Original Research

Safety practices and recommendations in government elderly care homes for the prevention of COVID-19

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Abstract

Introduction: The COVID-19 related mortality in elderly care facilities is a known challenge in many countries.

Objectives: To assess the safety practices among elderly care homes during COVID-19 outbreak

Methods: A secondary analysis of a survey in elderly care homes done among 19 randomly selected elderly homes in Southern Province. Guidelines used in Australian and United Kingdom were reviewed for the recommendations.

Results: Measuring body temperature among staff was not practised in more than 50% (n=10) homes. Other safety measures are practising among more than 50% homes. Availability of hand sanitizers and face masks are more than 50% (n=13; %=63%). Availability of thermometers is very low. According to reviewed guidelines, the two countries have identified common important steps in prevention and control.

Conclusions & Recommendations: Residents and staff should be strictly advised to adhere with safety measures more logistics and trainings should be provided.

Keywords: COVID 19, elderly, safety practices

Introduction

The COVID-19 related mortality in elderly care facilities is a known challenge. A significant number of COVID-19 related deaths were reported in long-term care facilities in Europe. Within early months of the year 2020, 50% of all COVID-19 deaths in France happened in elderly care homes (1). In long term care facilities in Belgium and Germany, the percentages of deaths were 51% and 37% respectively till May 2020 (1). Out of the 17,730 case fatalities occurring till May 2020 in Spain, 66% deaths belonged to care-home residents (1).

In Sri Lanka, the first confirmed case of COVID-19 reported in January 2020. By the end of 2020, the case load was around 43 000. The situation worsened within the month of April 2021 and at the end of August 2021, 450 000 cases were reported with 9000 deaths. Out of the deaths, more than 75% were above 60 years of age (2). Elderly patients living in the residential care facilities are more vulnerable for the impact of COVID-19 due to the various factors. Presence of chronic illnesses and crowded environment significantly increase their vulnerability (3). Usual living circumstances in residential care facilities which are designed for communal living, make it difficult to prevent the spread of infection if someone is infected with the virus (4). The comorbidities among residents such as cognitive impairment and dementia, cause poor compliance for good hygienic measures (5). Hygienic practices among staff plays a major role in preventing outbreaks in elders' homes. Some large-scale outbreaks in elders' homes have originated from infected staff members (5). Reported COVID-19 incidence rates among staff members and residents were in the range of 1.5-5.9% and between 40-72% in the developed countries such as the United Kingdom and United States of America (4). Outbreaks in long-term care facilities can be effectively prevented by implementing safety measures such as wearing surgical masks, restricting visitors and arranging suitable infrastructure (6). Residential facilities in Hong Kong have achieved zero COVID-19 infection rate by adopting safety measures (5).

The Government of Sri Lanka's response to COVID-19 pandemic could be viewed as proactive with multi-sectoral approach despite the lack of resources (7). The preparedness of healthcare systems to respond to the pandemic, with lack of facilities, resources and staff in the healthcare system, including elderly homes is identified as a great concern in Sri Lanka (8). However, in Sri Lanka, the current preparation to face the pandemic in elderly care homes has not been evaluated. No specific guidelines or literature are available. Therefore, the evaluation of safety practices is important to prevent acquisition and further transmission. This report is based on a study to fill the existing gap.

Methods

A set of data which were collected by the Planning Unit of the Southern Provincial Chief Ministry were used for the descriptive analysis. There are 49 registered government elderly homes in this province. Randomly selected 20 government elderly homes were included in the survey. An interviewer-administered questionnaire which was prepared by a panel of experts representing public health, geriatric medicine and social services disciplines was used to collect data. Key variables describing; (i) the safety measures practiced by staff, residents, visitors (ii) detection and response for positive cases (iii) receiving the guidance from health and other organizations and (iv) availability of logistics were included into the questionnaire. A graduate officer from the Southern Provincial Chief Ministry collected data over the phone after taking informed verbal consent from respondents.

Australian national guidelines for COVID-19 safety measures in elderly care facilities (9) and those pertaining to the United Kingdom (10) were reviewed by two investigators who were post graduate qualified health professionals. Relevant implications for the Sri Lankan setting were extracted and narrative analysis was done.

Results

A total number of 19 elderly homes in the Southern Province were taken for the survey (11 from Galle District, 3 from Matara District and 5 from Hambantota District). One home was omitted from survey due to lack of information. There were 464 elderly residents (189 males and 275 females) in four 'female only', two 'male only' and 13 mixed centres. Most (n=336; 73%) of the residents belonged to the 60-69 age category. The questionnaires were answered by the home managers (n=9; 47%), administration officers (n=5; 26%) and home clerks (n=5; 26%).

Residents in eight (42%) premises were adopted to wearing face masks all the time. In eight premises, residents were wearing facemasks only sometimes while in three were not wearing at all. Considering

the staff, 13 (68%) wear facemasks at all times, while in two (11%), staff did not wear at all. Number and percentages of adhering to other safety measures for inmates' residents and visitors are shown in Table 1. Regarding the guidance received from authorities, 12 (63%) facilities have received health authority guidance, while only seven (37%) received from other government authorities. Details of logistical support and the requirement of logistics are shown in Table 2.

Review of International guidelines

According to reviewed guidelines, the two countries have identified common important steps in prevention and control. They included staff training, adhering guidelines, management of admissions, monitoring of symptoms and testing on inmates and staff and management of visitors.

Table 1: Other safety measures for inmates and visitors

Safety measure	Adhering		Not adhering	
	No.	%	No.	%
Special provisions are arranged for those who go out for clinic	17	89	2	11
Restricted outgoing movements for inmates	14	74	5	26
Measuring body temperature of staff	9	47	10	53
Provided hand sanitizers	10	53	9	47
Provided adequate hand washing facilities	16	84	3	16
Measuring body temperature of visitors	14	74	5	26
Provided washing facilities for visitors	18	95	1	5
Restricted visitors to the institution	17	89	2	11

Table2: Logistical support and requirement of logistics in the institutions

Logistical support	Receiving		Not receiving		Have requirement		No requirement	
	No.	%	No.	%	No.	%	No.	%
Face masks	12	63	7	37	18	95	1	5
Hand sanitizers	12	63	7	37	19	100	0	0
Infrared thermometers	3	16	16	84	16	84	3	16

Discussion

This secondary analysis evaluated the safety practices adhered to in elderly care homes in Southern Province to prevent COVID-19 transmission and further acquisition. It revealed the deficient practices in wearing face masks among staff, measuring body temperature among staff and visitors and movement restrictions. Availability of logistics such as hand sanitizers and face masks were detected as inadequate in some institutions. A gap was detected in practising guidelines in institutions. Provision of hand sanitizers to visitors and restriction of visitors was satisfactory. With the quantitative analysis of results, we detected some gaps in the prevention and control activities in our setup. It tallies with a narrative review exposed practice and knowledge gap in the response to COVID-19 reflecting longstanding neglect and weakness of palliative care in long-term care sector (11). Commonly identified steps from reviewed guidelines are staff training, adhering guidelines, management of admissions, visitors and staff, and testing. The points are aligned with another Australian document (12).

The following recommendations were suggested for improvement. Residents should be strictly advised to adhere with safety measures when they go out. Body temperature should be mandatorily measured among staff and visitors. The staff should be stressed to wear face masks regularly. More facemasks, hand sanitizers and infrared thermometers should be provided. All these activities should be supervised, monitored and evaluated by administrations. Regarding the training of the staff, it was suggested to conduct rapid training of staff on safety measures and emergency response. Staff should be empowered to stay in constant alert for both typical and atypical COVID-19 symptoms in care-home residents. It needs to ensure all the elderly homes received and practising the guidelines published by the Ministry of Health and has developed an institutional protocol to respond a case. In a review by Gillisen et al. (2020), it states that there should be a dearth of comprehensive, international COVID-19 guidance on palliative care for nursing homes (13).

Residents with suspected COVID-19 should be tested immediately and isolated from other residents pending their test result. Immediate advice should be sought from public health authorities. A need was identified to introduce a protocol of response if a staff member develops suspicious symptoms. It was suggested to guide/facilitate elderly homes to provide quarantine facilities for inmates/staff if need. Elderly homes should not, under normal circumstances, accept admissions from hospital or the community until they have been informed of a resident's COVID-19 status. All admissions to care-homes, regardless of COVID-19 status, should be quarantined for 14 days after admission. As elderly patients are particularly susceptible to adverse clinical outcome in COVID-19 infection and assessment, treatment is challenging. It is recommended that the elderly population should remain shielded during the COVID-19 outbreak (14).

Provincial social service departments, elderly care officers in district secretary offices and divisional secretary offices should be advocated to support implementing above measures while strengthening the inter-sectoral collaboration with health authorities. The need to involve social service officers, elder rights promotion officers and grama niladhari (GN) officers in strengthening services as multi-stakeholder involvement is essential. In addition, priority should be given for residents in elderly homes and staff of elderly homes when the vaccination is commenced.

This is the first published analysis regarding the facilities in elderly care homes in Sri Lanka. It included representatives from all three districts in the Southern Province. As a limitation, the validity and reliability of the responses may have affected due to the telephone survey.

Conclusion & Recommendations

Though commendable aspects were noted, there were areas which need improvement. Residents should be strictly advised to adhere with safety measures when they go out and measuring body temperature among staff and visitors should be

promoted. More facemasks, hand sanitizers and infrared thermometers should be provided. Elderly homes should be encouraged to develop institutional protocols to respond if there is an outbreak within residents. Rapid training of staff regarding safety measures and emergency response were suggested. Intersectoral collaboration with health and non-health authorities is essential for implementing as there is multisectoral involvement.

Public Health Implications

- Deaths due to COVID-19 among elders especially in elderly care facilities are higher in number worldwide.
- Problems are detected in adhering to safety measures and necessary logistics in facilities in Southern Province, Sri Lanka. These centres should be facilitated regarding the safety measures. Coordination among health and non-health sectors should be facilitated for better outcome.

Authors Declarations

Competing interests: The authors declare that they have no competing interest.

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Author contributions: AC, SM, DS and LK prepared the proposal. SM and DS provided the technical guidance. LK, MW, PT and LW reviewed literature. MW, PT and LW collected data and AC and UP analysed the data and wrote the article. All authors read and approved the final manuscript.

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