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Photodiagnosis and Photodynamic Therapy

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Comment on Kumar A, Sagdeo A, Sagdeo PR, Possibility of using ultraviolet radiation for disinfecting the novel COVID-19, Photodiagnosis and photodynamic therapy. 34 (2021) 102234

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With great interest, I went through the article entitled "Possibility of using ultraviolet radiation for disinfecting the novel COVID-19 by Kumar A et al. [1]. I would like to congratulate the authors for having proposed an ultraviolet device for sterilizing used personal protective kits and other devices. Such devices will play an important role in fighting the ensuing pandemic. The prevailing COVID -19 pandemic has led to marketing of ultraviolet lamps as germicidal lamps. Many institutions and households are using these devices for disinfection in their premises. As correctly mentioned by the authors, improper and direct exposure to these germicidal ultraviolet rays can lead to unwanted complications. There have been reports of photokeratitis developing following improper use of ultraviolet germicidal lamps during the COVID pandemic [2,3]. Sengillo et al. [2] and Leung et al. [3] have described features of photokeratitis following ultraviolet exposure in 7 and 3 cases respectively. All these patients usually present within few hours of exposure with symptoms of blurred vision, foreign body sensation, redness and watering from eyes. Clinical signs vary from varying degrees of conjunctival injection to corneal punctate epithelial erosions. Most of the cases recover quickly within few days with use of topical antibiotic drops and lubricating drops. Corneal exposure to ultraviolet rays leads to apoptosis [4] and increase in exposure can cause desquamation of corneal epithelium leading to corneal haze and corneal edema [5]. Almost all the patients in the above-mentioned reports had direct exposure to ultraviolet lamps for disinfection process is going to increase as the pandemic progresses. Proper adherence to manufacturer instructions and use of appropriate protective wear can go a long way in preventing unnecessary complications arising out of their use.

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