## Evidence-based strategies to reduce the magnitude of occupational cancer

Sir.

Globally, owing to its universal presence, enormous impact on the variable domains of life (viz. associated morbidity, financial burden, quality of life, disability, and death), cancer has emerged as a significant public health concern. <sup>[1]</sup> In fact, current estimates suggest that 14.1 million new cancer cases and 8.2 million associated deaths have been reported in the year 2012, of which maximum contribution is from developing countries. <sup>[2,3]</sup>

Furthermore, a study has depicted that approximately 20% of all forms of cancers are assigned to the environmental factor.[1] In addition, almost 900 potential carcinogens have been earmarked for their carcinogenic potential in the workplace. [2,4] Both industrialized nations (probably because of exposure to environmental carcinogens for more than five decades) and low/middle income nations (owing to the less stringent enforcement of occupational health standards) have eventually contributed to the rising trend of occupational cancers. [5,6] Moreover, diversified parameters such as environmental carcinogens (viz. asbestos, silica, arsenic, radiation, etc.,);[7] employment in cancer-prone industries;[8] exposure to unsafe equipments;[9] nonavailability of personal protective equipments;<sup>[9]</sup> poor awareness among workers about the occupational hazards;[9] attitude of physicians;[10] and nonexistence of practices like preplacement/periodic medical examinations;<sup>[9]</sup> have together contributed to the rising trends of occupational cancer.

Researchers have realized that the efforts of policy makers/health professionals are definitely inadequate to counter the rising incidence of the disease.<sup>[5]</sup> In fact, these potential risk factors indirectly provide opportunities to minimize the magnitude of the disease

comprehensively. [4,7-9] In addition, the problem is further complicated by parameters like inadequate funding, absence of a surveillance system to predict exact estimates, and dearth of scientific research, have also hampered the global efforts to combat the burden of occupational cancers. [9,11,12]

Owing to the multi-faceted nature of the problem, there is an immense need to formulate a holistic strategy that should have provisions to address all the potential determinants. [2,3] This proposed strategy should be developed on the basis of findings of the case-surveillance system so as to guide for rational allocation of resources.[12] In addition, implementation of other interventions like establishing maximum permissible limits for carcinogenic chemicals;[2,7] encouraging use of personal protective measures; [9] establishing pre-placement and periodic medical examination in industry; [9] enhancing awareness about occupational cancer among employees;[9] sensitizing medical practitioners regarding scope of carcinogenic elements;[10] expanding scope of social security/insurance; [9,13] and facilitating research work to understand the patho-physiology of occupational cancers;[12,14] can also be done to minimize the incidence of occupational cancer.

To conclude, owing to the rising trends of occupational cancer there is an indispensable need to develop evidence-based interventions to negate its influence on different domains of life.

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