

# An update to middle east respiratory syndrome coronavirus and risk of a pandemic in 2019

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**Dear Editor,**

Based on available data and current situation of Middle East respiratory syndrome coronavirus (MERS-CoV) on disease outbreak news of World Health Organization (WHO) website, 2374 MERS-CoV cases including 823 associated deaths (globally case fatality rate was 34.66%) occurred from 27 countries in worldwide [1]. Constant incidence of a large number of MERS-CoV cases and high lethality related to MERS-CoV infection indicate that this infection must be considered as a threat to global health security with high intensity and lethality. Since there is not still a vaccine or specific treatment to prevention of MERS-CoV [2], all at-risk individuals in involved

countries are better to have a focus on preventive measures. Every year, millions of muslims travel to epicenter of this infection in Saudi Arabia to perform Hajj. The pilgrims on return to home hold ceremony which was attended by family and friends. Oriental etiquette to want to share hospitality with others increases transmission of probable MERS-CoV to others. This represents that MERS-CoV capable transmit from human-to-human but the virus does not pass easily from person to person unless when an individual is in close contact [3]. The current epidemiological status of MERS-CoV from 2019-01-01 until 2019-04-15 presented in table 1. This data showed that during the mentioned period the most of MERS-CoV patients were male (89.5%) with age > 50-year-old (57.9%). After 8 years from the start of the MERS-CoV pandemic, Saudi Arabia (most MERS-CoV cases occurred in the Riyadh city), 56.5% had comorbidities and 12.9% were health care worker, 24.7% had history for exposure to camels, 23.5% reported that they had camel milk consumption and 62.4% had a positive history for exposure to MERS-CoV Cases. During the course of this study, 14 people with MERS-CoV died and remaining survived. Thus, the latest case fatality rate related to MERS-CoV infection was 16.47%.

**Table 1.** Sample characteristics of 85 MERS patients in the worlds in 2019

Characteristic	Levels	n	%
Age (year)	≤ 50	8	42.1
	> 50	11	57.9
Gender	Male	17	89.5
	Female	2	10.5
Reporting Country	Oman	13	15.3
	Saudi Arabia	72	84.7
City of Residence	Al-Qassim	5	5.9
	Asir	1	1.2
	Jeddah	3	3.5
	Madinah	1	1.2
	Makkah	1	1.2
	Najran	1	1.2
	North Al-Batinah	9	10.6
	Quryiat	1	1.2
	Riyadh	58	68.2
	South sharquia	4	4.7
	Tabouk	1	1.2
Health Care Worker	Yes	11	12.9
	No	74	87.1
Comorbidities	Yes	48	56.5
	No	37	43.5
Exposure to Camels	Yes	21	24.7
	No	13	15.5
	Not reported	51	60.0
Camel Milk Consumption	Yes	20	23.5
	No	12	14.1
	Not reported	53	62.4
Exposure to MERS-CoV Cases	Yes	53	62.4
	No	2	2.4
	Not reported	30	35.3
Final Outcome	Dead	14	16.5
	Survived	71	83.5

Overall, In today’s “global village”, there is a probability of MERS-CoV epidemic at any time and in any place without prior notice. Thus, health systems in all involved countries should implement better triage systems for potentially imported cases of MERS-CoV to prevent large epidemics.

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