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Differentials, barriers, and enablers of death registration in Nepal: Evidence from the Civil Registration and Vital Statistics (CRVS) Survey

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Introduction

A well-functioning Civil Registration and Vital Statistics (CRVS) system should be the primary source of timely and reliable mortality statistics. The CRVS system in Nepal is only partially functioning and its primary focus has been on its administrative and legal aspects rather than statistical outputs.¹ After participation in the first CRVS ministerial meeting in the United Nations Economic and Social Commission for Asia and Pacific (ESCAP) region in 2014, Nepal initiated a range of CRVS strengthening activities, including conducting the nationally- representative CRVS Survey 2015/16. The survey was administered among both service recipients (households) and service providers (Local Registrars) and it sought to elicit information about civil registration status and the major barriers for effective CRVS interventions in Nepal. The survey also asked about possible remedies (enablers) to increase registration to help Nepal achieve the national CRVS targets set by the Government of Nepal by the end of the CRVS Decade (2015-2024). This is the first such study conducted in Nepal; hence it fills a knowledge gap and can guide policy to strengthen its CRVS system.

This study analysed CRVS Survey 2015/16 household and service provider data to:

- Understand the differentials in death registration likelihood in Nepal and reasons for registration and non-registration of deaths, and
- Identify the possible ways for enhancing death registration coverage and make registration more convenient, from both household and service provider perspectives.

Methods

The nationally representative CRVS Survey 2015/16 collected data from 80,000 households. A two-stage sample design was used for the selection of households, with 1600 Enumeration Areas (EAs) were selected from 16 analytical domains. The CRVS Survey asked households to report all deaths that occurred in the previous three years and whether these deaths were registered. We analysed these data to calculate the reported completeness of death registration and compared with the estimated completeness from actual CRVS data, nationally and by province and ecological belt, published elsewhere.² We also assessed the likelihood of death registration using logistic regression by socio-economic, demographic, geographic and death characteristics. The reasons for death registration and non-registration by the households were also analysed. Perspectives from households about ways to improve the registration and from service providers responses regarding ways to make registration more convenient were also analysed.

Results

Death registration completeness (70%) based on reports from households showed a strong positive correlation with completeness of actual death registration (67%) at the provincial and ecological belt level. Completeness was less likely for women (male 77%, female 60%) and children (only one quarter of deaths aged below 15 years were registered). Death registration completeness was comparatively lower in Madhesh, Karnali and Sudurpashchim Province and high for external causes of death

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(accidents/suicide/natural disaster), but there was no difference for urban and rural areas and nor the place of death. Similarly, death registration completeness was higher in households where household heads have higher education attainment, work in technical occupations and where there are more communication facilities. Also, property transfer, access social security and other legal processes were the three major reasons behind death registration. ‘No need to register’ was the major reason behind non-registration, as stated by both households and service providers. Both households and service providers stated that registration would be made more convenient by arranging mobile teams for registration, allowing registration at place of occurrence, and promoting online registration.

Discussion

The higher male registration completeness is due to male dominance in the property ownership and mandatory death registration certificate for accessing the widow pension after husband’s death.

The potential reasons behind this gap by province are the lack of awareness, high poverty levels and low literacy rates compared to the other provinces.^{3, 4} The lower death registration completeness for certain socio-economic groups limits the utility of death registration data obtained from the CRVS system for those groups.

Possible interventions include establishing an active notification system, like in Bangladesh where community health workers were assigned to record household deaths during their routine household visits and regular immunisation services, could be effective for improving registration completeness.⁵ Similarly, making legislations stricter, launching sensitisation programs, deploying dedicated and trained CRVS staff and making registration compulsory for wider range of services. It is also recommended to build a mechanism for the involvement of hospitals and police as a notifier in the CRVS system.

One of the limitations of this study is that the findings are based on the deaths reported by households in the CRVS survey, which would bias study results if the information on registration and non-registration of death in the survey were different. However, the strong correlation of the survey based reported completeness and actual registration completeness suggests likelihood of only minor differences. This is the first study of this kind in Nepal, which is based on both household and service provider responses about the differentials, barriers and enablers of the death registration. The results in this study are important for understanding the strengths and weaknesses of the CRVS system and identify the major bottlenecks for national CRVS system development and are also valuable evidence for CRVS strengthening efforts in other low-and middle- income countries facing similar challenges like Nepal.^{6, 7}

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