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Original article

Epidemiology of Burns During Confinement Period Experience of the Burns Department of Marrakech University Hospital

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Abstract

The coronavirus disease pandemic has spread to every corner of the world and has affected our practice as healthcare professionals, Morocco has experienced a period of strict containment on March, April and May 2020.
This confinement gave notable social and economic changes.
Through this analytic study we compare the epidemiology of burns admitted to the burn's unit of the university hospital Mohammed VI of Marrakech on March, April and May 2020 and March, April and May2019, we have noticed significant decrease of cases and particularly severe cases and also the importance of domestic accidents as the principal cause.

Keywords: ***burns, covid 19, epidemiology.***

Introduction

The word experienced in 2020 one of the worst outbreaks in its history; the covid 19 pandemic. A big part of the world population was confined, this gave remarkable social and economic changes. In Morocco we have experienced a total confinement during the months of March, April and June, everybody stayed at home only emergency cases were treated, even for burns, a lot of patients preferred to stay home and not to come to the hospital, everyone was scared to be covid positive, though this study we tried to analyze the epidemiological profile of burns (gender, age, circumstances of the burn, burnt skin area) by comparing them to the same period of 2019,

Method and martials

It's about an analytic study comparing the epidemiology of burns admitted from the 20th march to the 1st June 2020 to the same period of 2019.
The study concerns all cases of burns admitted to the burn's unit.
The analyze concerns age, gender, causes and severity of burns.

Results

From the 20th Mars to 1st June 2020, we have admitted 15 cases of burns, and 23 cases in the same period of 2019, in majority females in the both years (65% in 2019 against 66% in 2020).

The sex-ratio was 2 in 2020 and 1,8 in 2019, the age average was 29 years in 2020 and 33 years on 2019. (**Figure 1**)

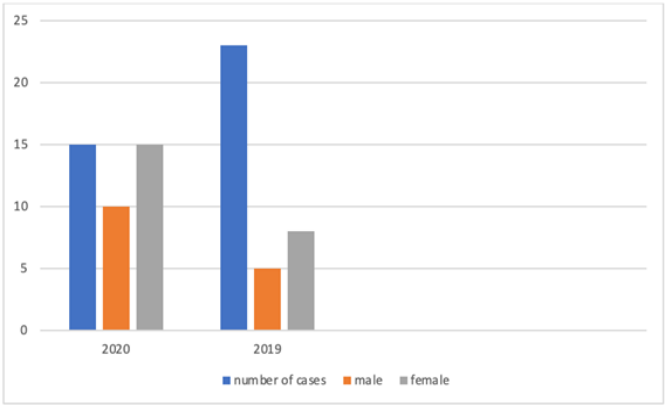

Figure 1: Age and sex comparison

The domestic accident was the principal cause of burns in both 2020 and 2019 (80% and 74%). (**Figure 2**)

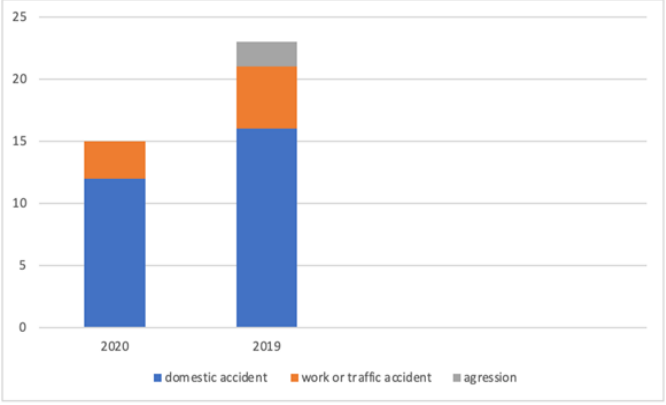

Figure 2: Causes comparison

The severity was judged by the estimation of the burned skin surface; the average was 22% in 2020 (extremes 6 and 87%), in 2019 the average was 25% (extremes 5 and 85%). (**Figure 3**)

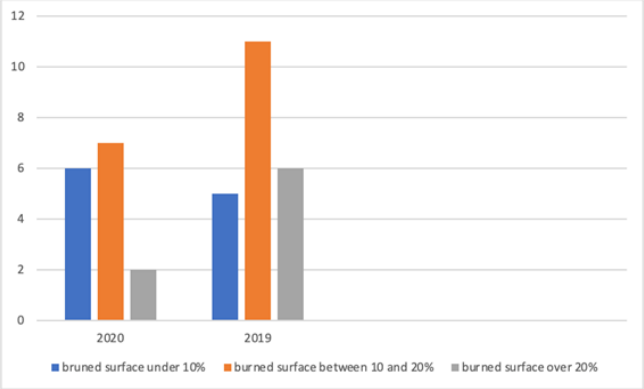

Figure 3: Burns severty

Discussion

The analyze of our results showed no significant difference between the normal and the confinement period concerning the sex-ratio [1,2], however the number of cases has decreased significantly; 34 % less, this result joins the literature [3,4] it´s can be explained by the confinement, none was allowed to go out without having a legal authorization and people were scared of corona virus, they preferred to stay home then to go to the hospital.

Females are more burned than males, The domestic accidents were the principal cause in both periods, however, their percentage was more elevated in confinement period (80% vs 69%) The work and traffic accidents were normally more present in period of non-confinement [5], this can be explained by the fact that everyone stayed at home confined even for work the majority of companies have adopted teleworking, which means that all incidents occur at home.

The analyze shows also a significant decrease of severe cases (burned surface more than 20%), This can be explained by the decrease of work and road accident due to the lockdown (**Figure 3**) [6,7].

Conclusion

The confinement gave important changes in social and economic habits, which also led to significant changes in the epidemiology of burns, we noticed less cases and especially less severe cases. this could help for the establishment of prevention strategy.

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None

Conflict of interest

There is no conflict of interest.

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