

O1141 Healthcare workers who care for patients with carbapenemase-producing *Enterobacteriaceae* (CPE) do not become carriers of CPEJalal Tarabeia*¹, David Schwartz², Yehuda Carmeli³¹ Ziv Medical Center, Tsfat, Israel, ² Tel Aviv-Yafo, Tel Aviv-Yafo, Israel, ³ Tel Aviv University, Tel Aviv-Yafo, Israel

Background: Israel is classified in the epidemiological scale as endemic for Carbapenemase producing *Enterobacteriaceae* (CPE). These patients are hospitalized in CPE isolation units and under patients and staff cohorting. The risk that healthcare (HCW) workers carrying for these patients will become colonized and carry CPE raises concerns both regarding the HCW wellbeing and regarding the risk that colonized HCW will become source of hospital transmission. To address these concerns we evaluated the CPE colonization status of HCW providing care to CPE carriers.

Materials/methods: A cross sectional study was performed. HCW who worked for at least 3 months in a CPE cohorting unit were eligible for his study. 32 HCW who volunteered and signed an informed concern form to be examined for CPE carriage were included. Participants answered a questionnaire and rectal eSwabs specimens were collected and transferred to the laboratory where they were processed according to the national protocol for CPE detection. Confidence intervals were calculated using SPSS software. The study was approved by the local IRB.

Results: During the study period, CPE cohort unit ranged in occupancy between 7- 20 patients. 32 HCW who worked in this unit participated in the study: 20 (52.6%) nurses, 8 (21.1%) nurse assistants 6 (15.8%) physicians, and 4 (10.5%) other HCW. Close contact with CPE carriers and contact with their secretions was reported by 76.3% of the HCWs. 84.2% reported using personal protecting equipment (gown and gloves) at all the time. 89% reported changing their uniform daily. 34.3% reported showering in the hospital at the end of the shift before leaving home. All 32 participants had negative rectal swabs for CPE (one sided, 97.5% CI: 0-5%).

Conclusions: Our finding that the risk for HCW colonization with CPE is small despite prolonged close contact with the patients and their secretion. These conclusions are in condition when adherence to using PPE was very high. These results helped us to reassure the HCWs in cohort units that their working conditions are safe and that as long as they adhere to isolation instructions caring CPE patients does not put them at risk to become carriers.

