Using e-Learning to improve culture on needle safety

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AIM

The high accumulative number of needle-stick injuries (NSI) over the years and increased in workplace environmental health and safety (WEHS) inspection findings on recapped needles in 2020 suggested that more needs to be done to boost up the level of needle safety awareness in research labs. With this aim in mind, Office of Biosafety (OoB) Needle Safety Workgroup developed an online engaging and intuitive e-learning course titled 'Needle Safety in Research

METHODOLOGY

The workgroup developed the eLearning course based on the following foundation:

Intuitive

Direct key points & contents for ease of learning



Potential Risks Associated with Needlestick Injuries ing on Past Needlestick Injuries Incidents licy & Procedure on Prevention of Needlestick Injurie ough Proper Handling of Sharps

Engaging Videos of reenacted common lab situations with narration & text

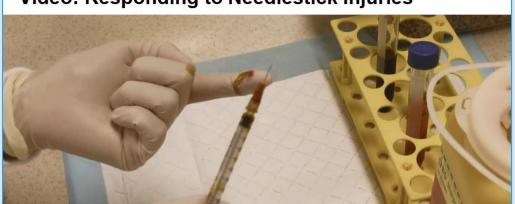
Video: Safe Use of Needles in BSC



Video: Safe Practices for Handling & Disposal of Needles



Video: Responding to Needlestick Injuries



Support

To achieve unanimous decision from SingHealth **IBC Management Representatives to make the** eLearning mandatory





Safe Handling and **Disposal of Needles**

- **Conducting Work Activity Risk Assessments**
- Adopt Best Practices when Handling and Disposing

Emergency Response

Responding to Needlestick Injury **Reporting Needlestick Injury Incident**

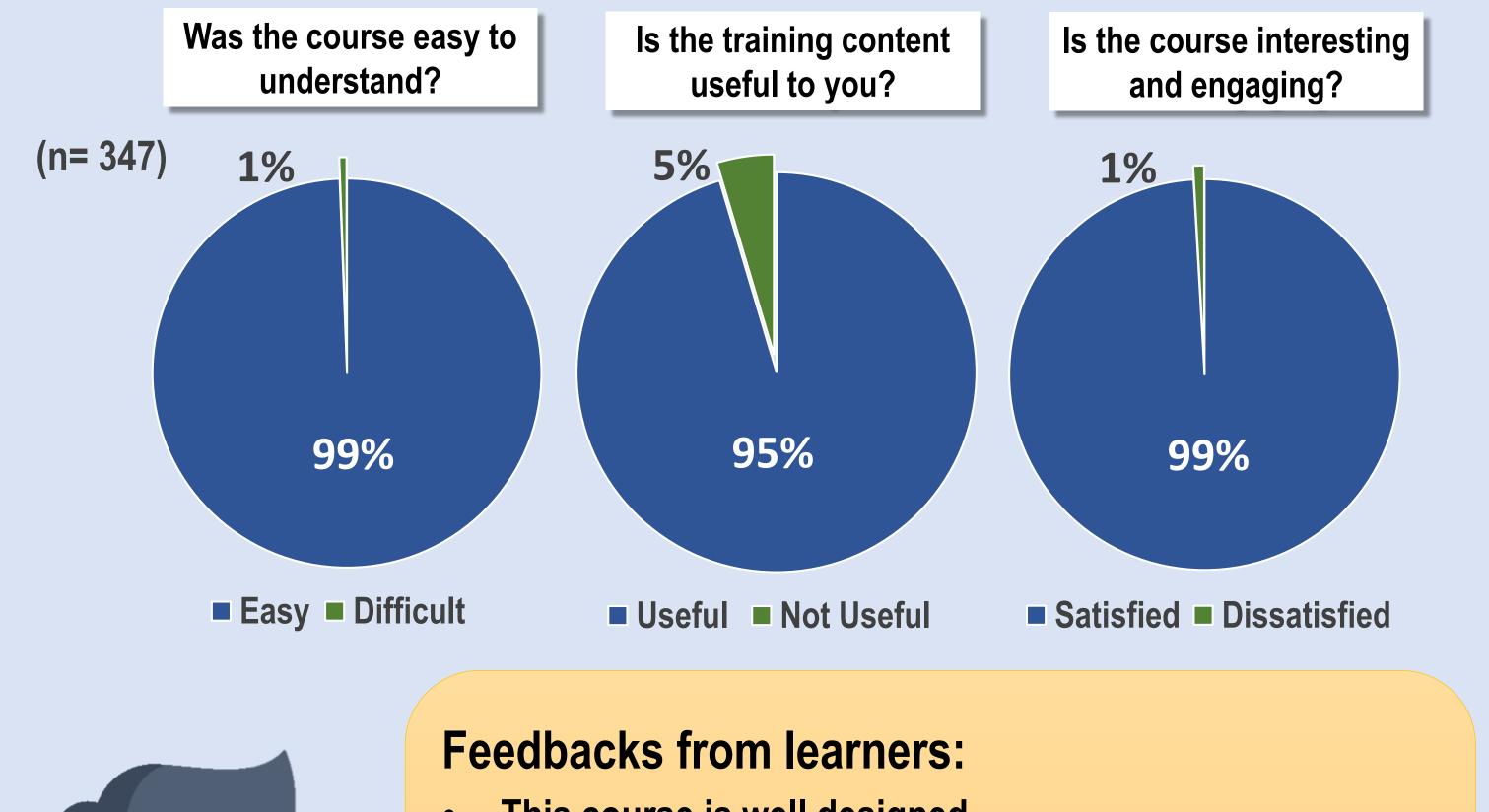






RESULTS

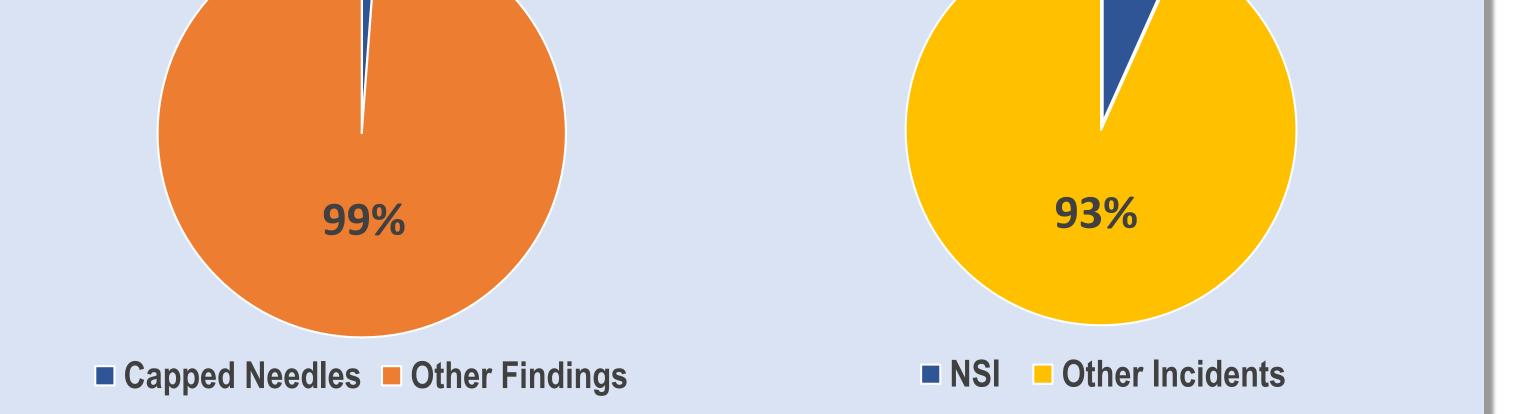
eLearning course was well received by learners:



WEHS Inspection Findings Reported WEHS Incidents 9% 25% (n= 20) (n= 116) 75% 91% Capped Needles Other Findings **Other Incidents 2021 - After Course Launched** 7% 1% (n= 86) (n= 15)

2020 - Before Course Launched

- This course is well designed.
 - Very concise and well-made. Examples are all relevant.
 - Very helpful and applicable to work.
 - The course covers the subject matter well.
 - The module is very informative for new researchers.



CONCLUSION

Making use of verbal and visual cues allow learners to retain information better and able to apply the information instinctively, resulting in using needles safely in the course of their work. We are optimistic that the eLearning course will contribute to improving safety culture in handling of needles in the research laboratories.

