The under-reporting of UV induced occupational non-melanoma skin cancers and actinic keratoses in Italy

Solar UV radiation is one of the main occupational carcinogenic exposures according to CAREX (1), and UV-induced skin cancers (SCs) are the most frequent tumors in Caucasians, with an incidence constantly increasing in recent years (2,3).

Accordingly, in many Countries we should expect a relevant reporting of occupational SCs, giving the high number of outdoor workers exposed to solar UVR (2,3).

For these reasons we examined the Italian data on reported occupational non-melanoma SCs (NMSC) and actinic keratoses (AK) from 2014 to 2019 and we compared them with published data from other Countries.

Then, we calculated the expected number of UV-induced occupational SCs, based on available incidence rates and on the workers exposed to "solar radiation" identified within the BRIC2019-ID08 project and according to the numbers indicated by the CAREX data.

Our study shows a large under-reporting of UV-induced occupational Scs in Italy, representing less than the 10% of the expected cases. These data are in line with similar under-reporting detected in Denmark, while higher reporting has been documented in UK and Germany. We found no data on the reporting of occupational SCs for the majority of the Countries considered.

In conclusion, our study shows that occupational skin cancers are under-reported in Italy, and that occupational solar radiation exposure can be currently considered in many Countries a neglected occupational risk.

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