

Brief Report

COVID–19 Cases Isolated in an Alexandria University Student Dormitory

Iman H. Wahdan [✉], Marwa S. Abdou, Nessrin A. El-Nimr

Department of Epidemiology, High Institute of Public Health, Alexandria University, Egypt

Abstract

With the rise in the number of COVID-19 cases in Egypt, the Ministry of Health and Population decided to use the university student dormitories as isolation hospitals for mild cases. The present study was conducted to describe the current situation of isolated COVID-19 cases in Smouha Alexandria Student Dormitory from the 7th till the 31st of May 2020. The cumulative number of reported COVID-19 cases was 487 by the 31st of May 2020, with 41.7% still under treatment, 24.4% isolated at home while still under treatment, 19.9% completely cured, 13.8% transferred to one of the isolation hospitals, and only 0.2% died. The death rate was very low. Moreover, the transfer to isolation hospitals decreased and the cure rate increased to one fifth by the end of the month. These rates denote good quality of care and good prognosis among the cases admitted to the dormitory. With the increase in number of cases, it is recommended to prepare more dormitories to be used with isolation hospitals in case of emergency.

Keywords: COVID–19; Isolation; Dormitory; Egypt

Available on line at:

jhphalexu.journals.ekb.eg

Print ISSN: 2357-0601

Online ISSN: 2357-061X

CC BY-SA 4.0

✉Correspondence:

Email: imanwahdan@yahoo.com

Suggested Citations: Wahdan IH, Abdou MS, El-Nimr NA. COVID–19 Cases Isolated in an Alexandria University Student Dormitory. JHIPH. 2020;50(2):75-79.

INTRODUCTION

The world is seeing a catastrophic pandemic of COVID-19. Nearly 6.4 million of world population have been confirmed as cases of COVID-19 and above 380 thousand deaths were reported by the 2nd of June 2020.⁽¹⁾ The intensity of the pandemic varies from one country to another. Statistics of World Health Organization (WHO) depicts that the Eastern Mediterranean region (EMRO) ranks the third in prevalence of confirmed cases of COVID-19 after the Americas and Europe, with a total number of 536,148 cases and 12,899 deaths. Egypt ranks the seventh country in prevalence in the EMRO.⁽²⁾

Egypt confirmed its first case of COVID-19 on the 14th of February 2020.⁽³⁾ The number of infected cases is rising across the country. From the beginning of the pandemic till the 2nd of June 2020, 27,536 cases, 1052 deaths and 6827 recovered cases were reported.^(1,4) On the 2nd of June 2020, the number of cases was 270 per million, while the number of deaths was 10 per million compared to 827 cases per million and 48.8 deaths per million worldwide, respectively.⁽¹⁾

With the rise in the number of COVID-19 cases in Egypt, and the fact that the majority of the cases (88%) had mild symptoms, the Ministry of Health and Population (MOHP) decided on the 7th of April to use

the university student dormitories in some governorates, including Alexandria, as isolation hospitals. Actions were taken by the MOHP to provide these dormitories with the necessary medical teams and equipment to be efficiently ready to receive mild COVID-19 cases not necessitating hospital isolation.⁽⁵⁾ Smouha Alexandria University dormitory is the first dormitory to be used as an isolation hospital in Alexandria, with a capacity of 576 beds. The other dormitories are still under preparation.⁽⁶⁾ Hence, the present study was conducted to describe the current situation of isolated COVID-19 cases in Smouha Alexandria Student Dormitory.

METHODS

A descriptive analysis of 487 COVID–19 cases isolated in Smouha Alexandria University Dormitory from the 7th till the 31st of May 2020 was carried out. A data collection sheet was used to record the date of admission, outcome of cases (cured, transferred to an isolation hospital or home isolated while still under treatment or died) and the number of cases still under treatment.

Statistical analysis

The Statistical Package for Social Sciences program

(SPSS) for Windows version 20.0 (SPSS, IBM, Armonk, NY) and Microsoft Excel were used for data analysis.

Ethical considerations

The study protocol was approved by the Ethics Committee of the High Institute of Public Health, Alexandria University. The researchers complied with the International Guidelines for Research Ethics. Anonymity and confidentiality of data were guaranteed and maintained.

RESULTS AND DISCUSSION

The cumulative number of COVID-19 cases reported from Smouha Alexandria University Dormitory was 487 by the 31st of May 2020. Figure 1 shows that out of the 487 reported cases, 41.7% (203 cases) were still under treatment in the dormitory, 24.4% (119 cases)

were isolated at home while still under treatment, 19.9% (97 cases) were completely cured, 13.8% (67 cases) were transferred to one of the isolation hospitals and only 0.2% (one case) died.

It appears from Figure 2 that daily newly reported cases fluctuated throughout the study period with two peaks: the first was on the 13th of May (64 cases) and the second was on the 20th of May (63 cases). Then it started to decrease by the end the month. This could be parallel to the decision taken by the MOHP for isolation of mild cases at home. When the weekly number of newly reported cases was presented in Figure 3, there was an increase in the number of cases during the second week of May followed by a decrease in the third week and fourth weeks despite that the last three days of the later were not still reported at the time of writing this manuscript which makes this figure underestimated.

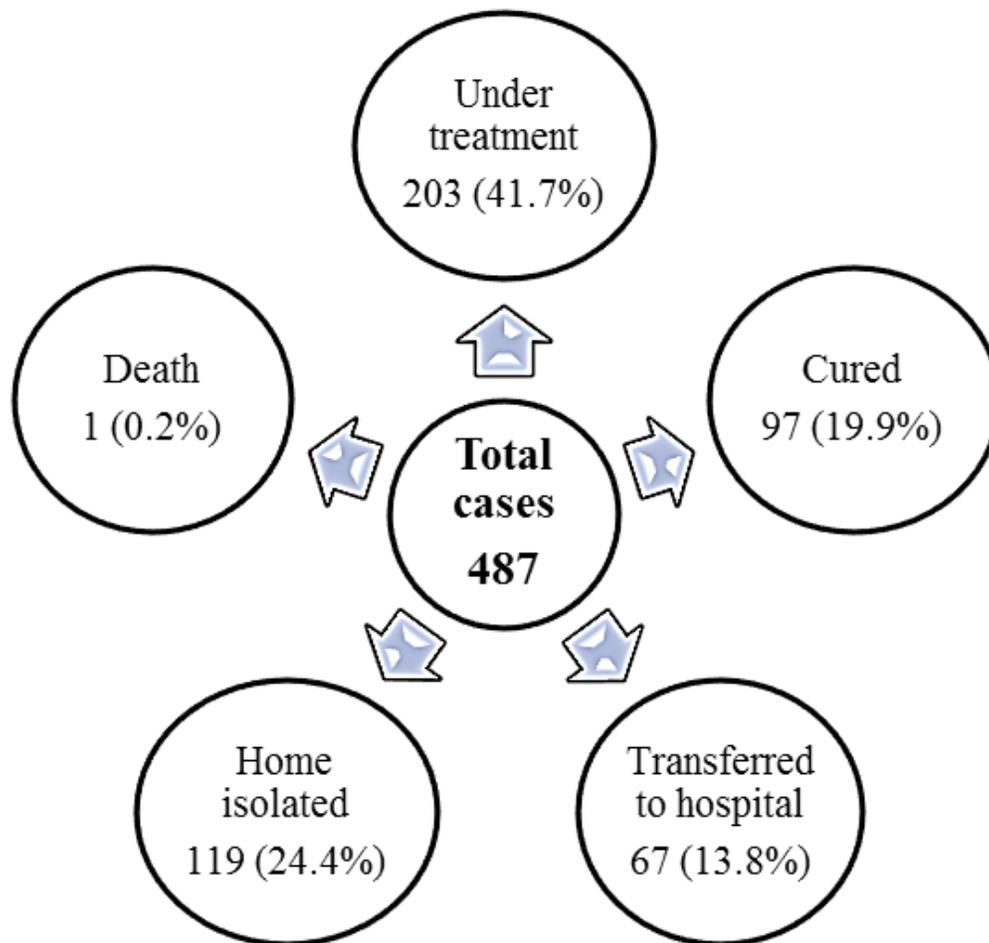


Figure 1: Number of reported COVID-19 cases and their outcome (Smouha Alexandria University Dormitory, 7th to 31st of May 2020)

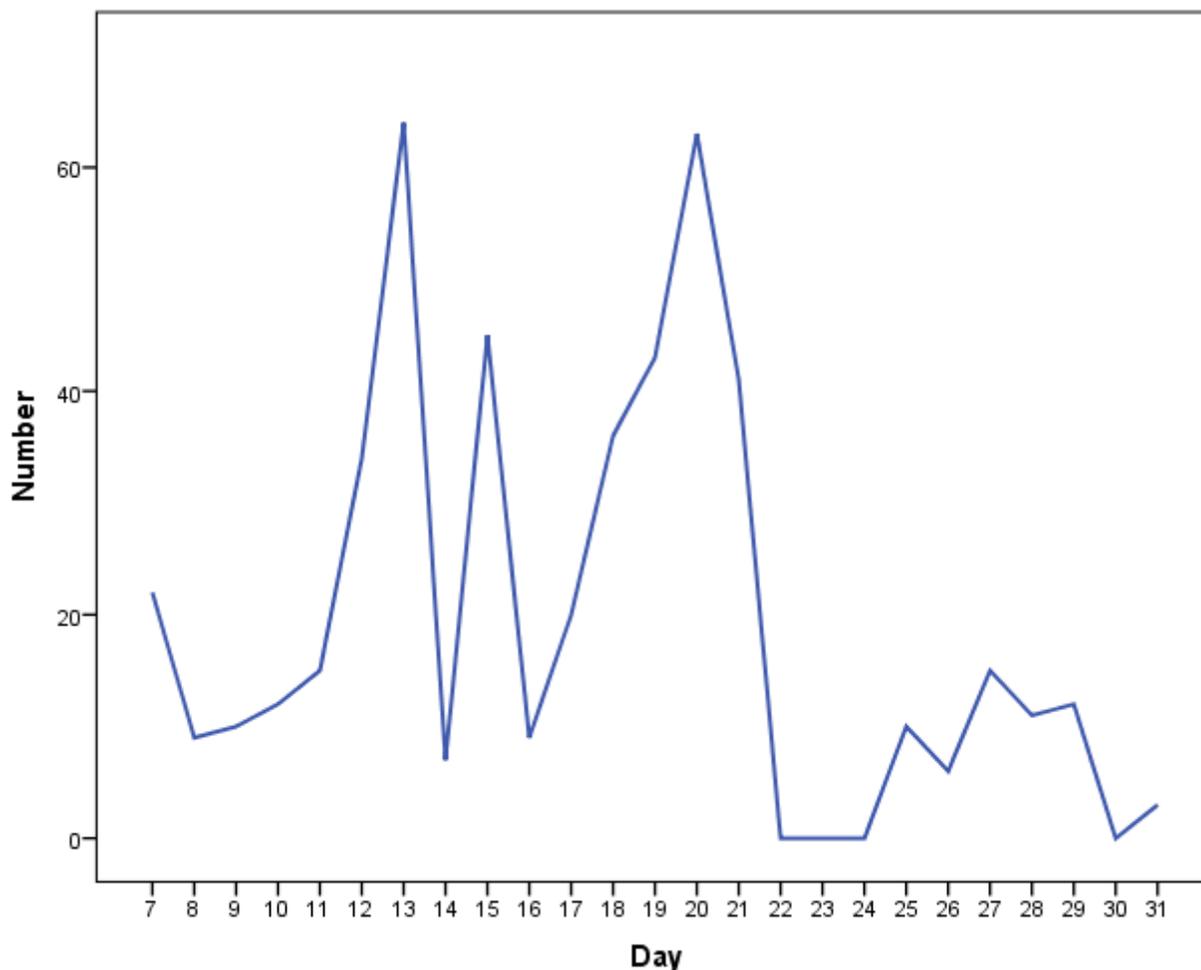


Figure 2: Number of reported new COVID-19 cases by day (Smouha Alexandria University Dormitory, 7th to 31st of May 2020)

The daily newly reported cases fluctuated throughout the study period with two peaks: the first was on the 13th of May (64 cases) and the second was on the 20th of May (63 cases). Then it started to decrease by the end the month. This could be parallel to the decision taken by the MOHP for isolation of mild cases at home (Figure 2).

When the weekly number of newly reported cases was presented in Figure 3. The figure showed that there was an increase in the number of cases during the second week of May followed by a decrease in the third week and fourth weeks despite that the last three days of the later were not still reported at the time of

writing this manuscript which makes this figure underestimated.

As illustrated in Figure 4, the proportion of cases isolated at home increased by the end of the month, while the proportion of cases which were transferred to isolation hospitals increased in the second week then decreased in the third and fourth weeks. The proportion of cured cases increased from 1.8% in the first week of May to 12.1% in the fourth week of May. The total cure rate of cases was 19.9%. The cure rate is underestimated because the available data did not include the outcome of cases isolated at home and those transferred to the isolation hospitals.

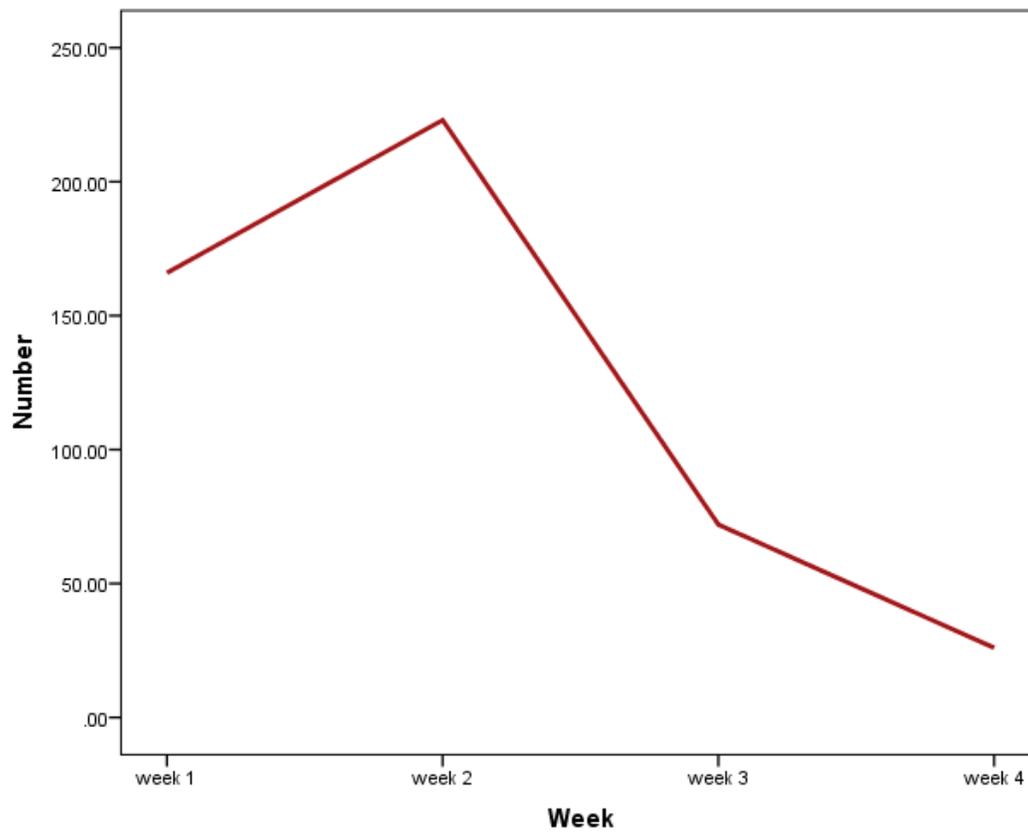


Figure 3: Number of reported new COVID-19 cases by week (Smouha Alexandria University Dormitory, 7th to 31st of May 2020)

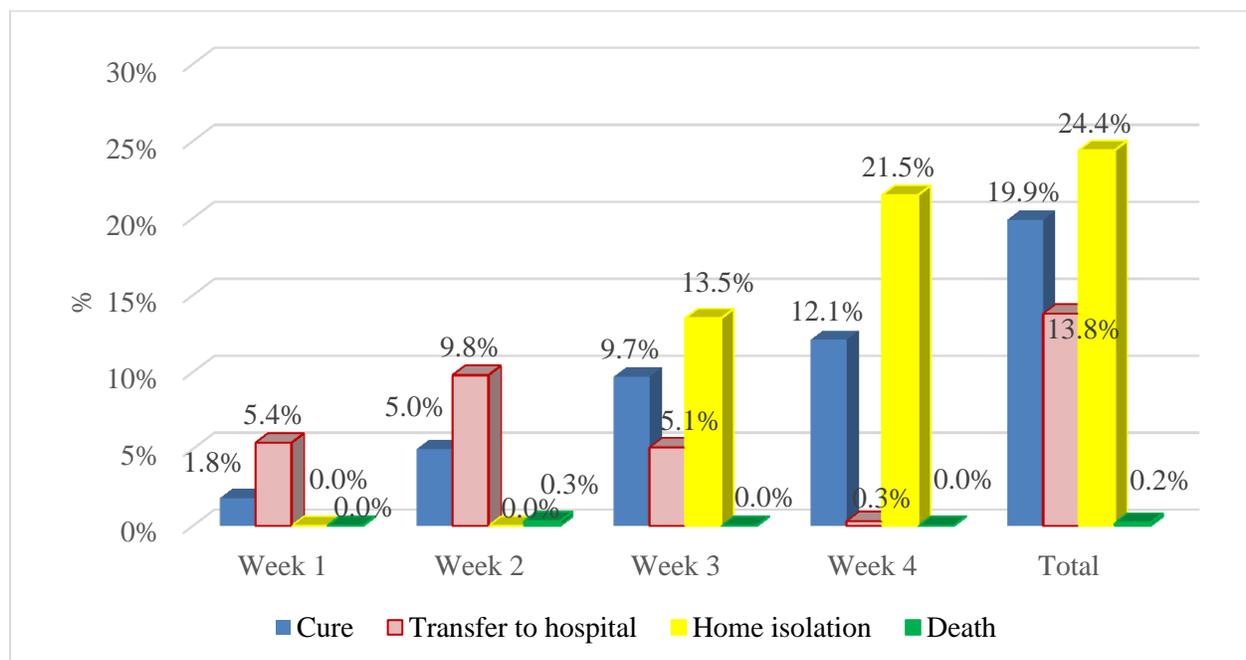


Figure 4: Outcome of COVID-19 cases by week (Smouha Alexandria University Dormitory, 7th to 31st of May 2020)

CONCLUSION AND RECOMMENDATIONS

The analysis of available data by the end of month revealed that the death rate was very low, and the transfer to isolation hospitals decreased. This denotes good quality of care and good prognosis among the cases admitted to the dormitory. The cure rate increased to almost one fifth by the end of the month and could be higher than this if there was a chance to have data about the prognosis of cases after home isolation and hospital isolation.

With the increase in number of cases, it is recommended to prepare more dormitories to be used with isolation hospitals in case of emergency.

CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

FUNDING

No funding sources

REFERENCES

1. Worldometer [Internet] .[updated 2020 June 02; cited 2020 June 02]. Available from: <https://www.worldometers.info/coronavirus/>.
2. World Health Organization (WHO). Coronavirus disease (COVID-19): situation report - 134. Geneva: WHO; 2020. 17 p. Report No.: 134.
3. Ministry of Health and Population (MOHP), World Health Organization (WHO). Coronavirus disease informative statement. Cairo: MOHP; 2020.
4. Ministry of Health and Population (MOHP). COVID-19 update. Cairo: MOHP; 2020.
5. Abd El Hamid A. Corona.. University dormitories and new isolation hospitals in Egypt [Internet]. Cairo: Al Arabiya; 2020 [updated 2020 April 07; cited 2020 June 02]. Available from: <https://www.alarabiya.net/ar/Arab-and-world/egypt/2020/04/07/%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7-%D9%85%D8%AF%D9%86-%D8%AC%D8%A7%D9%85%D8%B9%D9%8A%D8%A9-%D9%88%D9%85%D8%B3%D8%AA%D8%B4%D9%81%D9%8A%D8%A7%D8%AA-%D8%AC%D8%AF%D9%8A%D8%AF%D8%A9-%D9%84%D9%84%D8%B9%D8%B2%D9%84-%D9%81%D9%8A-%D9%85%D8%B5%D8%B1>.
6. Falah E, Lotfy A, Adel M, Badr AA, Abd El Azim H, Fathy M. University cities are turning into quarantine hospitals to cope with Corona. Photos [Internet]. Cairo: Youm7 ; 2020 [updated 2020 May 14; cited 2020 June 02]. Available from: <https://www.youm7.com/story/2020/5/14/%D8%A7%D9%84%D9%85%D8%AF%D9%86-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A%D8%A9-%D8%AA%D8%AA%D8%AD%D9%88%D9%84-%D9%84%D9%85%D8%B3%D8%AA%D8%B4%D9%81%D9%8A%D8%A7%D8%AA-%D8%B9%D8%B2%D9%84-%D8%B5%D8%AD%D9%89-%D9%84%D9%85%D9%88%D8%A7%D8%AC%D9%87%D8%A9-%D9%83%D9%88%D8%B1%D9%88%D9%86%D8%A7-%D9%85%D8%AF%D9%8A%D9%86%D8%A9-%D8%A7%D9%84%D8%A8%D9%86%D9%8A%D9%86/4773313>