

# Improving Causes of Death through the Implementation of Verbal Autopsy in Solomon Islands

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## Background

Accurate cause of death (COD) information is crucial for effective public health policy and planning. In the Solomon Islands, 80% of deaths occur in the communities where methods of COD determination are often impractical, leading to gaps in COD data. Only 10% of deaths have COD determined through Medical Certification of Causes of Death (MCCD). Verbal autopsy (VA) is a cost-effective method to generate reliable COD information in the Solomon Islands. This study explores the implementation of VA within the health system in the Solomon Islands to improve the collection of COD information. In addition the will also explore the implementation of VA beyond the health workers, involving the Faith Based Organization on the VA activities.

## Methods

The study will comprehensively assess the SmartVA system implemented in the Solomon Islands in 2016, with a focus on Malaita Province and Temotu Province. It will also review VA workshop reports produced on August 21, 2024, to identify key areas for improvement. The study aims to expand VA capacity in the Solomon Islands by training nurses and church leaders to conduct VAs on eligible deaths using electronic tablets. The VA data will be analyzed using the Tariff 2.0 automated diagnostic algorithm to generate cause-specific mortality fractions (CSMFs) for community and non-inpatient hospital deaths.

Based on the VA analysis results, a policy briefing document will be produced and disseminated to the Ministry of Health and Medical Services (MHMS). The dissemination strategy will include workshops, academic symposiums, emailing the policy briefing document to decision-makers, and distributing printed copies during workshops and symposiums. Additionally, the study will emphasize the importance of integrating VA into the national health system to ensure sustainability. This integration will involve continuous training and capacity-building for healthcare workers and community leaders, fostering a collaborative approach to mortality surveillance. The study will also recommend strategies for maintaining the quality and reliability of VA data, including regular audits, feedback mechanisms, and the involvement of Faith-Based Organizations (FBOs) to enhance community acceptance and support.

## Results

The study anticipates that 80% of community deaths will have their causes of death (COD) determined through the VA system. This will provide high-quality and reliable COD data, enabling a thorough analysis of the leading causes of death. The COD data from VA will significantly influence public health policy, planning, and the appropriate allocation of resources. The study will also identify key focus areas to enhance and sustain VA activities in the Solomon Islands. Furthermore,

the integration of VA into the national health system is crucial, ensuring it is fully accepted and supported by Faith-Based Organizations (FBOs). This integration will involve continuous training and capacity-building for healthcare workers and community leaders, fostering a collaborative approach to mortality surveillance. Additionally, the study will recommend strategies for maintaining the quality and reliability of VA data, including regular audits and feedback mechanisms.

## **Discussion**

The implementation of Verbal Autopsy (VA) in the Solomon Islands has slightly improved the collection of cause of death (COD) information, particularly for community deaths. Recent analysis of VA data highlighted the predominance of non-communicable diseases (NCDs) as the leading causes of death, with ischemic heart disease and stroke being the most common<sup>1</sup>. The VA method has proven effective in generating reliable COD data, which is essential for health policy and planning. This underscores the need to sustain and enhance VA activities in the Solomon Islands.

Despite the implementation of VA activities in 2016, challenges remain regarding the quality, completeness, and reliability of VA data. The system is not functioning optimally and requires significant strengthening. Key areas for improvement include better training for data collectors, increased community awareness, and integration of VA data into the national health information system. Addressing these issues is crucial for improving mortality surveillance and informing effective health interventions.

## **Conclusion**

Automated VA methods are a valuable tool for improving COD data collection in the Solomon Islands. The integration of VA into the Health Information System (HIS) is recommended to ensure continuous and accurate COD information, which is vital for public health interventions and policy-making.

## **Keywords**

Cause of death, Verbal autopsy, Solomon Islands, Non-communicable diseases, Public health policy, and Health Information System.