

LETTER TO THE EDITOR

Comment on incidence of cancer in Iranian sulfur mustard (SM) exposed veterans

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I read with interest the article by Mohammad Reza Zafarghandi and colleagues on incidence of cancer in Iranian sulfur mustard (SM) exposed veterans (Zafarghandi et al., 2013). I would like to comment on the “Method and results” and “Conclusion” of this article:

- The type of the study is more suited to a historical cohort because the investigator chose to identify cohort members based on records of previous exposure, rather than identifying cohort members concurrently with the initiation of the study and planning to have the follow-up period occur during the study (Rothman et al., 2010)
- Why the authors did not control the effect of some more important variables such as exposure episodes, and the use of gas masks that are available for veterans health records.
- The authors mentioned that using Cox proportional hazards model, hazard ratio of cancer occurrence for SM exposure was calculated. The Cox PH model assumes that the hazard ratio comparing any two specifications of predictors is constant over time. Equivalently, this means that the hazard for one individual is proportional to the hazard for any other individual, where the proportionality constant is independent of time. If time-dependent variables are considered, the Cox model form may no

longer satisfies the PH assumption and extended Cox model should be applied instead (Kleinbaum & Klein, 2005). Most variables considered in the study (such as smoking status, education and age) strongly have the properties of time-dependent variables. Why the authors did not use extended Cox model in terms of including time-dependent variables?

- There is a discrepancy between findings of incidence rate ratio for overall and subgroups of cancers. Since cancer composed of all its subgroups, how the authors explained this discrepancy.
- Although the incidence rate of cancer did not differ significantly between groups (SM exposed and non-exposed), authors suggested carcinogenesis of SM following acute exposure during war.
- We did not have **conflict of interest**

References

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