Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Resuscitation

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Letter to the Editor

Strategies for preventing sudden unexpected COVID-19 deaths at home

With the recognition of rapid respiratory and cardiac failure associated with COVID-19, the importance of follow-up plans after hospital discharge, such as home care, has been discussed (even in cases characterised at the outset by mild symptoms).[1,2] Globally, the number of reports on unexpected at-home deaths related to COVID-19 has been increasing.[3,4] In Japan, all COVID-19 patients must be admitted to a hospital initially, regardless of the severity of symptoms, because of the infectious disease law. However, with the wide spread of COVID-19, the Japanese government implemented a new policy regarding treatment locations for patients with mild symptoms; accordingly, hotels or other accommodations, or homes, were authorized for patient care beginning 2 April 2020 because of the lack of hospital beds.[4] Herein is a description of the impact of this new strategy.

During a patient's stay at a hotel or other accommodation, at least one nurse remains at the facility 24/7. The patient's condition, including vital signs, can be checked daily, so the worsening of symptoms can be detected easily. In contrast, if patients choose to be treated at home, a member of the public health staff calls each one once a day to check his/her health status. Table 1 shows the number of cases and treatment locations for prefectures with high incidences of COVID-19 (i.e. 'special alert prefectures') approximately four weeks after the declaration.[4] The data shows that there were substantial variations regarding which location was dominant. Overall, there were about three times more COVID-19 patients treated at home than in hotels or other accommodations. As a result, no deaths were reported for patients staying in hotels or other accommodations, whereas there were several cases of sudden or unexpected death noted for those patients treated at home.[4]

We observed that staying in hotels under the close observation of medical professionals decreased the likelihood of sudden unexpected death from COVID-19. However, considering the limited resources, the huge cost, and the rapid increase in COVID-19 cases, improving home care would be a reasonable option. We suggest avoiding 'social isolation' to minimize deaths at home. Furthermore, judging from the fact that a patient died within one day of the last telephone follow-up, the addition of some objective tools to assess a patient's status is essential for home care. Therefore, broad implementation of the use of the pulse oximetry monitor and its daily update function may be especially useful for early recognition of the worsening of patients' conditions.

Table 1 – Locations for treating COVID-19 patients (by prefecture).

Prefecture	Total number of patients	Hospital (%)	Hotel or other accommodation (%)	Home (%)	Nursing home (%)	Unknown (%)
Overall	8711	5558 (63.8)	862 (9.9)	1984 (22.8)	147 (1.7)	160 (1.8)
Tokyo	2668	1832 (68.7)	198 (7.4)	635 (23.8)	3 (0.1)	0 (0.0)
Chiba	644	296 (46.0)	13 (2.0)	258 (40.1)	73 (11.3)	4 (0.6)
Saitama	684	277 (40.5)	53 (7.7)	354 (51.8)	0 (0.0)	0 (0.0)
Kanagawa	542	217 (40.0)	74 (13.7)	251 (46.3)	0 (0.0)	0 (0.0)
Osaka	1047	580 (55.4)	135 (12.9)	332 (31.7)	0 (0.0)	0 (0.0)
Hyogo	348	302 (86.8)	46 (13.2)	0 (0.0)	0 (0.0)	0 (0.0)
Fukuoka	395	217 (54.9)	88 (22.3)	81 (20.5)	9 (2.2)	0 (0.0)

Conflict of interest

None declared.

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