Spotlight: Mahasarakham Hospital

Applying root cause analysis to identify drivers of HIV-related stigma at Mahasarakham Hospital, Thailand

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Background

Mahasarakham Hospital is a district health facility located in Thailand's Nong Khai Province, approximately 400 km northeast of Bangkok **(Figure 1)**. With 1,700 healthcare workers (HCW) and 41 clinical departments, Mahasarakham receives 1,500 patient visits per day. At present, the HIV clinic at Mahasarakham provides care to over 1,700 people living with HIV (PLWH).

As part of the Bureau of AIDS, TB, and STI's (BATS) initiative to reduce HIV-related stigma and discrimination (S&D) in healthcare settings, beginning in 2018 Mahasarakham Hospital implemented routine measurement of S&D among healthcare workers (HCW) and PLWH, and applied quality improvement (QI) methods, including root cause analysis, to develop stigma-reduction interventions based on identified gaps.

Figure 1. Mahasarakham Hospital

Using Root Cause Analysis to Drive Implementation

To identify root causes of HIV-related S&D, Mahasarakham Hospital staff reviewed baseline results from assessments of HCWs and PLWH, and completed a driver diagram exercise. As part of this activity, staff identify primary and secondary drivers of a problem of documented gap and generate ideas for interventions whose effectiveness can be tested using Plan-Do-Study-Act (PDSA) cycles. By completing this analysis of root causes, Hospital staff developed a deeper understanding of how S&D manifest themselves in a local context and created a structured plan for prioritizing QI activities to reduce S&D.

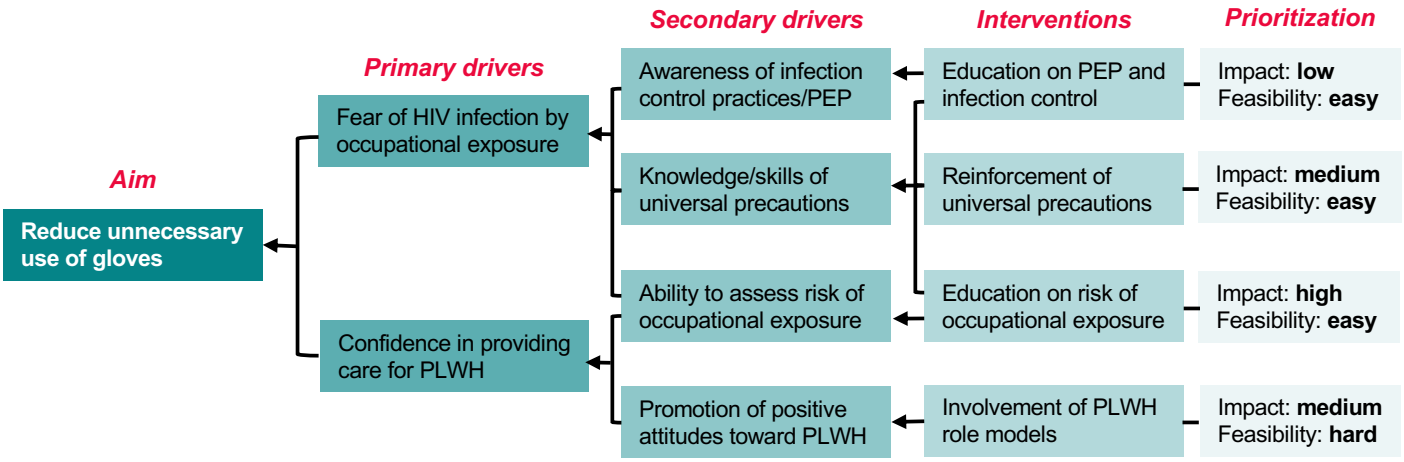
Results of HCW and PLWH Surveys

In 2018, Mahasarakham conducted a facility-wide assessment of S&D among HCWs and PLWH using a web-based survey platform (REDCap). Results of HCW surveys revealed that high proportions of staff reported fears of HIV infection, use of unnecessary precautions (e.g., use of double gloves), and negative attitudes toward PLWH. Results of assessments completed by PLWH showed high rates of self-stigma. In addition, many PLWH reported unauthorized disclosure of their HIV status in the healthcare setting and discrimination related to sexual and reproductive health decision-making.

Results of Root Cause Analysis

Given the substantial number of HCWs who reported fear of HIV infection and use of unnecessary precautions, the indicator on use of double gloves was selected for prioritization. Subsequent root causes analysis conducted by the hospital team yielded two primary drivers and four secondary drivers of use of double gloves (**Figure 2**). Based on the secondary drivers, the team devised four interventions and ranked their expected impact and ease of implementation.

Figure 2. Driver diagram of root causes of unnecessary use of gloves



Generating a Data-Driven Response to Reduce S&D

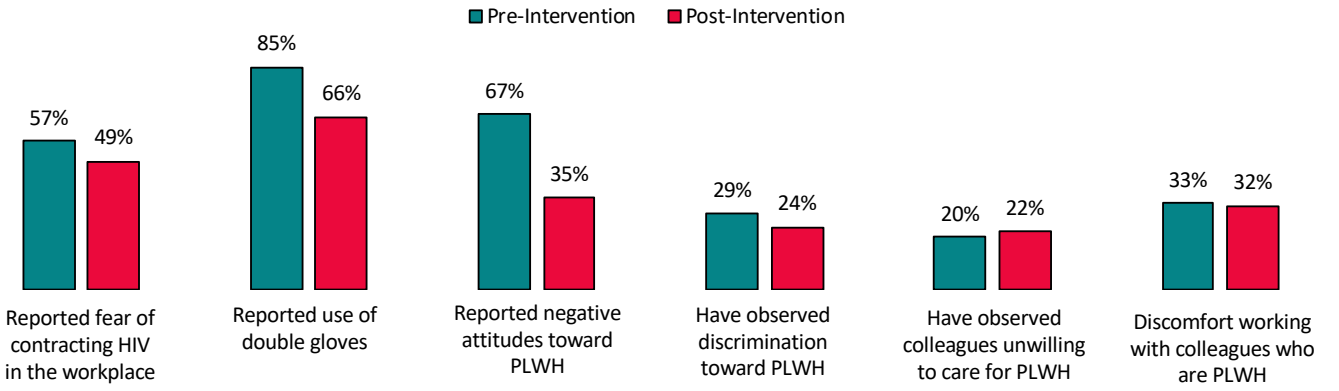
Intervention

Findings of the driver diagram exercise led to the development of a package of S&D-reduction interventions, including change of hospital signage to eliminate "marking" of PLWH visiting the HIV clinic, and four participatory trainings with a special emphasis on post-exposure prophylaxis and universal precautions. Using surveys of S&D among HCWs disaggregated by cadre, hospital porters were identified as a target of focused intervention.

Results

Following six months of intervention, surveys of HCWs were repeated with results showing improvements across multiple indicators **(Figure 3)**. In particular, the indicator on use of unnecessary precautions (e.g., use of double gloves) decreased by 19%, and reports of negative attitudes toward PLWH decreased by over 30%.

Figure 3. Pre- and Post-Implementation Results



Lessons Learned

In its use of root cause analysis to inform its stigma-reduction interventions, Mahasarakham Hospital aims to develop a data-driven response to the reduction of HIV-related stigma and discrimination. Through its approach, the hospital team has adopted several "best practices" that are crucial to the successful implementation of S&D QI activities:

- ✓ ***Using root cause analysis to identify, and prioritize, effective interventions.*** Application of QI methods such as root cause analysis enables hospital teams to identify how S&D manifest themselves in local settings. Through participatory approaches such as driver diagram exercises, these teams leverage group-based learning to heighten their understandings of the systems within which they work and apply these understandings to the development of appropriate interventions. Prioritization of selected interventions according to feasibility and predicted impact is used to further tailor responses to local human and resource constraints.
- ✓ ***Disaggregating survey data to target interventions.*** With over 1,700 staff and 41 clinical departments, Mahasarakham is a large hospital, making facility-wide activities a costly endeavor. Disaggregation of survey data by hospital cadre allows large facilities like Mahasarakham optimize available resources by targeting their interventions to groups (e.g., porters) who may report higher than average levels of S&D.
- ✓ ***Examining ways through which organizations "mark" PLWH.*** Feedback from PLWH revealed that hospital porters often spoke loudly when communicating to colleagues that they were transporting a patient to or from the hospital's HIV clinic. Though unintentional, a lack of discretion in referring to a patient's destination "marks" that patient as HIV-positive and may lead to the incidental disclosure of a patient's HIV status without his or her express consent. In response, efforts should be made to understand how organizational practices and norms, such as communication among staff may abet S&D.

Acknowledgements

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