

## Editorial

# To Identify the Non-Biological Causes of Child Mortalities in Developing Countries, Social Autopsy Tools Should Be Based On “The Pathway to Survival Conceptual Framework”

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## Introduction

Since a large proportion of child deaths occur due to preventable diseases in developing countries, estimating the cause of death (CoD) is very important for such prevention. Verbal Autopsy (VA) has given us tremendous amount of valuable data on the cause of death; however, VA data is primarily limited to assigning only biological cause of death (BCoD) to the unregistered child mortalities. Apart from gaining the information on BCoD, knowing the social or non-biological determinants (NBDs) linked with health care seeking behavior, health care delivery and access to health care to any child is of utmost importance. This knowledge potentially may help us to develop interventions targeting effects of different barriers affecting the timely and appropriate health delivery to the needy, thereby may help us by armoring us with new and more advanced information to prevent the child mortalities and improving the child survival estimates in developing geographies, which have huge inconsistencies related to social determinants of health. The concept of capturing NBDs and relating them with the death incidents in children have been backed in the literature<sup>1-10</sup>.

To record such NBD, there is a specific technique known as “Social Autopsy” (SA)<sup>2,6,10-12</sup>, which as a tool, is similar to Verbal Autopsy (VA) tool; however, the only difference between the two is that SA tool focuses specifically on NBDs and VA focuses on assigning the BCoD in assigning the CoD of children who have died and due to any reason health/national database system was unable to get their CoD assigned.

Compared to VA, SA is comparatively a newer idea. SA focuses on capturing detailed information related to different NBDs using a structured questionnaire which are asked from parents or caretakers of deceased children<sup>10</sup>. To capture and organize such determinants, the SA tool should be based on a well-constructed and relevant conceptual framework that should aid the proper data organization. To cater with, literature has shown several of the conceptual frameworks namely “The Three delay model”, “SSSR”, “The Pathway to Survival Conceptual Framework” etc.

In comparison to other CFs, literature has shown that “The Pathway to Survival

Conceptual Framework” (TP to SCF) provides a more holistic approach in capturing relevant information and later organizing it to give a much detailed evidence and statistics on Non-biological causes of child mortalities<sup>13</sup>. This framework was developed by joint efforts of Centers of Disease Control and Prevention (CDC) and United States Agency for International Development (USAID) in 1995, as a continuation of efforts for adding the social component in the maternal mortality investigations<sup>13</sup>.

The Pathway to Survival Conceptual Framework (TP to SCF) actually addresses all the relevant determinants discussed in different CFs, such as ‘The Three Delay Model’ (which only focus on delays and related barriers during the case management at three interphases of maternal illness) and ‘SSSR’ (which is specifically related to undertaking SA on maternal deaths from a human right perspective); however, TP to SCF organizes much more wider range of determinants and is specifically developed for organizing data on child mortalities. TP to SCF addresses following set of determinants which are worth to discuss.<sup>13</sup> Determinants related to preventive measure (towards child and mother) adopted by parents before the birth and illness (including breast feeding, immunization, tetanus vaccination of mothers before or during pregnancy etc.). Case management at home; parent’s/caretakers health seeking behavior at home (including their knowledge; awareness and perception towards danger signs of common and fatal childhood ailments and behavior towards treatment

adherence at home etc.). Health care system and facility based determinants on case-management (including availability of services, and competence of health service providers). Financial and socio-economic variables. Transport based variables etc.

One of the most prominent characteristics of this framework is that it may be used for addressing the prevalence of different NBDs and their related barriers. This Framework has been built in keeping view of case management guidelines based on the Integrated Management of Childhood Illness (IMCI), making it most suitable for addressing the determinants related to child mortalities.

## Conclusion

### *To wrap up*

The social causes of death are very important to gather. The captured data should address as many social determinants as possible. Social autopsy is a tool that specifically developed to gather different NBDs of mortalities. Social autopsy should be based on a holistic conceptual framework relevant to the topic of interest. In our case, the most suitable CF relevant to the issue of identifying social causes of child mortality is The Pathway to Survival Conceptual Framework (TP to SCF).

TP to SCF captures detailed information by addressing multitude of determinants and their related barriers in a very organized way, so that at the end of this inquiry/exercise, the gathered information may be helpful to tell us the possible social reasons linked with the death of the very child.

The gathered information will then be helpful to plan any interventions to prevent or address the possible determinants linked with the death, thereby improving the child survival estimates of the region in the long run.

### Conflict of Interest

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

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