



SURGICAL SMOKE IN THE OPERATING ROOM IN TURKEY

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Introduction: Operating rooms are used where advanced technological tools and equipment are used, many risks are present together and these risks can adversely affect patient / employee health. Surgical smoke, defined by various names such as cautery smoke, diathermy smoke, smoke cloud, smoke, steam, aerosol, bioaerosol, air pollutants, is one of these risks.

The point of view of surgical smoke in our country is not to be expected and at the required level. Within the quality standards established by the Department of Quality and Accreditation in Health (2016), it is noteworthy that there are standards regarding the general ventilation system of the operating room but no surgical smoke is included.

Method: This review was planned to examine the surgical smoke studies in Turkish operating rooms. The review was created by reviewing the scientific publications obtained from both national and international Pubmed, Google Scholar, Cochrane Library, and Science Direct, which have been scanned with key words such as "surgical smoke", "operating room", "cautery smoke" Studies in English or Turkish have been studied. Four studies in accordance with inclusion criteria were considered from 2013 to 2019.

Findings: Usta et al. (2019), reported that 90.5% of the nurses had worked in the operating room within general ventilation system, 89.5% of the nurses reported that the smoke evacuation device wasn't available, 72.4% of the nurses stated that they had no filters on the surgical smoke extractors or they did not know if they had. 96.2% of the participants stated that there was no protocol in the operating rooms to prevent surgical smoke or they do not know if there were such a protocol. In order to prevent surgical smoke, 85.7% of the nurses used surgical masks. Alcan et al. (2017) found that 97.2% of nurses evaluated the measures taken in order to protect against surgical smoke in the operating rooms they worked. Yavuz van Giersbergen et al. (2019) reported that only 8.2% of the nurses stated that they had protocols for surgical smoke, and 65% of nurses stated that they used surgical masks to protect themselves against surgical smoke. Ünver et al. (2016) showed that aspiration catheters were used as an alternative smoke evacuation device in the operating room.

Conclusion: As a result, we can conclude that the engineering controls for the operation smoke in the operating rooms are insufficient and that the Turkish operating room nurses have negative symptoms due to the operation smoke. We also advise healthcare managers to assess the potential hazards of surgical smoke, to educate the operating room nurses about these hazards, and to encourage the use of evacuation tools to minimize the potential health hazards to the surgical staff.

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