risk with respect to other workers at comparable exposure levels are still object of debate. Overall, the topic of workers at particular risk exposed to EMF is an open question and has to be managed case by case using a combination of information sources: directive itself, exposure assessment in the workplace, technical standards, findings of workers’ health surveillance, information acquired by the general practitioner or specialists having in care the worker, data from the manufacturer of the devices (e.g. technical sheets or instruction manuals), scientific literature etc.

Aim of special session Magnetic Resonance Imaging (MRI) is an important technology both for diagnostic and research purposes. MRI operators are exposed to high levels of electromagnetic fields (EMF), mainly static magnetic fields and low-frequency time-varying magnetic fields (TvMF). Objective of this Special Session is an update of the results of research on the effects related to occupational EMF exposure in MRI operators, and on possible prevention.

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Method A sample of 152 MRI operators working in 6 different hospitals in Italy was collected. No measurements were available, so for each participant exposure was estimated based on scanner type (<1T, 1.5T –<3T and ≥3T respectively) and on the total number of MRI procedures followed. In all operators an ad hoc questionnaire including relevant sociodemographic and occupational data, and the occurrence of subjective symptoms based our previous experience, was collected. The influence of stress was also evaluated. The relation between occupational exposure and symptoms was studied using multivariate analysis.

Result The multivariate analysis shows a significant correlation between exposure level and the total number of investigated symptoms. The results were confirmed considering the specific subset of ‘core symptoms’ based on previous literature data. In the multivariate model, the weight of the other covariate factors was not significant. The overall results were substantially confirmed considering the effect of work stress.

Discussion and conclusions In the observed group of MRI operators the total number of subjective symptoms was associated with EMF exposure; the subset of ‘core symptoms’ also proved significantly dose-related with exposure. The symptoms