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Orthodox Judaism as a Risk Factor of Covid-19 in Israel



Our short-term but intense experience with Coronavirus disease 2019 (COVID-19) has identified advanced age, comorbidity and immunosuppression as major risk factors of acquisition and mortality of this highly-contagious disease.^{1,2} Experiences in Israel, however, suggests that practicing Orthodox Judaism is an additional significant risk factor.

For example, the number of COVID-19 patients in the city of Bnei-Brak (100% ultra-Orthodox “Haredi” Jewish population) is currently 845 per 100,000, as opposed to 97 per 100,000 in Tel Aviv-Yafo, where the Orthodox population is estimated at 15% (Table 1). Other cities with significant concentrations of Orthodox Jews such as Jerusalem (~30% of the Jewish population) and El’ad (100%) share the disproportionately increased percentage of COVID-19 patients. Since high population density is another potentially significant risk factor facilitating viral spread,³ one can compare the morbidity in Jerusalem and Tel Aviv-Yafo, which have quite similar density figures (7,180 and 8,565 people/sq. Km, respectively).

TABLE 1. Confirmed COVID-19 cases in several cities in Israel in relation to their Orthodox population and population density.

City	Jerusalem	Bnei-Brak	El’ad	Tel-Aviv-Yafo
Population	919,450	199,000	47,900	451,500
Jewish Pop. ^a	61 %	~100%	~100%	92%
% Orthodox ^b	~33%	~100%	~100%	~15%
Pop. Density ^d	7,180	26,105	13,515	8,565
COVID Pts. ^c	1,780	1,681	226	434
Covid-19 Pts./100K Pop.	195.5	856	477	97
Covid-19 Pts./100K Jewish Pop.	318	856	477	106

^aNumbers rounded. Jewish population as percent of the total population.

^b% Orthodox as published by Israel Bureau of Statistics, respective municipalities or the Jerusalem Institute, as % of the total population

^cIsrael Ministry of Health publications, confirmed cases, data of April 9, 2020. In Jerusalem, less than 60 patients came from the Arab population.

^dPeople per square kilometre. Bnei-Brak is Israel’s most densely populated city.

The number of COVID-19 cases in Jerusalem is 3 times that of Tel Aviv (318 vs. 106 patients per 100,000 Jewish population), most likely due to the larger proportion of population practicing the Orthodox way of life, as compared to the largely secular population of Tel Aviv (Table 1). However, population density is important as well, as data on COVID-19 morbidity in Bnei-Brak and El’ad demonstrate.

The postulated cause of the increased risk of the Orthodox Jewish population to contract COVID-19 is the traditional intimacy of their religious practices. These include customary group Talmudic study in Yeshiva and praying 3 times daily in synagogues in groups of at least 10 people (so called “Minyan”) before the proper warnings were issued and social distancing (encompassing all religious gatherings) was strongly advocated and enforced. Initial data, though incomplete, indicate that the same may apply to Orthodox Jewish concentrations in Britain and New York City.

Thus, early recruiting of the spiritual leaders to convince their communities that preventive behavior must take precedence over centuries-old religious customs in times of pandemic, is strongly recommended.

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