



Transition from hospital to home during COVID-19: A case report from an Australian transitional care program

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Abstract

Aim and Background: With the ongoing COVID-19 global pandemic, consideration for vulnerable groups, including our ageing population has been of great concern. Social isolation has been recommended to protect older adults with chronic diseases and reduce the spread of the virus, as well as to prevent healthcare services becoming overwhelmed. Yet social isolation presents its own health risks. **Methods:** In this paper, we provide commentary on the lived experience of returning home from hospital prior to and during the COVID-19 pandemic. This case report details the experience of an 83-year-old female, who was living and mobilising independently in her own home, prior to hospital admission following a fall and resultant head injury. **Results:** The participant returned home prior to the COVID-19 pandemic with a government funded community transition care program which included assistance with cleaning tasks, shopping, and Physiotherapy over a 45-day period. Her transition into the community continued through measures of social distancing. Barriers and

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facilitators to community participation such as lack of transport and assistance with shopping, were identified. COVID-19 has illuminated the issue of social isolation and increased awareness of its negative health effects at a global level. As society eases restrictions and returns to a new 'normal', many older adults will remain socially isolated. Ongoing allied health intervention is required to ensure quality of life through the latter years and to support older adults through periods of social distancing.

Keywords: transition care; COVID-19, social isolation, community participation

Introduction

With the world's population ageing, healthcare systems are under increased pressure to care for older people (United Nations, 2015). This strain has been exacerbated on a global level during the COVID-19 pandemic. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a novel virus that causes the COVID-19 infection (Shahid et al., 2020). Australia confirmed its first case of COVID-19 on the 25th of January 2020, and COVID-19 was declared a global pandemic by the World Health Organization on the 11th of March 2020. On the 15th of March 2020, Australia, like many other countries (Canada, Spain, UK, Belgium, Germany, Greece, Italy, Netherlands, Portugal, China, Denmark, France, Hong Kong, Lithuania and Singapore) adopted a social distancing approach to prevent community transmission (Armitage & Nellums, 2020). Australians were advised to stay at home unless performing essential activities and to maintain a social distance of at least 1.5 meters from others. A maximum of 10 people were permitted indoors and hotels, gyms, entertainment venues, galleries, museums, and libraries were closed. The higher risks to individuals over the age of 65 years was highlighted by the government (Australian Government Department of Health, 2020).

Evidence suggests that individuals aged 65 years and over and those with a higher number of chronic diseases such as cardiovascular disease (CVD) and type II diabetes (Beard et al., 2016) are at a higher risk of contracting the virus and experiencing poorer health outcomes and increased mortality rates (Shahid et al., 2020). In an attempt to reduce transmission and prevent healthcare systems becoming overwhelmed, many countries have recommended that people avoid contact with others through social and physical distancing, potentially intensifying social isolation for vulnerable groups, including older adults (Armitage & Nellums, 2020).

Social isolation is defined as an '*objective lack of relationships and social interaction*' and loneliness as '*a subjective and distressing feeling*' (Coyle & Dugan, 2012). Despite the benefits of reduced transmission of COVID-19, isolating older adults and the ensuing loneliness experienced presents its own health risks such as poor sleep quality (Coyle & Dugan, 2012), increased blood pressure (Hawkey et al., 2010), impaired cognitive function (Wilson et al., 2007) and depression (Cacioppo et al., 2010). Individuals are likely to be fearful of the virus and experience increased feelings of anxiety. Socially isolated older adults have been identified as more likely to seek medical assistance to satisfy the need for social interaction (Gerst-Emerson & Jayawardhana, 2015). Yet during the COVID-19 pandemic it has been perceived that these individuals are not seeking medical assistance when required, for fear of contracting the virus.

Furthermore, the impact of the COVID-19 pandemic on the utilisation of multidisciplinary health services, targeting restorative care of people over 65 years of age, also warrants investigation. The Australian Transition Care Program (TCP) emphasises transition between acute and community care, with the aim to reduce hospital stays and enable people to return to their own homes, rather than residential aged care facilities (Gray et al., 2013; Kim & Thyer, 2015). TCPs offer a multidisciplinary coordinated discharge,

support and allied health therapy in their home or residential care setting. They aim to provide care that is ‘goal-oriented, short term, therapy focused and necessary to complete the care recipient’s restorative process, optimise their functional capacity’ (Gray et al., 2013 p. 2) and to provide patients and families additional time to make long term plans when required (Couzner et al., 2013).

Despite the best intentions of supportive services following hospital discharge, some older adults prior to COVID-19 restrictions described themselves *‘like prisoner’s in your own home’* (Taylor et al., 2010 p. 1287). When older adults are presented with challenges such as returning home from hospital, it is unclear how the addition of social distancing guidelines due to COVID-19 may impact upon the transition home from hospital, and the subsequent health of older adults.

Aims

The original aim of this study was to explore community participation, physical activity, barriers and facilitators for participation in older adults during and after community transition care programs (CTCPs), answering the question *‘do transition care programs promote active community participation?’* Due to the global pandemic, the study aim was adjusted to explore community participation, physical activity, barriers and facilitators for participation of an older adult receiving a TCP, prior-to and during social distancing restrictions (COVID-19). The specific research question was, *‘Can an older adult returning home from hospital prior to and during social distancing restrictions maintain community participation?’*

Ethical approval

Ethical approval was gained from Southern Adelaide Clinical Human Research Ethics Committee (SAC HREC) (OFR number 182.19). An amendment to carry out a telephone

interview and publish the account of a single participant was sought and approved. Research was carried out following the rules of the Declaration of Helsinki of 1975. Informed written consent was obtained.

Case Presentation

The participant, 'Kathy,' was an 83-year-old female, who was living alone in her own home. She reported no chronic health conditions and 'good' overall health. She was admitted to hospital with a head injury following a fall and received a residential transition care program (RTCP) in a rehabilitation facility prior to returning to her own home with a community transition care program (CTCP). Her services were approved for 45 days, including assistance with cleaning tasks, shopping, and Physiotherapy. Following hospital admission, Kathy demonstrated reduced mobility, and was reliant on a rollator frame at home, and four wheeled walker outside of home. She was no longer able to drive due to the nature of her injury, although referrals had been made for reassessment.

Timeline

Kathy's CTCP began prior to social distancing restrictions on the 24th of January 2020 and concluded on the 9th of March 2020. A timeline of data collection and COVID-19 restrictions across South Australia is provided in Figure 1.

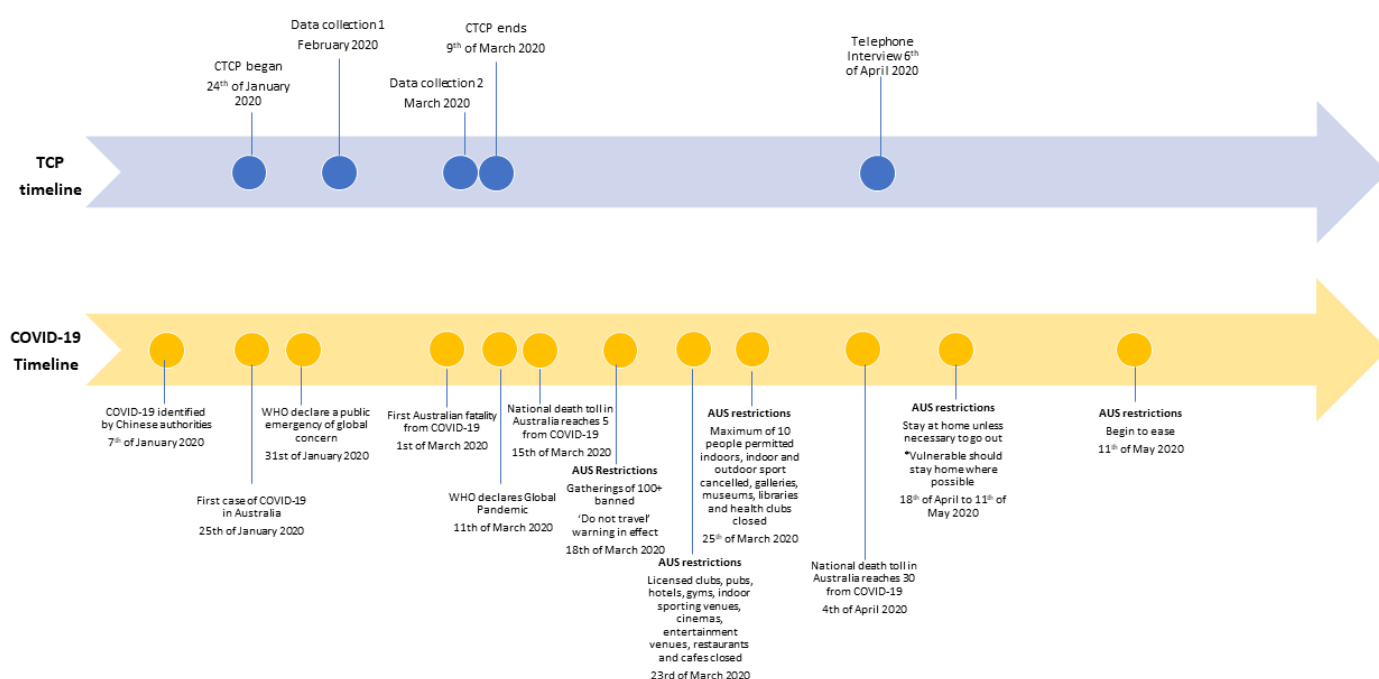


Figure 1 Timeline of TCP and COVID-19 in South Australia

Methods

Recruitment

Individuals referred to Southern Adelaide Local Health Network (SALHN) transition care services were assessed by an external clinician to determine their eligibility and service requirements. To be eligible, participants needed to be aged 65 years or over, receiving a community transition care package (CTCP), live in metropolitan Adelaide, mobilise independently (+/- walking aids) and be able to communicate in English. If the individual was interested in participating, consent was obtained to pass on their contact details to the Lead Investigator (CG), who then made contact, confirmed eligibility, provided further study information and obtained informed written consent where appropriate. The sample size for the original study was 40 participants. Due to the COVID-19 disruption only one participant was recruited.

Data collection

Prior to discharge home with a CTCP, and on completion of the CTCP external assessors carried out the modified Barthel Index to measure functional independence. All other data were collected on returning home with a CTCP and repeated on completion of the CTCP, prior to COVID-19 social distancing restrictions. The participant was asked to complete a demographic questionnaire, the Assessment of Quality of Life -8D (AQOL-8D) questionnaire (Richardson et al, 2013) to measure health related quality of life (HRQoL) and the De Jong Gierveld loneliness scale (Tomás et al, 2017). The participant was asked to carry a GeneActiv triaxial accelerometer to measure minutes of moderate to vigorous physical activity (MVPA), and a Qstarz BT1000XT GPS device to measure community participation, whilst keeping a self-reported diary of community activities for two separate seven-day monitoring periods as recommended in previous studies (Hirsch et al., 2016; Hordacre et al., 2014; Schipperijn & Etroelsen, 2014). The GENEActiv device was worn 24 hours a day (inclusive of sleeping, showering and swimming- as the devices are waterproof) and the GPS device was removed for water-based activities as well as overnight so the device could be charged.

A semi-structured interview lasting approximately 37 minutes was carried out via telephone on the 6th of April 2020 during social restrictions, to gain the participant's perspective of community participation following hospital discharge, prior to and during social distancing measures (COVID-19). Questions included *'what are the greatest difficulties or barriers you face when attempting to be actively involved in the community?'* and *'what things helped you to be actively involved in the community in the way that you want to?'* The interview was recorded and transcribed verbatim. Content analysis (Bengtsson, 2016) was driven by the research aims. For reporting purposes, the participant was given a pseudonym to maintain anonymity.

Data analysis

Physical activity: was objectively measured using wrist worn GeneActiv accelerometers. Accelerometer data were used to detect times spent sedentary, engaging in light, moderate or vigorous activity, using cut points developed by Esliger adjusted for the sampling frequency and epochs (light 283, moderate 605 and vigorous 1697) (Esliger et al., 2011). To determine overall daily PA, GeneActiv .bin files were converted to 60-second epoch files and analysed using Cobra software (Francois Frayasse, University of South Australia). Sleep was excluded from the analysis, detected using visual analysis of the activity trace combined with self-reported sleep diaries.

Community participation: GPS (Qstarz BT1000XT) data were used to calculate the number of trips away from home. GPS data provided co-ordinates of the beginning and end locations and total number of trips were recorded. Activity diaries were used to cross-check with the objective data, where GPS data were missing.

Interview data: Transcript data were imported into NVIVO 12 Pro and analysed for examples of facilitators and barriers to community participation.

Results

Quantitative data

Outcome measures completed on entry to and exit from the CTCP program are summarised in Table 1. Kathy's levels of functional independence and HRQoL increased, and levels of loneliness decreased over the course of the CTCP. An overview of community participation is provided in Table 2, Kathy's total trips out of home, minutes of MVPA and sleep time had increased on exit from the CTCP. Social interactions decreased, as did minutes spent sedentary.

Table 1 Outcome measures

	Outcome measure	Total score (interpretation)	Data collected by	Score on entry to CTCP	Score on exit from CTCP
Functional Independence	Modified Barthel Index [19]	100 (fully dependent)	SALHN	88	95
Health Related Quality of life (HRQoL)	AQOL-8D [20]	100 (High quality of life)	CG	58	63
	Independent living			28	50
	Happiness			37	44
	Mental health			67	64
	Coping			50	58
	Relationships			59	67
	Self-worth			67	58
	Pain			80	90
	Senses			85	85
	PSD score			59	71
	MSD score			58	60
Loneliness	De Jong Gierveld Loneliness Scale [21, 22]	6 (most lonely)	CG	4	3

Note. ¹Southern Adelaide Local Health Network (SALHN), ²CG researcher

Table 2 Measures of community participation

Community participation	Entry to CTCP (% of day)	Exit from CTCP (% of day)
Trips out of home (per week)	1	7
Social interactions (per week)	11	10
MVPA (mean per day)	8 minutes (0.5)	12 minutes (0.8)
Sedentary time (mean per day)	822 minutes (57)	793 minutes (55)
Sleep time (mean per day)	494 minutes (34)	517 minutes (36)

Qualitative data

Kathy discussed her experience of the transition home from hospital in depth, identifying barriers and facilitators to resuming previous activities. The perceived barriers and facilitators are outlined below, followed by a discussion of how COVID-19 restrictions further contributed to these barriers.

Barriers of community participation

Kathy reported that going out of home to carry out activities of daily living (ADL) such as shopping were difficult because of the need for a walker, *'the walker limits me to how far I can go because I haven't much stamina.'* Stamina and fatigue following hospital admission prevented visiting the shops as, *'it was too far for me to walk.'* Shopping was also limited by the amount of shopping she could fit into her walker, combined with environmental challenges, such as a, *'funny little ramp at the end of my road. It's been badly done'*. Windy weather conditions meant that she was unable to go out altogether, *'so that means that I'm virtually housebound on a windy day'* unless she asked for her sister to take her out in her car, which she considered being a burden.

When asked what prevented her from participating in her community as she used to, the answer was direct, *'A lack of transport really.'* With specific reference to a choir group Kathy was involved in:

'You see I wouldn't have been able to get there if I had to walk. Probably one of the others would have picked me up. But trouble is, I haven't really been strong enough. Well, I got too tired too quickly. I can't actually be away more than a couple of hours. That makes it a bit awkward if you're sort of socialising and you know, you really need to be a (group of) three or more.'

Facilitators of community participation

Kathy described the benefits of her CTCP services in facilitating community participation on returning home from hospital. Her experience of receiving assistance to the local shopping centre was positive and facilitated community participation. She also found Physiotherapy useful to reduce her dependency on mobility aids and increase her independence:

'Well, I think they instigated I had a physio coming. And she particularly the last one was a very active person. And it was very encouraging in what she was wanting me to do. She asked me what my goals were and I said, ultimately I wanted to get rid of the walker. Just walk with a stick. And so she was trying to get me to be active with a walker and get more confidence that way. And then giving me exercise up my passage, you know, without the walker and using my stick and things like that. Yeah. So that person was very motivated. So that was good.'

COVID-19

The changes in daily life due to COVID-19 ran throughout the interview with isolation and restrictions at the forefront of answers related to community participation, *'At the moment you can't go out anyway. As we are supposed to be isolated.'* Normal behaviours and places that were visited previously were no-longer an option, *'the library is closed anyway, but what isn't closed?'* Deciding to follow the recommendations was quite definite with comments such as *'I won't be going out'* and *'I won't be visiting anybody'* repeated. However, the awareness that remaining home might not be feasible for long periods caused Kathy to state that she, *'might just walk around the block'* to maintain normality. The GPS data recorded one visit out of home during the first week of CTCP and seven in the last week of CTCP (see Table 2). Indicating that Kathy was becoming more active in the community prior to COVID-19 restrictions being enforced.

Kathy expressed the feeling she was starting to get some control of her life back following hospital admission, *'I was getting stronger each day.'* This comment was supported by an average increase of 4 minutes MVPA (50%) per day and decrease in sedentary time by 29 minutes. She also felt able to go shopping with a support person, only for this activity to be terminated *'you can't ride in the car anymore, the next time you have to*

give us a list.’ Not knowing whether she would be able to access supportive services was a real concern, that resulted in fear that support services would be ceased, *‘I am expecting them to ring up and say, no, you can’t have anybody!’* The possibility of contracting the virus was described as *‘frightening’*. Despite an overall improvement in HRQoL, components of mental health and self-worth declined (see Table 1).

A more positive aspect of COVID-19 restrictions was an increase in neighbourly support. Neighbours who were previously strangers made a concerted effort to provide contact details and knock when visiting the shops to ask, *‘is there anything you need?’* Neighbours rallied during the times that *‘the shelves were being stripped of toilet paper.’* Very aware that the shops were quite *‘bereft’*, Kathy was almost surprised when her neighbour returned with the jam that she had asked for.

Deciding to preserve health but also be involved in social interactions became a priority which was extensively planned, *‘I can observe the rules and we can sit on the front veranda.’* *‘We had coffee, she brought her own - and I turned the kettle on!’* *‘We had a lovely visit.’* In the first week of CTCP Kathy reported 11 social interactions, which decreased to 10 in the final week of the CTCP (See Table 2). However, the majority of the visits in the first week involved service set up and home adaptations, rather than the social visits which were more apparent following CTCP.

Discussion

Reintegration into the community following hospital discharge has previously presented barriers for older adults. Kathy was no exception, she identified barriers including mobility restrictions, the environment, weather, reliance on others, lack of transport and fatigue that prevented her from resuming previous activities. Yet services provided as part of her CTCP such as Physiotherapy and assistance shopping, acted to facilitate community participation.

During this transition, COVID-19 was declared a global pandemic and social distancing guidelines were gradually escalated, further increasing the barriers to active community participation.

Experiences of social isolation and loneliness were present throughout the interview, with community participation limited by access to transport, feeling a burden, and levels of fatigue, preventing Kathy from attending activities of longer duration where potentially transport with friends could have been arranged. Her experiences are supported by previous research, that suggest a lack of individualised treatment left older adults returning home from acute care unable to attend activities they would have previously (Reay et al., 2015), frustrated by reduced mobility, and lack of transport which limited the opportunities to socialise on returning home (Martinsen et al., 2015). For Kathy, these limitations in the environment of restrictions, exacerbated isolation and loneliness from her family and community connections.

Behaviour change for this participant and those around her were evident prior to and following the introduction of social distancing measures. There was a sense of trying to preserve 'normality' despite the fear of the unknown, contracting COVID-19 and feelings of loneliness. The intent of taking a walk, just to get out of the house was an attempt to feel a sense of purpose and change the environment. Receiving a guest on the front veranda, with visitors bringing their own tea, was an important coping mechanism for Kathy to meet the need for social interaction. Neighbours also changed their behaviours by taking the time to offer their help and reach out to support others, which has previously been deemed important in providing a sense of belonging for older adults (Stanley et al, 2010). Neighbourly support was possibly a benefit of the high number of individuals furloughed at home, with additional time on their hands to consider the more vulnerable individuals living nearby.

The Australian government acknowledged in June 2020, that during COVID-19 TCP clients may not be able to receive the services they need (Australian Government, 2020). Service disruptions may be due to isolation or quarantine restrictions, directions by a GP, client's personal preference or staff shortages of TCP providers. The case presented, describes the experience of Kathy, whose CTCP program was not disrupted, yet she still demonstrated low levels of physical activity and community participation. Consideration for individuals who are unable to commence or continue with TCP services, in the context of restrictions, whilst transitioning from hospital to home requires urgent consideration to negate the potential negative health consequences.

Implications for future practice

The value of supportive services such as TCPs should not be underestimated for older people returning home from hospital. Standard services such as Physiotherapy/Occupational Therapy and assistance shopping may not merely act to assist ADLs and facilitate active community participation but promote feelings of motivation, confidence, control and increasing independence. The experiences presented in this case study highlight how important setting goals and adaptation can be, for example enabling online shopping when unable to visit the shops provides independence and feelings of control. During a global pandemic, periods of social isolation may become increasingly frequent. Promoting physical and social adaptations during community-wise restrictions i.e. taking tea outside on the front veranda and walking around the block for a change of scenery, may be a useful consideration in the practical care of older adults.

Limitations

This paper is limited by reporting on a single case. Data collection to determine community participation of older adults transitioning from hospital to home was restricted by the global pandemic. This lived experience provides useful insight into transitions during a pandemic, where social distancing and isolation are promoted for older adults.

Conclusion

COVID-19 has thrust social isolation into the spotlight and increased awareness for the negative effects on health at a global level. As society returns to a new 'normal' following the easing of restrictions, social isolation of older adults will remain, and requires ongoing intervention. This paper has highlighted how an older adult receiving a CTCP, and those around her, adapted their behaviours to meet their social needs. Neighbourhood support will hopefully continue long after the acute phase of COVID-19 has passed. But more importantly, methods to assist with positive behaviour changes to prevent social isolation during transition care and during times of social distancing needs to be considered by allied health professionals. Despite supportive services, levels of physical activity were low for this individual. Older adults may require assistance to maintain their physical and social activity, particularly at vulnerable times such as on discharge to the community from hospital, or a second wave requiring lockdown.

Key messages

- COVID-19 has highlighted the issue of social isolation of older adults and increased awareness of its negative health effects at a global level. As society eases restrictions and returns to a new 'normal', support of socially isolated older adults and those who could not access TCP services will require urgent attention.

- Allied Health services can support positive behaviour changes to prevent social isolation during both transition care and times of social distancing.
- Transition care services should consider the individual's specific barriers and facilitators in order to provide programs that promote an active return to previous activities and community participation.

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