

Letter to the Editor

Need to validate Verbal Autopsy/Social Autopsy (VASA) integrated tool for developing countries to assign biological and social reasoning of child mortalities.

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Over the time since 1990, as the world strive for reducing child mortality¹, there has been a clustering of child mortality estimates in developing countries². The most distinguished clusters have been found in countries belonging to Sub-Saharan African and South Asian regions^{3,4}, especially in India, Nigeria, Pakistan, Democratic Republic of the Congo and China^{2,3}. Most of the developing countries, in comparison to developed ones, lack comprehensive vital registration system (VRS)^{5,6}. This system gathers data mostly on births and deaths of the population. The information extracted from such data facilitate and supports the health managers and planners during planning and allocation of scarce resources to the population.

Ascertaining the cause of death is crucially important for developing countries⁷. Most of the developing countries have weak VRS, due to which large number of deaths from non-accessible areas gets missed out and the cause of such deaths remain unknown. Verbal autopsy (VA) is the alternative way adopted by developing

countries to capture data on child deaths and related variables⁸. With the use of VA, the biological cause of death (e.g. pneumonia, diarrhea, infections etc.) is ascertained. Similarly, Social Autopsy, which is relatively a newer technique than VA, focuses on capturing the non-biological determinants (mostly on the socio-economic, cultural, healthy behaviors before and after birth, care seeking behavior of parents during the illness and all determinants linked with access to health care services during the childhood illness child)⁹. Such determinants can indirectly pinpoint the barriers in delivery of health care services to the ill child and helps in ascertaining the social cause of death¹⁰ (in comparison to biological cause of death identified through VA).

Both of these tools (VA and SA) have strong public health importance, however a recently newer technique called ‘VASA tool’ which is an integrated version of VA and SA, is a very novel approach found in the literature. Despite of very limited number of VASA experiments found

in the literature, the gist of the technique and its outcomes can simply explain that it can be of great help in identifying the biological and non-biological causes of child deaths and can be a strong tool which give data on different barriers in accessing the health care services that played role in the child death causation^{11,12}. Very few efforts^{11,13,14} have been made so far using this tool to identify the extended information and assigning biological and social cause/s of child deaths, apart from ascertaining only biological cause of death through routine child mortality investigation involving only verbal autopsy generated data⁸.

There are different versions of VA and SA instruments developed by different agencies and the literature shows that several of VASA based Integrated Child Mortality Investigations (ICMI) investigations have used different VA and SA components in different combinations^{15,16}, however, there is only one integrated VASA tool available in the literature which has been developed by a group of researchers called as Maternal and Child Epidemiology Estimation (MCEE) (formerly known as the Child Health Epidemiology Reference Group or CHERG). The SA component of this tool is developed under a conceptual framework, “The Pathway to Survival Conceptual Framework (TP to SCF)”, which has been considered so far as the most holistic framework addressing different non-biological determinants of child mortality^{17,18}.

Since the CHERG’S (MCEE’s) VASA tool captures and organizes data on biological and social determinants of child mortality and ultimately assign biological and social cause/s of any death incident, the gathered data should be valid and reliable.

Here lies the concept of validity of any instrument. Validity of an instrument tell us the instrument’s ability and the measure to which its capacity can be able to measure what it is supposed to measure. Similarly, reliability tells us the degree to which a test consistently (on repeated trials) measure what it intends to measure. There are several techniques to identify the validity and reliability of any tool. Despite the fact that the CHERG (MCEE) VASA tool has been developed by a well-known agency with a team of experts, this tool has not been validated for use in developing countries, where its greatest need lies. There is a strong need that this tool should be tested on its validity and reliability so that the data (i.e. biological and social cause of death and biological and social determinants linked with child death) generated¹⁹ from this tool should be valid and reliable to be used in policy and planning across developing countries.

Conclusion

We suggest that the CHERG (MCEE) VASA integrated tool should be tested on its validity and reliability to be use in developing countries to cater the upcoming need to identify the extended data on child mortality determinants.

Competing Interest

All the authors disclose that there are no competing interests in the preparation of this article.

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positive change in saving preventable child mortalities.

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