

# Trends in Psychiatric Hospital Admissions among Children and Adolescents During the Early Corona Pandemic Period (2020) Compared with a Typical Year (2018)

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## INTRODUCTION

The Corona pandemic is profoundly affecting the lives of children and adolescents around the world, bringing uncertainty into many aspects of their lives.

During the corona measures the daily routine of children and adolescents is consistently changing by school closures, canceling extracurricular activities, physical isolation and more. This could have impacted their mental health, and may have encouraged psychiatric hospital admissions (Meherali et al., 2021).

Paradoxically, while literature describes many psychiatric implications and sever effects of the corona measures on children and adolescent's mental conditions (Sharma, Majumder, & Barman, 2020), studies on hospital admissions noted a clear reduction in psychiatric admissions. In Israel, The Tel Aviv Sourasky Medical Center (TASMC; Schreiber et al., 2021) and Schneider Children's Medical Center (Gavish et al., 2021) studies focused on pediatric admissions in general or on the rate of psychiatric consultations in emergency rooms. This does not describe the characteristics of these psychiatric admissions. Therefore, the current study aims to observe the trends and patterns of psychiatric admission among children and adolescents during the early period of the corona pandemic (2020), to understand the exceptional patterns of this year, the data was compared to a year considered to be typical 2018.

## GOALS

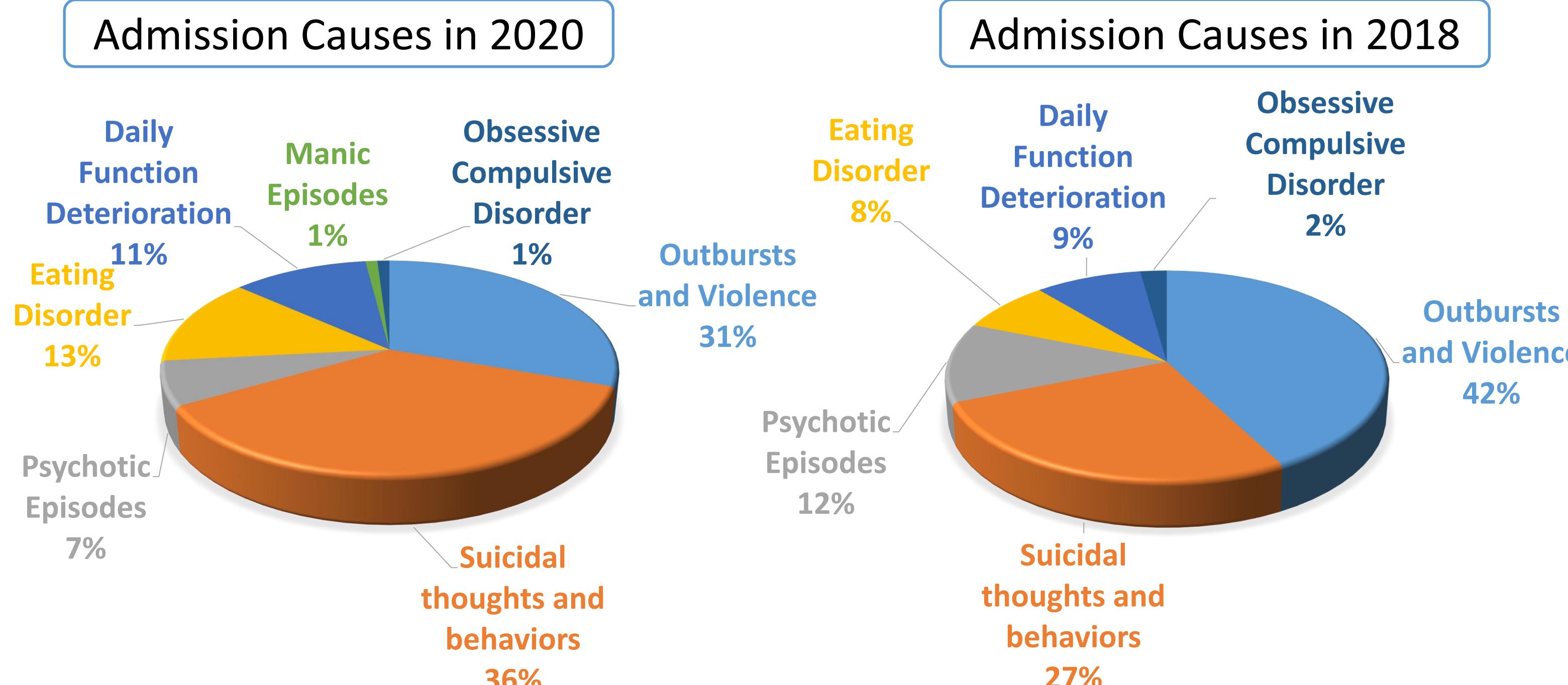
1. Examine the difference between the characteristics of hospitalizations in 2018 compared to 2020 in terms of: duration, re-hospitalization frequency and causes of admissions.
2. Identify the rate of psychiatric hospitalizations in 2020 that were related directly to corona stressors.
3. Examine the frequency of each corona stressors according to patients reports.
4. Examine the relationship between corona stressors reported and the sociodemographic variables including age, gender, out-of-home placements and type of educational framework.

## METHOD

**Procedure:** A cross-sectional study with purposive sampling. After receiving the approval of the Ethics Institutional Committee according to the Helsinki Declaration, the researchers analyzed the medical records of patients who were previously hospitalized in 2020 between the date 21.02.2020 where the first case of corona was verified in Israel until the date of 09.12.2020 where the first batch of vaccines from Pfizer arrived to Israel, and also the medical records of patients hospitalized in 2018 in the same dates. The study was conducted in The Child and Family Guidance Unit in The Galilee Medical Center, a psychiatric department for children and adolescents aged 6-18 years.

**Data analysis:** Descriptive statistics were recruited from the medical data reported in The Chameleon Electronic Medical Record. Statistical analyses were performed with SPSS v.20. Since all the variables were not normally distributed according to the Shapiro-Wilk test of normality besides the age, non-parametric tests were conducted including Mann-Whitney U tests for analyzing differences and Chi-Square tests for analyzing associations in different categories.

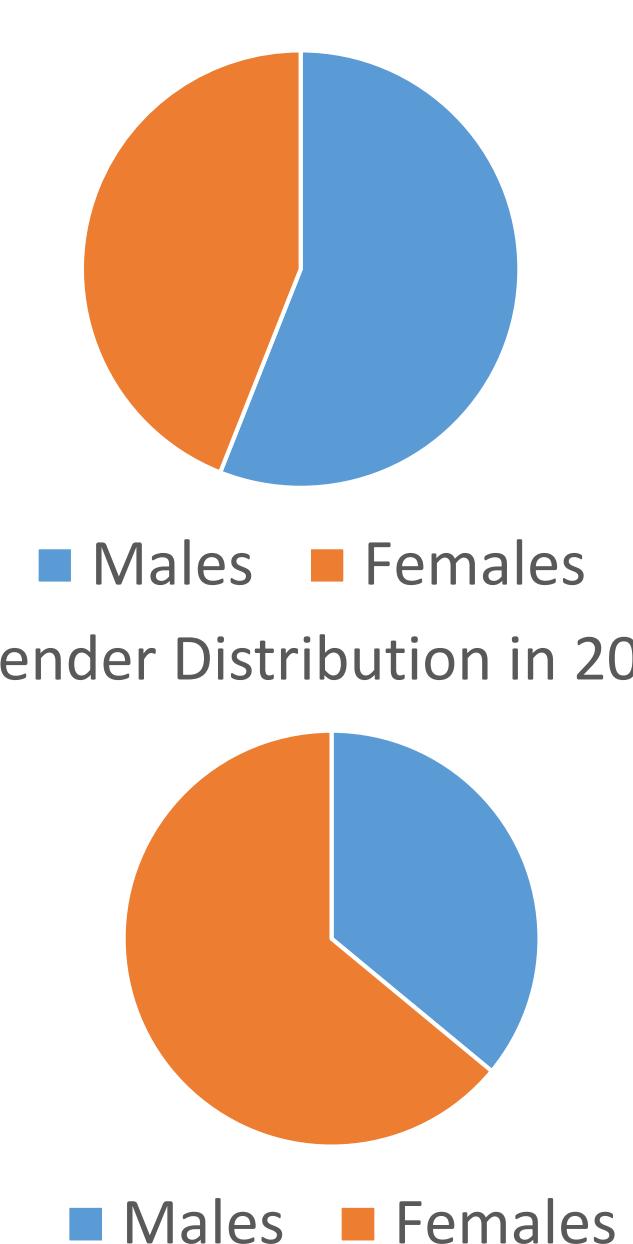
## RESULTS



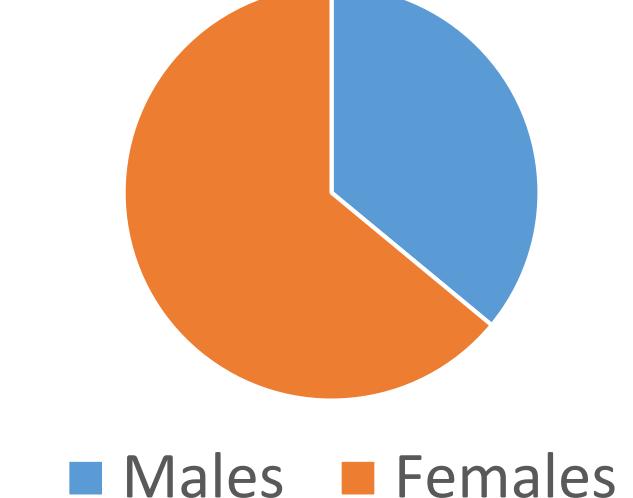
- ❖ The common age of patients admitted was 14 years in 2018 and 15 in 2020.
- ❖ In both years the median duration of hospitalization was 57 days. Most patients were living at their parents house and were learning in regular education frameworks.
- ❖ Almost 20% of patients in both years were released due to refusal to continue hospitalization. In 2020, 9% of hospitalization refusals were due to fear of contamination by corona from the hospital.

## RESULTS

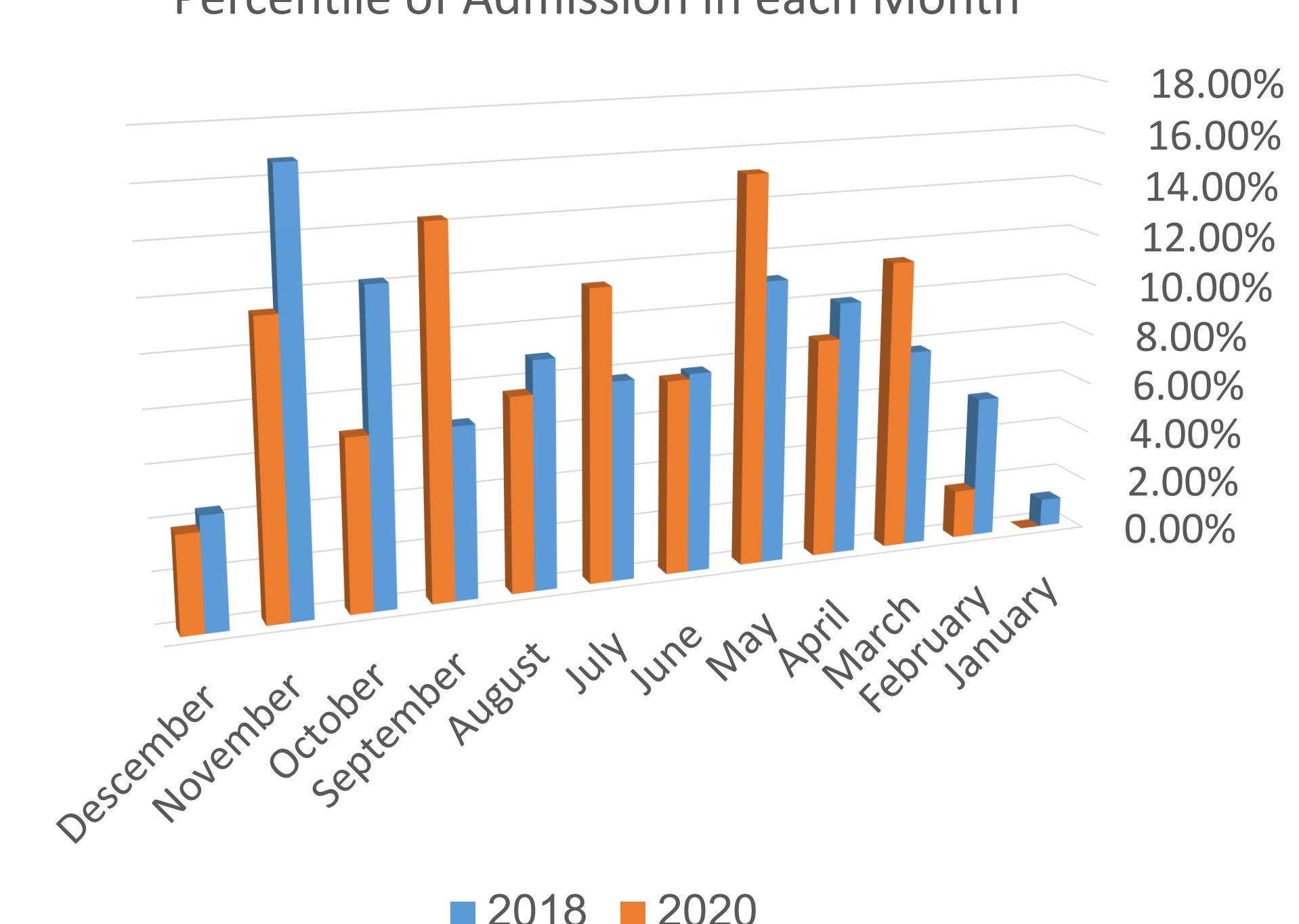
Gender Distribution in 2018



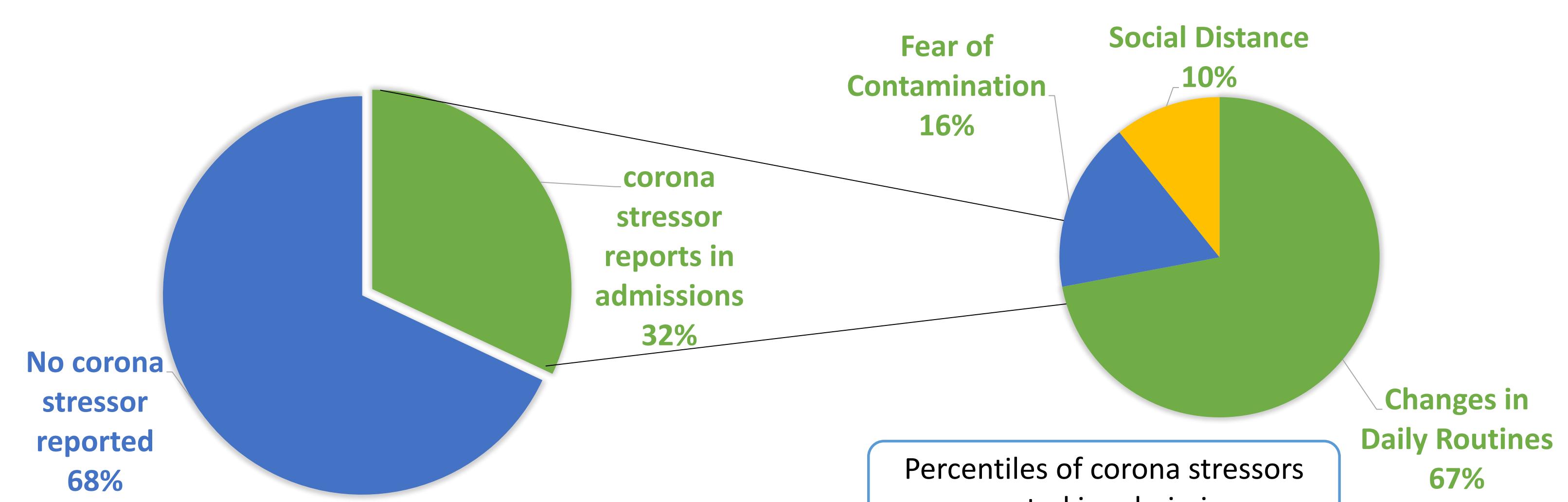
Gender Distribution in 2020



Percentile of Admission in each Month



- ❖ In the year 2020, 32% of the admitted patients reported about a reasons for admission that are related to the corona stressors.



## DISCUSSION

- ❖ The Current study showed an increase in the rate of suicidal thoughts and behaviors. Similar to previous studies (Ougrin et al., 2021).
- ❖ Most Admissions in 2018 were in November while in 2020 most admission were in May. This finding could be associated with school's onset and closures. In Israel, on 3 May schools started to return to frontal learning after two months of online learning, this has led to experiencing another change in daily routine which may have accelerated the pressure on children therefore that might explain the rise in psychiatric admissions rate in May. Literature showed school onset is considered a significant stressors associated with an increased rate of psychiatric admissions (Nixon et al., 2021) Especially in the corona pandemic (Viner et al., 2021).
- ❖ Approximately, third of the in admission in 2020 patients reported about a stressor of the corona pandemic that is related to the deterioration in their mental state, mostly it was related to the changes in daily routines. According to the International Classification of Functioning, Disability, and Health (ICF; WHO, 2001) consistency in daily routines are an essential part of maintaining health, this was deteriorated in the corona period by the changing restrictions and therefore impacted the wellbeing of many children and adolescents.
- ❖ The study did not find a significant association between the demographics variables and the corona stressors which could indicate that the corona impacted all children and adolescents among all ages and from different educational frameworks and home placements. Though, its important to note that in the year 2020 there has been a rise in the female admission compared with previous years (2018,2017) this phenomenon was presented also in previous literature. The systematic review and meta-analysis of Ma and his colleagues (2021) noted that adolescent's females exhibited higher prevalence of depression and anxiety compared with males in 2020. Other studies of psychiatric admission of children and adolescents in the corona period also showed a majority of females (Ougrin et al., 2021) this could indicate that females are a more vulnerable population in pandemic crisis.

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