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Abstract (poster session)

**Local production of the World Health Organization-recommended alcohol-based handrub formulation worldwide: a global survey**

J. Bauer-Savage, D. Pittet, E. Kim, B. Allegranzi\* (Berlin, DE; Geneva, CH; Boston, US)

**Objective:** Inadequate infrastructure and lack of alcohol-based handrub (ABHR) are significant barriers to best hand hygiene practices, especially in resource-limited settings. Between 2006 and 2008, the World Health Organization (WHO) developed and tested two ABHR formulations for hand antisepsis suitable for local production in healthcare facilities (HCFs). We investigated the feasibility, advantages, costs and barriers related to the local production of the WHO-recommended ABHR formulations worldwide. **Methods:** In 2011, we conducted an online survey based on a previously pilot-tested questionnaire including 58 questions related to the WHO formulation preparation and storage, ingredient and dispenser procurement, quality control, tolerability, acceptability, costs and promotion. One hundred twenty five potential local producers of the WHO formulations were identified through the WHO regional focal points, country contacts and stakeholders and invited to participate. **Results:** Among 100 respondents to the invitation (80%), 56 were not currently producing the WHO formulations, 4 decided not to participate in the survey, and 1 was excluded due to incomplete data. Thirty-nine sites (34 HCFs and 5 private companies) from 29 countries (7 low-, 16 middle-, and 6 high-income economies) were included in the final data analysis. In all 39 sites the WHO formulation local production proved feasible, using locally sourced alcohol in 72% of sites, and with 54% replacing a previously used ABHR. Product tolerability and acceptability was excellent in 82% of sites and its use was promoted as part of a multimodal strategy in 88%. Cost evaluation was possible in 16 sites and showed WHO formulations to be less expensive than marketed products. Difficulty identifying staff with adequate skills for local production was experienced by 41% of sites with a need for training in 74%. Constraints in ingredient and dispenser procurement were encountered in 51% of sites; some quality control issues and sub-optimal reprocessing of dispensers potentially leading to contamination were reported by 46% of sites. **Conclusion:** Local production of the WHO ABHR formulations is feasible and provides a solution particularly suitable for low- and middle-income countries as an alternative to unavailable or unaffordable commercially-produced ABHR. Improvement is required for quality control and ingredient and dispenser procurement.