

Category : **ICU organization**

**A201 - How to protect the hospital from contamination: predictors of covid-19 infection among emergency department consultants.**

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## **Introduction:**

**Introduction:** As the Covid-19 pandemic increases, Tunisia, like other countries, is committed to reorganizing health structures, mainly emergency departments, which not only continue to provide care for non-Covid patients but also manage an influx of suspected Covid patients. The objective of our study was to identify predictors for Covid 19 infection and to avoid contamination of the hospital.

## **Methods:**

**Methods:** This was a prospective, descriptive study, extending over two months (from 03/27/2020 to 05/26/2020). We included all patients consulting the emergency department, regardless of the reason. The predictive factors of a Covid infection, confirmed by PCR or by a typical appearance on the chest CT scan were sought

## **Results:**

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We included 5241 patients. The sex ratio was 0.97. The mean age was 44.6±18 years. Thirty-five percent of patients were smokers. The most common medical history in our patients was hypertension (23.9%), diabetes (19.5%), asthma (7.8%), and coronary artery disease (7.7%). The reasons for consultation were dominated by cough, dyspnea, nausea or vomiting, and fever, in 9.5, 8.5, 8.8, and 6.9% of cases respectively. The concept of exposure was observed in 3.1% of patients. The concept of contact with a suspected case was observed in 1.3% of patients, while contact with health personnel was observed in 6.3% of patients. Suspicion of covid 19 infections was found in 2.3% of patients. Eighty-nine percent of patients were managed in the emergency department. Independent predictors of COVID 19 infection in multivariate analysis were: fever (adjusted OR=21.19 p<0.01), breathing difficulties (adjusted OR=16.49 p<0.01), neoplasia (adjusted OR=15.93 p<0.025), and contact with health care personnel (adjusted OR=5.78 p<0.019).

## **Conclusion:**

### **Conclusions:**

Identification of predictive factors for Covid 19 infection allows detection of suspect patients up on arrival at pre-triage and triage areas, allowing isolation while ensuring continuity of care for non-Covid patients.