

LETTERS TO THE EDITOR

RESEARCH

A pioneering national program for the protection of residents of long-term care facilities during the COVID-19 pandemic

COMMENT

This paper focuses on the establishment and immediate impact of the national program for protection of residents of long-term care facilities (LTCF). More than a year and half into the pandemic, this approach is still having positive impact. Wide PCR testing and vaccination were integrated into the program as they became available.

BACKGROUND

Early in the COVID-19 pandemic, it was clear that residents in LTCF were at elevated risk for infection and severe disease.¹ Outbreaks in LTCF in various countries^{2,3} highlighted the need for an organized response.⁴⁻⁶ In Israel, the first COVID-19 outbreak in an LTCF occurred on March 15, 2020, followed by a rapid increase of cases (see Figure 1). During this period, the cumulative mortality rate in LTCF increased from 0.1 deaths per 10,000 residents on March 20 to 4.5 on April 11. By April 13, about 30% of the total COVID-19 deaths in the country occurred in LTCF.⁷

There are (as of April 2020) 88,904 residents living in 1315 Israeli LTCF, 3.5% of the elderly population, for which four different government ministries are responsible.⁸ This structure presented a challenge for decision makers to set consistent guidelines for best practice.

METHODS

On April 11, 2020, the government established the “Fathers and Mothers Shield” (FMS), a national project to reduce morbidity and mortality from COVID-19 in all the LTCF in Israel while enabling, to some extent, a return to daily life routines.

FMS had three objectives: (1) Publication of COVID-19 policy guidelines; (2) improving the speed, quality, and

quantity of PCR testing; and (3) interruption of potential infection chains.

Guidelines and transparency

Given the urgency and despite the multiplicity of governmental agencies, within a week the program was crafted, including detailed guidelines for outbreak control, staff training, and classification of functional and medical conditions of verified and suspected cases. A daily summary of updated guidelines and epidemiologic data was published online to increase transparency. To strengthen communication, the FMS held weekly videoconferences with LTCF CEO's of the four ministries, residents, and family members. This followed on-site visits. The meetings enabled surge planning and ongoing guideline updates while promoting compliance and sustainability.

The military and NGOs educated the LTCF staff on infection control, personal protective equipment (PPE), and FMS guidelines. Two dedicated national hotlines served institutions and families.

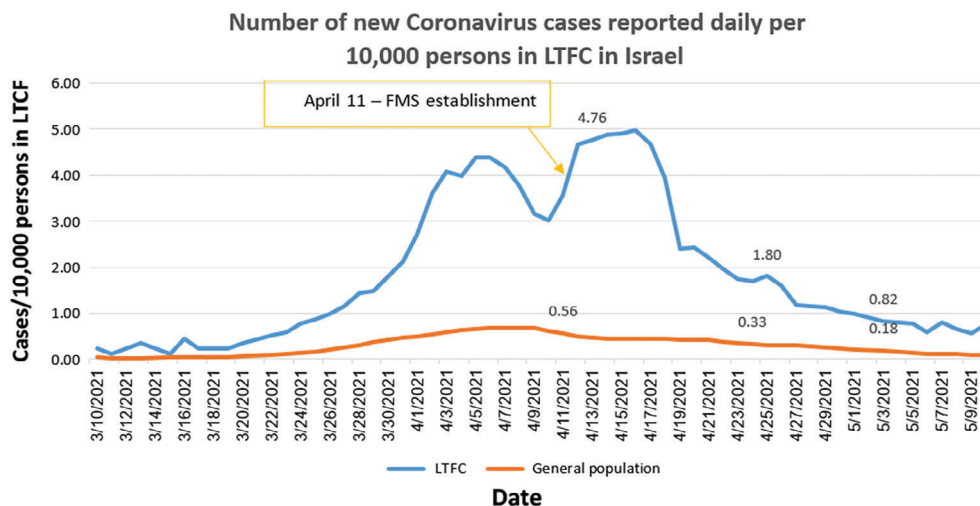
Visitation

The decision to allow visits was noteworthy, because in many countries, LTCF residents were in complete isolation, placing them at risk for mental distress, functional and cognitive decline.^{9,10} FMS pioneered visitations according to specific guidelines to ensure safe family visits. This resulted in immediate amelioration of residents' emotional and mental health.

PCR testing and interruption of potential infection chains

A dynamic outbreak risk-assessment index of LTCF included previous outbreaks in the institution, case mix,

FIGURE 1 Number of new Coronavirus cases reported daily per 10,000 persons in long-term care facilities (LTFC) in Israel



geographic COVID-19 rate. One-third of national testing resources were shifted to the FMS project enabling prioritized screening of residents and staff, regardless of their health maintenance organization (HMO). Magen David Adom (Israel's national emergency and prehospital medical organization) provided on-site testing with an improved centralized registry and a fast-tracking result system. LTFC implemented daily surveillance of vital signs and symptom assessment, providing early detection and immediate infection chain interruption. COVID-19 positive residents transferred to hospital outbreak departments.

The national program dealt with a variety of subpopulations, among them holocaust survivors, ultra-orthodox population, and new immigrants all of whom require specific cultural sensitivity.

A logistics plan identified and addressed shortages in human resources and PPE.

RESULTS

Guidelines

Determining a unified policy, issuing centralized guidelines, and transparency improved compliance with guidelines throughout the country despite the many ethnic and religious groups in Israel and reduced outbreaks.

PCR testing and interruption of potential infection chains

A short 2 weeks after FMS was established, the sample rate per 10,000 persons increased from 57.5 to 311.6 (542% increase), compared with 13.3 in the general population.

REDUCING MORBIDITY AND MORTALITY

The measures to reduce COVID-19 morbidity and mortality rates worked (Figure 1). Two weeks into the program, the mortality rate per week in LTFC decreased from 3.82 per 10,000 persons to 1.91, and 0.9 in the following weeks.

CONCLUSIONS

Israel's pioneering national plan to deal with the outbreak of the Coronavirus in LTFC provided effective management of the pandemic while enabling, to some extent, the return of daily life routines. These findings provide important insights for future response to emergencies in LTFC.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.


AUTHOR CONTRIBUTIONS

All authors meet the criteria for authorship as stated in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals. *Study concept and design:* Hanni S. Schroeder, Omri Goldwyn, and Ronni Gamzu. *Acquisition of data:* Hanni S. Schroeder, Omri Goldwyn, and Ronni Gamzu. *Analysis and interpretation of data:* Hanni S. Schroeder, Omri Goldwyn, and Ronni Gamzu. *Drafting of*

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SPONSOR'S ROLE

None.

Hanna S. Schroeder PhD^{1,2} 
 Omri Goldwyn LLmC²
 Ronni Gamzu MD, PhD³

¹Faculty of Medicine, The Hebrew University of Jerusalem, Jerusalem, Israel

²Finance and Strategic Planning Administration, Ministry of Health, Jerusalem, Israel

³CEO, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

Correspondence

Ronni Gamzu, CEO, Tel Aviv Sourasky Medical Center,
 Tel Aviv, Israel.
 Email: ronni@tlvmc.gov.il

ORCID

Hanna S. Schroeder  <https://orcid.org/0000-0003-2114-4268>

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Case management in a COVID-19 surge: A single-institution study of disposition and access to post-acute care

INTRODUCTION

Patients hospitalized with coronavirus disease 2019 (COVID-19) have demonstrated significant care needs after discharge, particularly among older adults and those with preadmission frailty.¹ Characteristics and outcomes of patients hospitalized with COVID-19 have been well

described,² but few studies have examined patterns in post-acute care (PAC) utilization over the course of a COVID-19 surge.³ Evaluating these trends may inform planning for future surges.

During the initial COVID-19 surge, PAC facilities and resources were limited due to lack of personal protective equipment, internal COVID-19 outbreaks, and staffing shortages. To address these shortages in Boston, Massachusetts, PAC sites for patients with COVID-19 were created, including Boston Hope Field Hospital⁴ and dedicated units at skilled nursing facilities (SNFs) in the community.⁵ We describe patterns in PAC utilization,

Portions of the work presented in this paper have been previously presented as a poster at both the Society for General Internal Medicine Annual Meeting and at the Society for Hospital Medicine District 1 Regional Meeting.