The occupational effects of interventional cardiology: results from the WIN for Safety survey.

Interventional cardiologists are amongst the most intensive radiation users within medicine. To assess the implications of this usage, the "Women In Innovation" Group (WIN) created a web-based survey called "WIN for Safety" distributed through the European Association of Percutaneous Coronary Intervention (EAPCI) to all catheterisation laboratory healthcare professionals, enquiring about radiation protection measures, compliance with monitoring, health (orthopaedic issues), radiation-associated problems (cataracts and cancer) and restrictions imposed upon the pregnant female. In total, there were 615 participants: 72.8% were interventional cardiologists. Most (73.5%) of them were male and 63.3% were aged 31-50 years. A radiation collar badge was used by the majority (64.4%) and the most frequently utilised protective measure was the thyroid shield (87.2%). Potential illnesses related to radiation exposure included 19.5% orthopaedic problems (back/neck/hip pain), 5.5% varicose veins, 2.4% blood count problems and 2.0% cataracts. Notably, an association between orthopaedic problems and years of exposure was found (p=0.001). Overall, only 2.2% had ever been diagnosed with a cancer, with a trend for more females to be affected (4.4% vs. 1.8%; p=0.067). Finally, 62.1% have restrictions imposed upon
the pregnant female in the working environment. Awareness of radiation in the field of interventional cardiology is essential. The main risk is orthopaedic problems and measures should be taken for prevention. Cancer has not been demonstrated to be a direct consequence; however, we should remain vigilant and monitor individuals.