

The Trend of Sharps Injuries among Healthcare Workers in Kedah- A Retrospective Analysis between 2017-2021

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ABSTRACT:

Introduction: Sharps injuries (SI) are a common occupational hazard to healthcare workers secondary to blood-borne diseases such as Hepatitis B, Hepatitis C, and HIV. The study aims to determine the trend of sharps injuries among HCW in Kedah between 2017- 2021 and to describe the sociodemographic characteristics and mechanism of sharp injury occurrence.

Methodology: This is a retrospective observational study involving reviewing secondary data from the SI registry from 2017-2021 in the Occupational and Environmental Health Unit, Kedah State Health Department. The study variables include sociodemographic data and the mechanism of SI.

Results: A total of 637 SI were recorded between 2017-2021 in Kedah. The incidence rate was 9.6 in 2017, 9.7 in 2018, 8.6 in 2019, 8.2 in 2020, and 7.7 in 2021 (per 1000 staff). The median age of the cases was 31 years (IQR=5). The majority of the cases were female 411 (64.5%). Medical doctors contributed 361 (56.7%) of the cases, followed by nurses 100 (15.7%), assistant medical officers 49 (7.7%), pharmacist 28 (4.4%), dental staff 37 (5.8%) and others 62 (9.7%). Most of the injuries occurred in the hospital setting 543 (85.2%) with most cases occurring in ward 279 (51.4%) followed by operation theater 90 (16.6%), emergency department 83 (15.3%), and others 91 (16.7%). Tasks performed during the injuries include blood taking 211 (33.1%), surgical procedure 182 (28.6%), setting IV line 110 (17.3%), giving injection 83 (13%), collecting waste 34 (5.3%), and others 17 (2.7%). Most injuries involved needles 544 (85.4%), surgical instruments 81 (12.7%), and others 12 (1.9%)

Discussion: The trend of SI among healthcare workers in Kedah between 2017-2021 was decreasing in trend, however, was lower as compared to other countries. This could be due to the Malaysian SI surveillance program depending on voluntary reporting, hence there might be a proportion of injuries that are not reported. The high proportion of SI among the younger age group explained their young age and inexperience may predispose them to make errors leading to sharp injuries. There was a high proportion of SI involved blood drawing, hence these practices may be prevented by using safety-engineered needle devices.

Conclusion: Sharp injuries surveillance is important in identifying, formulating, and monitoring safe practices for health care workers. The identified factors will inform policymakers in the planning of targeted interventional programs to prevent SI in Kedah.

KEYWORDS: sharp injuries, healthcare workers, Kedah, incidence, SI