ABSTRACT

Description of Direct and Indirect Costs among Patients Receiving Dental Health Services in the Working Area of Kembang Janggut Community Health Center, Kutai Kartanegara Regency

Madherisa Paulita, Ratno Adrianto, Ratih Wirapuspita Wisnuwardani

Correspondence E-mail : madherisa.mph2026@gmail.com

Background : Oral and dental diseases not only cause clinical problems but may also impose an economic burden through healthcare costs and productivity losses. Information on the costs associated with dental healthcare at the primary care level remains limited, particularly in geographically dispersed areas.

Objective : This study aimed to describe direct and indirect costs among patients receiving dental health services in the working area of Kembang Janggut Community Health Center, Kutai Kartanegara Regency.

Research Methods/ Implementation Methods : This descriptive observational study analyzed secondary electronic medical record data from 664 patients receiving dental health services between January and June 2026. Patient characteristics, diagnoses, procedures, financing, and medication use were summarized descriptively. Direct healthcare costs were estimated using recorded service tariffs. Productivity losses among working patients were estimated using the Human Capital approach based on the 2026 regional minimum wage and an assumed one lost productive day per patient.

Results : Patients were predominantly male (54.97%) and aged 20–59 years (60.24%). The most common diagnosis was pulpitis (30.72%), while examination and medication administration was the most frequently performed procedure (53.46%). The estimated direct healthcare cost based on the service tariff recapitulation was Rp50.845.000, with complicated permanent tooth extraction contributing the largest component (Rp27,200,000; 56.11%). The estimated medication cost was Rp2,997,574. The estimated indirect cost due to productivity loss was Rp43,750,095, predominantly among private-sector employees

Conclusion/Lesson Learned : Dental healthcare generated substantial estimated service costs and productivity losses. However, these findings represent assumption-based economic estimates rather than actual patient expenditures, particularly for productivity losses.

Keyword : direct costs; indirect costs; dental health services; Community Health Center.