

Peer Review

Review of: "Human Health Risks from Textile Chemicals: A Critical Review of Recent Evidence (2019-2025)"

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The article presents a comprehensive and up-to-date review, with a detailed examination of the primary pollutants present in the textile industry and their associated risks to human health. The contribution to understanding the impact of exposure to these pollutants on human health is clear. However, the authors need to integrate a system that assesses the impact of these pollutants, particularly on water resources, and the effects on human health of consuming water contaminated with these effluents. The textile industry has a significant impact, much of which is related to the impact of wastewater, which contains all the pollutants analyzed by the authors in this review. The authors should include a chapter on the environmental impact and its relationship to human health. The manuscript is difficult to read due to its extensive text. Figures and tables could be added to enhance the clarity of the information. For example, tables could indicate the types of studies that address the specific type of pollutant and its impact on human health, as well as, if possible, on the environment. In this way, the article would contribute better to the analysis of the information.

It is suggested that the authors include a section in the introduction on the context of the textile industry, including market data, leading countries, the amount of water used by the industry, and the amount of liquid, solid, and gaseous waste generated by this industry. This would allow for contextualization of the impact generated by this industry.

Methodologically, there are several aspects that the authors should improve to strengthen this section. When indicating that a search was conducted, it is necessary to include a PRISMA methodology that allows the reader to visualize the rigor with which the authors selected the information used in the review. This allows for the reproducibility of the work carried out and contextualizes the reader on the information that was analyzed. It is recommended to display the number of documents found and the

screening process used to select the documents included in the review. It is suggested to include a co-occurrence analysis to establish trends in pollutants. It is essential to acknowledge the authors and countries researching the topic, as this valuable information enables the reader to identify the primary references on the subject.

It is suggested that the authors include figures with the chemical structure of the contaminants analyzed, for example, with dyes, as this helps to further the discussion on the impact on human health and the difficulty of their degradation.

Finally, just as there is a section on skin impacts and allergies caused by contact with textiles, it is suggested that a section be included on the impact of contact with and consumption of wastewater from the textile industry, as well as contact with atmospheric emissions generated by this industry.

Declarations

Potential competing interests: No potential competing interests to declare.