Quality Improvement Project to Reduce Sharp Injury in NDCS



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Dr Foo Lean Heong, Dr Chelsia Sim, SN Woon Lee Tian, Ms. Amber Chua, Mr. Teh Yi Kee

Introduction

 Dental healthcare workers (DCWs) are exposed to patient's body fluid i.e. blood and saliva during dental procedure.

Interventions



- The use of sharp instruments for dental procedures puts both patients and DCWs at risk of sharp injuries, with some possibility of disease transmission.
 - 10% Hepatitis B
 - □ 1.8% Hepatitis C (Makery et al 2007)
 - □ 0.3% HIV (Tarigan et al 2015)
- Aside from bodily harm sharp injuries can cause anxiety to DCWs and increase cost and burden to the institution

Problem Statement

To reduce sharp injury incidents among the dental healthcare workers in NDCS and enhance patient and healthcare worker safety
To improve awareness among DCW about sharp injury
To promote safety clinical practice in NDCS

Root Cause Analysis





Knowledge on sharp injury



Before: pre-education module assessment on safe clinical practice

After: Post education module assessment achieved 100% result (an increase of 40%)



Conclusion

- The "6-month moving average" trend for the number of sharp injuries has shown a reducing trend
- Dropping of 1-2 cases of sharp injuries per month will save a total of \$8,520 for blood test (\$710 x 12 cases a year for both patients and staff), and \$42,000 for prophlylactic antiviral therapy annually.
- The team will continue to educate and create awareness among DCW.
- The team was award for the project "Reducing Needle Stick Injuries" during the SingHealth Target Zero Harm Award 2020.