Immunization Dropout Rates: Some Issues

Dear Sir,

The recently published article on "immunization dropout rates in Ihe, Awgu Local Government Area, Enugu State, South East Nigeria: A 1-year review" is a good review of the immunization coverage and gives a detail account of it in the health center of Ihe, Awgu area in Enugu State.[1] I would like to highlight some issues that have not been addressed in this article. The very first issue is that it is a record based study that gives only a measure of delivery effectiveness and not the overall program effectiveness. The record based evaluation of immunization coverage is the least adopted method. The widely and commonly practiced method is the World Health Organization cluster sampling method. However, this method does not indicate the precise location of areas with low vaccination coverage. Hence, the lot quality assurance survey method can be used by local managers to monitor the performance or the immunization coverage in their catchment areas.[2] The authors could have used any of these methods which have a distinct advantage over the record based evaluation. The second issue is that the dropout rate if calculated taking into account the primary vaccination from BCG - Measles first dose has a distinct advantage. DTP1–DTP3 dropout rate measures the ability of the immunization system to reach a child multiple times with the same antigen(s).[3] It also measures the same delivery system multiple times; thereby giving insight into factors that may hinder caregivers to continue utilizing a delivery system. But the indicator that is currently included in the Global Vaccine Action Plan is "DTP1 to measles first dose dropout rate (DTP1-MCV1)." The DTP1-MCV1 is preferred on the grounds that it measures dropout over a longer time interval between doses. DTP1-measles is thought by some to be a better measure of overall program effectiveness, whereas DTP1-DTP3 is considered by some to be a better measure of delivery effectiveness.[3] The authors have not taken the data pertaining to measles coverage when it was available. Furthermore, they have taken children <1-year age; they could have included the measles vaccination records to calculate the immunization dropout rate. The next issue is that the data from health centers will have fewer dropouts as the parents are aware of the benefits of immunization and have volunteered to get their children immunized. Moreover the 3 DPT doses are given with 1-month interval between the doses. Furthermore, the parents are instructed to return for the next dose exactly after a month. Hence, the dropout rate is very low as found in the study. A record based study will not help us identify the unimmunized children in the community. As stated the authors have given the likely/probable reasons for immunization failure.[1] Hence, the real reasons for incomplete/partial immunization cannot be ascertained, which may help the program managers to further improve their services to enhance the coverage. Factors associated with partial vaccination might differ from those associated with nonvaccination like immunization system weaknesses (e.g., inadequate vaccine supply, poor health worker availability and knowledge, and insufficient political and financial support).[4,5] To achieve improvements in vaccination coverage globally, multifaceted and country-specific strategies will be required to address factors contributing to incomplete infant vaccination.

Mane Abhay B

Department of Community Medicine, Smt. Kashibai Navale Medical College, Pune, Maharashtra, India
E-mail: drabmane@gmail.com

References

1. Chinawa J. Immunization dropout rates in ihe, awgu local government area, enugu state, South East Nigeria: A 1 year review. Ann Med Health Sci Res 2014;4:642-6.
2. Mane AB, Gitte SV. Utility of Lot Quality Assurance Sampling (LQAS) as a tool to monitor immunization services by local managers in developing countries. Indian J Public Health Res Dev 2013;4:7-11.
3. Informal Consultation of Developing a Monitoring and Accountability Framework for the Global Vaccine Action Plan. The Monitoring and Evaluation/Accountability Framework for the Global Vaccine Action Plan – The Monitoring Indicators; 2012. Available from: http://www.who.int/immunization/.../1_MA_Framework_overview_final.pdf. [Last accessed on 2014 Sep 20].
4. Centers for Disease Control and Prevention (CDC). Global routine vaccination coverage--2012. MMWR Morb Mortal Wkly Rep 2013;62:858-61.
5. Rainey JJ, Watkins M, Ryman TK, Sandhu P, Bo A, Banerjee K. Reasons related to non-vaccination and under-vaccination of children in low and middle income countries: Findings from a systematic review of the published literature, 1999-2009. Vaccine 2011;29:8215-21.

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