was lower than that of an Amalgam restoration and it was cost effective too. Moreover, there were no apparent logistic difficulties concerning the introduction of GIC in out-reach dental clinics. Furthermore, GIC seems to be fulfill the SDTT's expectations as a new restorative material.

Thus, the use of GIC in out-reach dental clinics seems to be the more effective method of provision of restorative care rather than the use of Amalgam. Moreover, with the other advantages of the GIC, its introduction to school dental service would be a better strategy for the provision of restorative care.