

Project Title

Quality Improvement Project to Reduce Sharp Injury in NDCS

Project Lead and Members

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

Organisation(s) Involved

National Dental Centre Singapore (NDCS)

Healthcare Family Group Involved in this Project

Medical, Nursing

Specialty or Discipline

Dentistry

Project Period

Start date: Jun-2018

Completed date: Jul-2019

Aims

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

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

See poster appended / below

Conclusion

See poster appended / below

Additional Information

Singapore Healthcare Management (SHM) Conference 2021 – Shortlisted Project (Risk Management Category)

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign, Safe Care, Risk Management, Adverse Outcome Reduction, Training & Education, Learning Approach, Self-Directed Learning, Education Platform, Virtual Learning Platform

Keywords

Protocol, Module, Townhall, Sharp Injury Calculator

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Quality Improvement Project to Reduce Sharp Injury in NDCS



Singapore Healthcare Management 2021

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

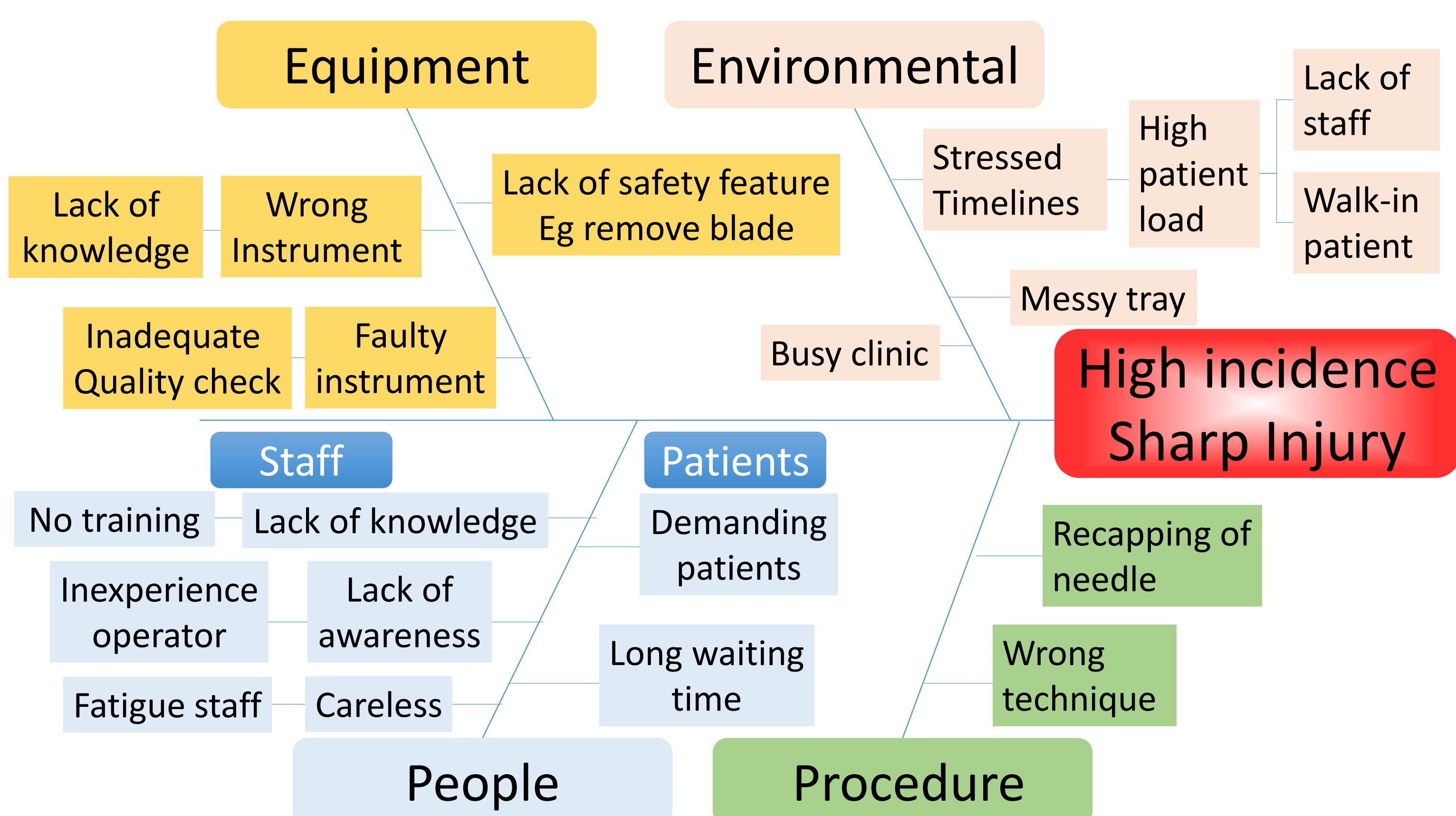
Introduction

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

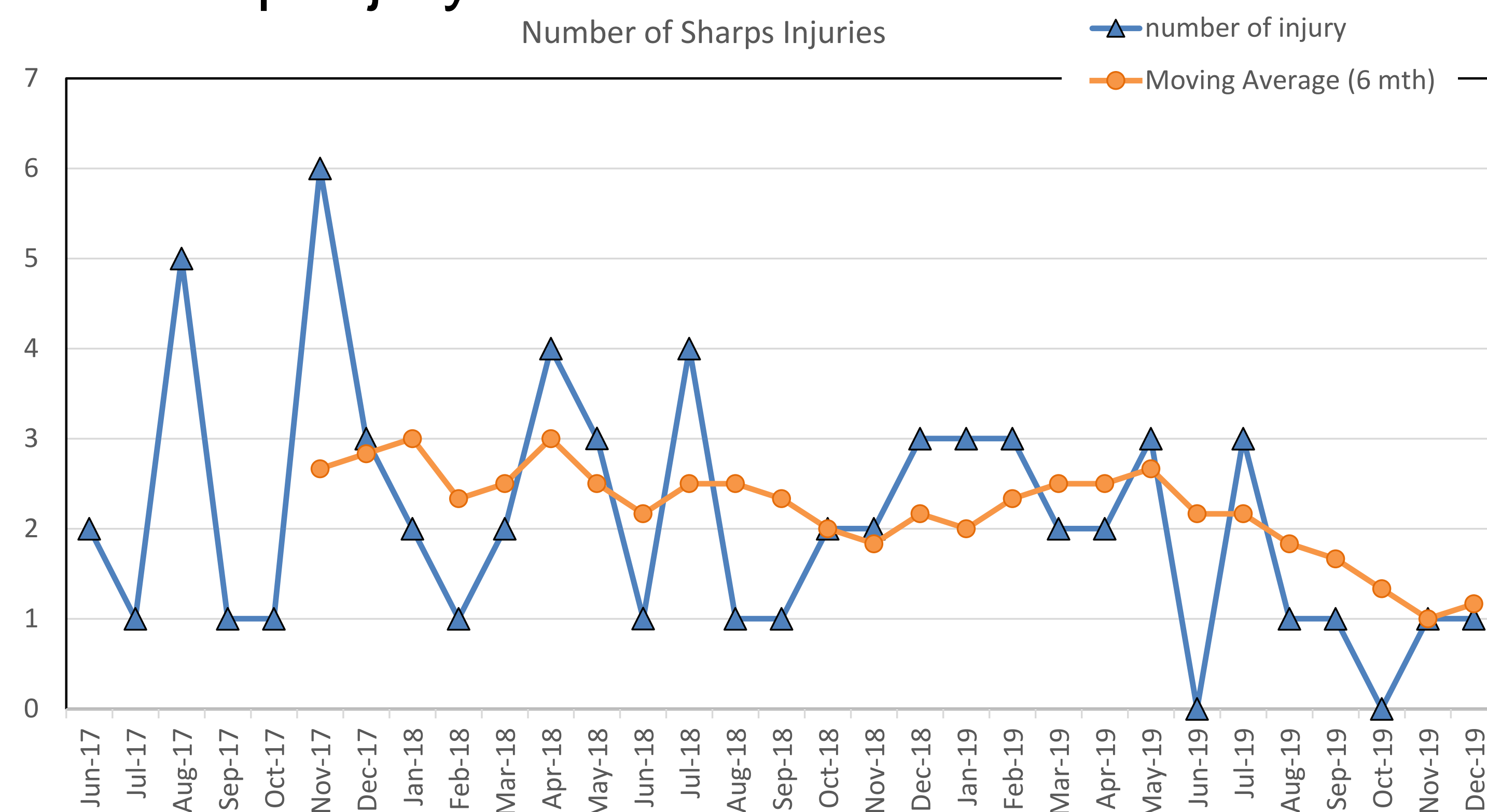


Interventions

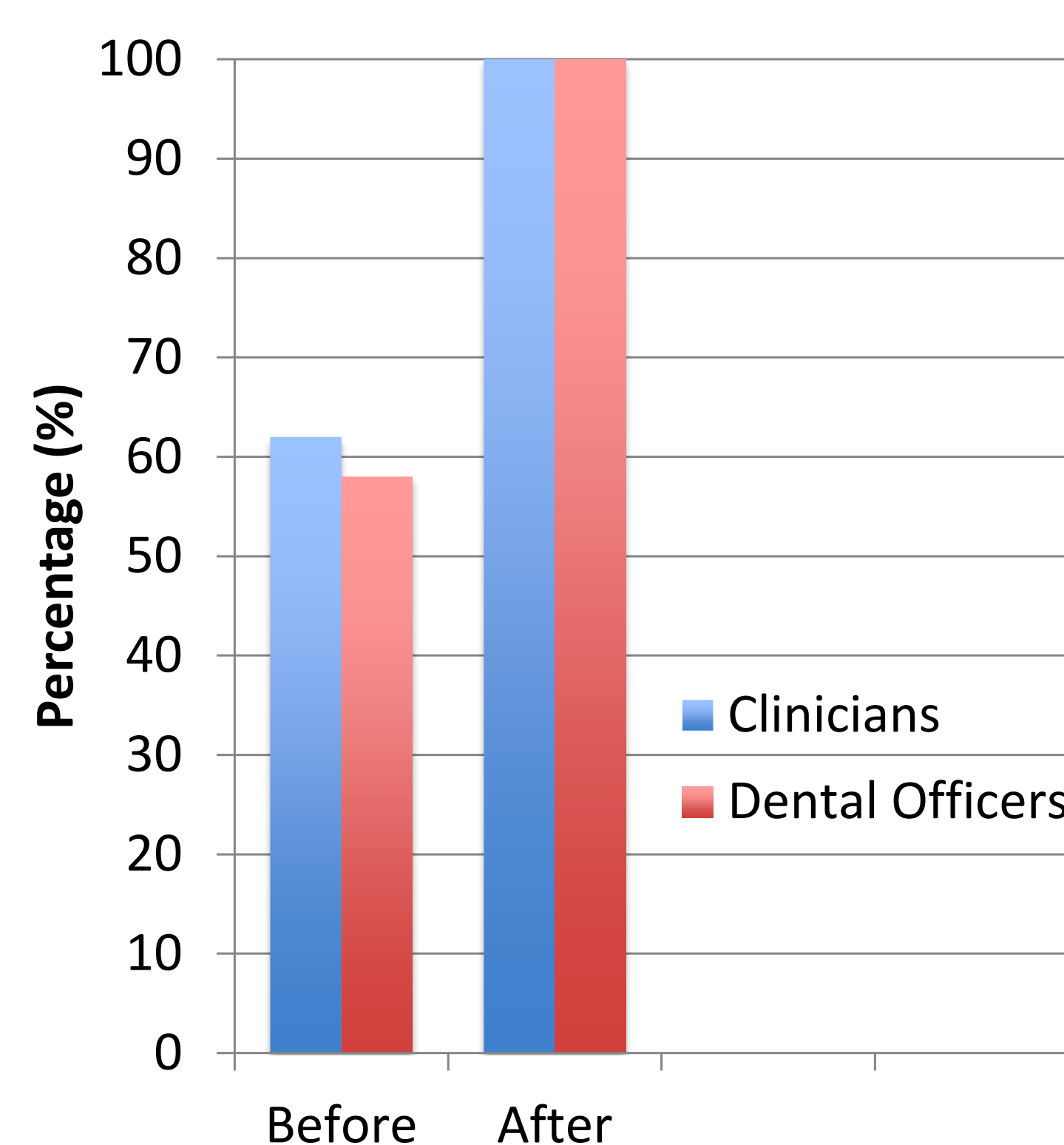


Results

Sharp Injury incidents trend



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 prophylactic 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.