

## Letters to the Editor

## Editöre Mektup

Where do we stand in occupational cardiology?

To the Editor,

I read with great interest the study entitled ‘Levels of awareness of occupational and general cardiovascular risk factors among metal industry employees’ by Gürdoğan et al. in the June issue of your journal.<sup>[1]</sup> Using the Cardiovascular Disease Risk Factors Knowledge Level (CARRF-KL) Scale,<sup>[2]</sup> the authors arrived at some striking results in their measurement of levels of awareness and knowledge among these workers.

The ways in which we live and work mean we are constantly exposed to the many toxic agents and heavy metals existing in the natural environment. Despite measures put in place to protect workers from over-exposure to these metals and toxins, problems associated with such exposure continue to be a grave health issue in Turkey and worldwide. While the neuropsychiatric and carcinogenic effects of these toxic materials are of primary concern, there is no doubt that they also have life-threatening effects on the cardiovascular system.<sup>[3]</sup>

Cardiology is in itself a dynamic arena, with new information and guidelines being produced almost daily. Nevertheless, I believe that there is a need for greater interest in and awareness of the relationship between cardiology and toxicology. The CARRF-KL scores that came out of this study by Gürdoğan et al. revealed greater knowledge and awareness of occupational and general cardiovascular risk factors among those workers who had remained longer in formal education and/or who had a family member with heart disease.

Of course, the other group most closely involved in this health issue are doctors, who urgently need to discuss, research and share their ideas on the effects of heavy metals, toxic substances and solvents on the

cardiovascular system. We see many patients in the cardiology clinic at our hospital admitted because of both environmental and work-related exposure to such materials, with a great number of them needing screening and follow-up for exposure to such agents as lead, mercury, arsenic, cadmium, manganese, trichloroacetic acid and mandelic acid.

It seems that what is necessary for both general practitioners and the cardiology community is the creation of a set of national ‘Occupational Cardiology’ guidelines for an approach to this specific patient population. These guidelines would not only set out the various cardiovascular diseases—primarily arrhythmias, heart failure and ischemic heart disease—that emerge as a result of exposure to toxic agents, but also formulate diagnostic algorithms, establish causality, explain how work and workplace factors affect the cardiovascular system, and how any given cardiovascular disease and its risk factors affect work life, and ultimately create a roadmap for best practices in treatment.

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doi: 10.5543/tkda.2015.10270



*Conflict-of-interest issues regarding the authorship or article: None declared*

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