

## **ABSTRACT**

**Background:** Evaluating the knowledge of hand hygiene among medical students is crucial as they must be compliant with infection control practices and thus reducing hospital acquired infections during their rotations and placements in the healthcare settings.

**Objectives:** To evaluate the knowledge of hand hygiene among medical students at Arabian Gulf University.

**Subjects and Methods:** This cross-sectional study targeted students of both gender from year one to year 6 during the 2019-2020 at Arabian Gulf University. The validated questionnaire for knowledge of hand hygiene for health care workers by World Health Organisation was adapted and converted to online version. The questionnaire included the sociodemographic information of the participant (i.e., gender, age, and medical year), previous training, a set of questions regarding hand-hygiene knowledge in both forms of multiple choice and yes/no questions. The questionnaire was sent to medical student's through university WhatsApp groups for the participants to answer it anonymously.

**Results:** A total of 159 medical students were included, eighty-two (52.2%) students from Basic years (year 1-4) and 76 (47.8%) from clinical years (year 5-6). We calculated the proportion of students with correct answers out of total number of participants for each question and considered 50% as the cut point to evaluate the knowledge. Thus, students in clinical and basic years had moderate knowledge, as 17 Out of 25 answers (including the cluster questions) were correct with a percentage of 50% and above. Besides, in the study we compared knowledge across students in basics and clinical years, however we could not find a statistically significant difference in most of the domains ( $P \geq 0.05$ ).

**Conclusion:** Although generally the medical students in this study had moderate knowledge and practices for hand hygiene, still about half of the students were below par the optimum knowledge and practices expected of a medical student. Medical curriculum of these students

and, others in similar contexts, may benefit by addressing these knowledge and practice gaps in hand hygiene.