ABSTRACT

Pesticide poisoning poses a health risk to individuals throughout the world although the reported global and local risk are not consistent in the literature. Mpumalanga Province has areas of epidemic malaria. Spray teams, applying local insecticides to indoor surfaces operate just prior to the rainy season (October to May) to control malaria. The purpose of this cross sectional study was to compare prescribed safe handling and application practices of Mpumalanga malaria spray operators mixing and applying insecticides versus actual practices in the field. All members of the spray operating teams were included in the study. A tick list and questionnaire was utilized to observe field practices and enquire about reasons for non-compliance. Only 28% of all operators complied with prescribed safety practices and differences in compliance between mixing (38%) and application (36%) were marginal. Gloves, face shields and dust masks were not utilized as recommended and contributed to the highest levels of non-compliance. Compliance was found to be dependent on gender, age, years of experience, education level and employment status. The low compliance rate necessitates further investigation of the malaria programme occupational safety management system. All stakeholders need to be aware of the consequences of pesticide poisoning and collaborate in efforts to work towards prevention rather than cure.