Cleanliness and Wellbeing?
Health risks associated with anti-slip flooring

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Introduction

Slips, trips and falls were the top incident type contributing to workplace injuries in 2015 with floors and level surfaces being the top incident agent.[1] To prevent slips, trips and falls, one of the methods deployed by companies could be the application of anti-slip coating on floors. After such treatment, other hazards may arise for cleaning staff as increased effort is required to remove dirt from the surface or from use of heavy cleaning equipment.

Methodology

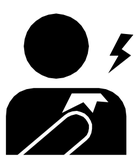
A literature search was conducted to identify different cleaning methods for floors treated with anti-slip coatings.

To determine potential WSH effects, cleaning staff and their supervisors were interviewed, supplemented by field observations.

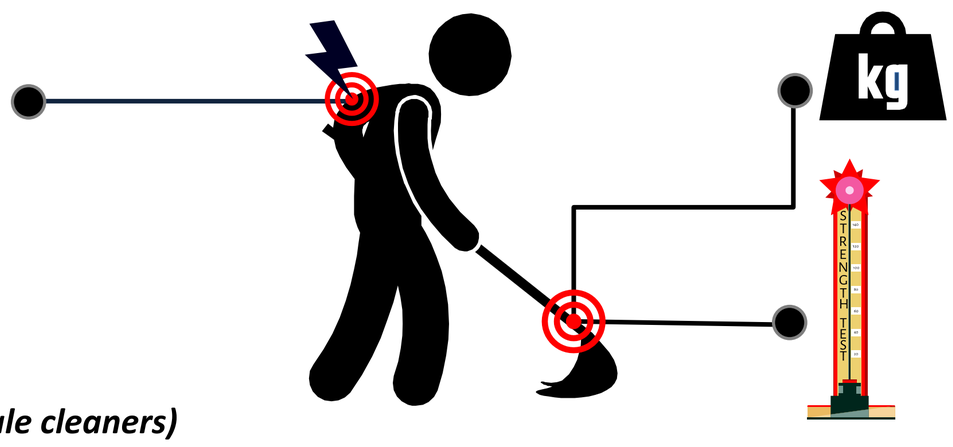
Borg CR10 scale from 0 (rest) to 10 (maximal) was used for the study.

Results

Before anti-slip application



There were few work-related musculoskeletal disorders (WRMSDs) reported when mopping the floor



Mass of the mop was **lighter** ranging from **1kg (dry) to 3kg (wet)**

Ease of transportation	Ease of cleaning
❷ Easy	❷ Easy

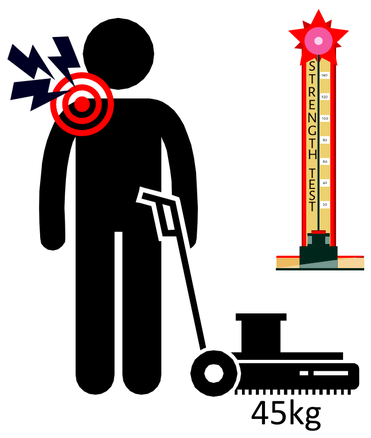
Mopping (this process only involved female cleaners)

After anti-slip application

Ease of transportation	Ease of cleaning
❷ Easy	❺ Hard

Increased WRMSDs of the upper back were reported as the floors were harder to clean

Mopping (this process only involved female cleaners)



	Ease of transportation	Ease of cleaning
	❺ Hard	❹ Somewhat Hard
	❽ -	❼ Very Hard

Increased WRMSDs of the upper back was reported due to the weight of machine

Mechanised Cleaning

Potential Solutions

Cleaning Methods[2]	Proper Mopping	Dry micro-fibre system	Steam cleaning	High pressure water jet
Strengths	Effective, quiet	Chemical free, effective	Chemical free, effective	Efficient, fast
Weaknesses	Correct chemical concentration and allow time for reaction before cleaning	Costly, microbes remain alive on cleaning materials	Heat involved, may cause damage to certain materials	Correct chemical concentration required, not suitable for indoor use

Other solutions

- Provide a dirt trapper mat to remove dirt from shoes at entrances
- Use hard bristle brush and detergent to clean the floor followed by rinsing floor with clean water. If necessary, dry with clean dry mop.

Conclusion

It is important to engage cleaners and supervisors to identify the best cleaning method, to conduct a risk assessment before implementing the intervention and to continue to monitor for any potential WSH effects after the implementation.

References

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