## Data Quality and Associated Factors on Regular Immunization Programme at Ararso District: Somali Region- Ethiopia

Authors : Eyob Seife, Molla Alemayaehu, Tesfalem Teshome, Bereket Seyoum, Behailu Getachew

Abstract : Globally, immunization averts between 2 and 3 million deaths yearly, but Vaccine-Preventable Diseases still account for more in Sub-Saharan African countries and takes the majority of under-five deaths yearly, which indicates the need for consistent and on-time information to have evidence-based decision so as to save lives of these vulnerable groups. However, ensuring data of sufficient quality and promoting an information-use culture at the point of collection remains critical and challenging, especially in remote areas where the Ararso district is selected based on a hypothesis of there is a difference in reported and recounted immunization data consistency. Data quality is dependent on different factors where organizational, behavioral, technical and contextual factors are the mentioned ones. A cross-sectional quantitative study was conducted on September 2022 in the Ararso district. The study used the world health organization (WHO) recommended data quality selfassessment (DQS) tools. Immunization tally sheets, registers and reporting documents were reviewed at 4 health facilities (1 health center and 3 health posts) of primary health care units for one fiscal year (12 months) to determine the accuracy ratio, availability and timeliness of reports. The data was collected by trained DQS assessors to explore the quality of monitoring systems at health posts, health centers, and at the district health office. A quality index (QI), availability and timeliness of reports were assessed. Accuracy ratios formulated were: the first and third doses of pentavalent vaccines, fully immunized (FI), TT2+ and the first dose of measles-containing vaccines (MCV). In this study, facility-level results showed poor timeliness at all levels and both over-reporting and under-reporting were observed at all levels when computing the accuracy ratio of registration to health post reports found at health centers for almost all antigens verified. A quality index (QI) of all facilities also showed poor results. Most of the verified immunization data accuracy ratios were found to be relatively better than that of quality index and timeliness of reports. So attention should be given to improving the capacity of staff, timeliness of reports and quality of monitoring system components, namely recording, reporting, archiving, data analysis and using information for decisions at all levels, especially in remote and areas.

**Keywords :** accuracy ratio, ararso district, quality of monitoring system, regular immunization program, timeliness of reports, Somali region-Ethiopia

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