

Hand Hygiene Knowledge, Attitudes and Practices in Academic Optometric Training

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Introduction

Hand hygiene is the most basic measure available to prevent transmission or cross-contamination of micro-organisms in a clinical environment. Optometry is one of the professions where close contact with the patient happens, especially direct contact with the eye, and therefore the spread of microorganisms (including that of the SARS-CoV-2) is of great risk. The World Health Organization (WHO) introduced the “My Five Movements for Hand Hygiene Model” in 2006 on how to apply hand hygiene when dealing with patients.

The initial objective of this part of the study was to determine if the WHO Observation form on hand hygiene practices can be used in an optometric clinical environment to observe and monitor hand hygiene practices.

Methodology

All third- and fourth-year students (n=75) registered for Optometry at the University of Johannesburg, were invited to participate in the study. After agreeing and consent forms were signed, the Hand Hygiene Knowledge Questionnaire for Health Care Workers as adapted from the WHO, were completed. After completion of the questionnaire, the students were observed at the onsite clinic training facility on how hand hygiene was practiced using the WHO Observation form. During all observations, the hand hygiene opportunities were noted and if the student washed / rubbed their hands and/or cleaned the surface where contact was made.

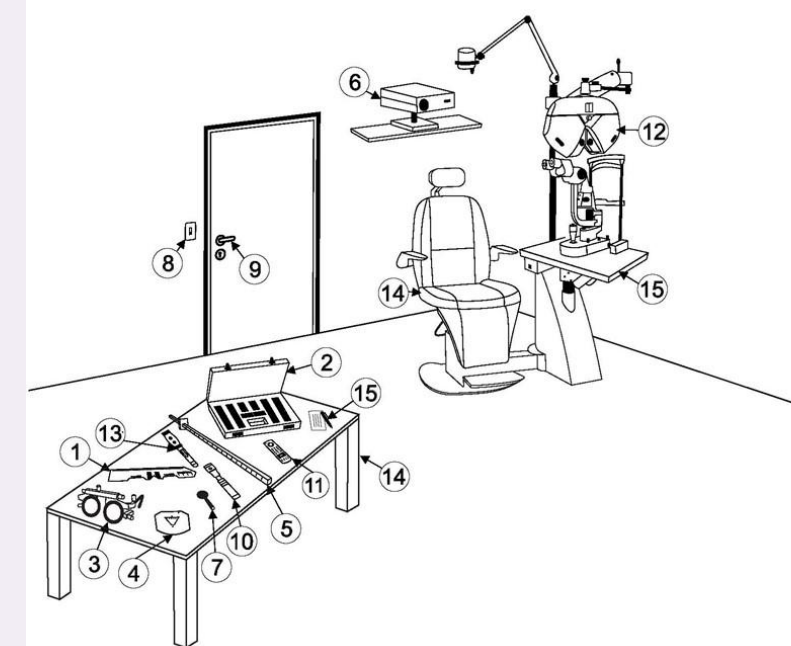
Results

- An observation rubric was developed to record the hand hygiene opportunities at the onsite clinic and consisted of three distinctive areas namely the patient zone, the intermediate (mixed zone) and the student (practitioner) zone.
- Observation results indicated that students did not attempt to wash or rub their hands or to clean the instruments or any surfaces. Not even the presence of the researcher changed their behaviour.
- Students indicated that only 46.5% regularly used an alcohol-based hand rub to clean their hands. Only 21.1% of the whole group indicated that they were aware of what the “My Five Movements for Hand Hygiene” referred to.
- Although the students indicated that they were aware that alcohol
- -based hand rub can remove germs from your hands, only 43.7% were correct in indicating that at least 20 seconds of hand rub is needed to do that.

Conclusions

- The results from the knowledge questionnaire indicated a clear gap in student hand hygiene knowledge and practices. The observation in the onsite clinic confirmed this knowledge gap and will be relayed to curriculum advisers.
- The adapted observation rubric can be used for improved observation in the clinic and for useful training opportunities for students.

DATE:	Description	Patient zone	Student (practitioner) zone	Intermediate (mixed) zone
CLINIC:	1 Pupillary distance ruler	x	x	
STUDENT:	2 Trial case and lenses			x
	3 Trial frame	x		x
CUBICLE:	4 Near rotating (reading) card	x		x
	5 Near reading rod		x	
	6 Projector		x	
	7 Occluder	x	x	
	8 Lightswitch			x
	9 Door handle			x
	10 Ophthalmoscope			x
	11 Remote control for projector			x
	12 Phoropter	x	x	x
	13 Retinoscope		x	
	14 Table		x	
	15 Record card and pen		x	
	16 Examination chair	x		
	17 Instrument panel		x	



Article



Biography



Marietjie Richter qualified as an optometrist in 1991. She started her academic career in 1992 at the Rand Afrikaans University (now University of Johannesburg) as a part-time lecturer. She was appointed full-time in 1994 and she is currently a senior lecturer in the Department of Optometry, specializing in Paediatric Optometry. She has completed a Masters degree in Optometry, as well as a Masters degree in Business Management. She is currently registered for her Doctoral degree in Optometry investigating knowledge, attitudes and practices towards hand hygiene of students at a tertiary institution in Johannesburg.