

An update of the clinical application of glass ionomer cement

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The World Health Organization (WHO) have added glass ionomer cement (GIC) to the WHO Model List of Essential Medicines since 2021, which represents the most efficacious, safe and cost-effective medicines for priority conditions. With this recent WHO endorsement, an increase in the use of GIC is plausible. GIC, including conventional glass ionomer cement (CGIC) and resin-modified glass ionomer cement (RMGIC), are commonly used as fissure sealants, luting cements, liner and bases, and dental restorative materials. Although there are

concerns about moisture sensitivity, low mechanical strength and compromised aesthetic, GIC has several advantages, including adhesion to tooth structures, biocompatibility, simple clinical operation and long-lasting fluoride release. Based on laboratory data regarding sustained fluoride release, CGIC and RMGIC have been associated with caries prevention. In this lecture, we will discuss the clinical application of GIC with the support of most updated evidence.