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A Pre-Hospital Intervention to Alleviate Loneliness and Isolation in Older Adults

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ABSTRACT

Aims
The project's objectives included determining how lonely older folks were in their pre-hospital environment and how much social contact they had. To gauge older individuals' knowledge of regional programmes to combat isolation and loneliness. Letting elderly folks who could benefit from local services know that they are available. Using pre-hospital efforts to identify and treat patients who are lonely.

Methods
Thirty (30) patients were recruited whilst on 6 ambulance observer shifts in Berkshire, UK. The ambulance observer shifts took place between January 2023 to February 2023. The patients were asked a simple questionnaire on loneliness and social isolation. At the end of the questionnaire, all patients were offered information leaflets with local services and their contact details that they might find useful to alleviate loneliness and social isolation. Patients were also offered a follow-up telephone call to assess the impact of the intervention or if help was needed with getting in touch with the local services.

Results
Of the 30 patients interviewed, 15 were male and 15 were female. The youngest patient was 66-years-old and the oldest patient interviewed was 98. The average age was 80.4. Twelve (12) patients (40%) scored 7 and above on the question of 'How lonely do you feel?', with 10 being extremely lonely. Fifty percent (50%) of the patients saw their friends or families less than twice a week and 46.6% spoke to their friends and families less than twice a week. Several patients had not had a conversation with friends or family for several weeks, with one response being 'over 3-months ago'. The vast majority (80%) of patients interviewed did not know that there were charities and local services in place to alleviate loneliness and social isolation. As part of the intervention, patients were offered information leaflets about local services available. These were printed on A4 paper or emailed to the patients if they preferred a digital copy.

Conclusion
Loneliness and social isolation is an epidemic on the rise amongst older adults, and their effects transcend not only mental well-being but physical health as well. Intervening in the pre-hospital setting is pivotal because pre-hospital practitioners are in a unique position to observe and assess patients in their own environment and gather firsth and evidence about the determinants of the patient's health. The benefits will be multi-fold if we can help patients before they get admitted to hospitals. Apart from the economic benefits of reduced admissions, patients will not be unnecessarily admitted and put at risk of deconditioning or nosocomial infections. Most importantly, these interventions aim to improve the patient's overall quality of life by enhancing their social connections and reducing loneliness.

Keywords
Pre-hospital; Loneliness; Social isolation; Older adults; Elderly.

INTRODUCTION

Loneliness and isolation are becoming more prevalent and pertinent public health issues in our elderly population. They are correlated with several adverse health outcomes and contribute to the economic strain on the National Health Services (NHS) of the United Kingdom (UK). Fifty percent (50%) of people aged 60 and above have a risk of social isolation, and a third of them will experience loneliness.[1,2] Forty-nine percent (49%) of adults ages 65 and above state that the television or pets are the main forms of

company and companionship in their lives. Although the average life expectancy has increased globally due to advancements in public health and medicine, healthy life expectancy has not matched this improvement. A contributing aspect of this is the increasing incidence of loneliness.[3,4] Factors that contribute to increased isolation include reduced inter-generational living, greater social and geographical mobility, and the rise in single-occupancy households. Loneliness can be experienced differently by individuals—some may develop feelings of loneliness or isolation in old age, some may have experienced this throughout their lives, or some may experience it as a consequence of an event such as a bereavement or retirement. It also may be a challenging issue to explore or acknowledge as patients may be reluctant to divulge that they are feeling lonely or isolated.[5-7]

DEFINITIONS

Loneliness and social isolation can be viewed as 2 discrete notions. A patient can be lonely without being socially isolated; they could experience both loneliness and isolation; or they could be socially isolated without feeling lonely. Defining loneliness is challenging due to the many subjective approaches to understanding it. One definition of loneliness is the negative feeling people experience due to the perceived discrepancy between expected and actual social relationships. Loneliness can be emotional or social. One might experience social loneliness where there is a lack of a social network, or one might experience emotional loneliness where there is a lack of a specific desired companion. Social isolation can be defined as the lack of social contacts and interactions.[8-10]

BACKGROUND

The impact of loneliness and isolation is consequential. It affects physical and mental health and well-being, therefore contributing to health inequalities and quality of life (QoL). Poor health and mobility can leave people less able to socialise, thereby leading to isolation and loneliness.[11]

There are well-established scales such as the University of California (UCLA) loneliness Scale or the de Jong Gierveld Loneliness Scale for measuring perceived loneliness.[12] Studies have reported rates of severe loneliness amongst adults aged 65 and above between 2-16%. One study revealed that over 50% of residents in nursing homes report feeling lonely.[13]

Risk factors for loneliness and social isolation can be broken down into 3 areas. Sociodemographic factors include age, gender, household composition, being a carer and socioeconomic status. Environmental factors include the type of residence, social resources, driving status and access to transport. Health factors include physical health, mental health and the presence of a disability. The highest risk factors include being older, unmarried or widowed, having health and disability, and living alone.[14,15]

The coronavirus disease-2019 (COVID-19) pandemic played a significant role in driving loneliness and social isolation. Prior to the pandemic, approximately 1 in 12 people over 50 in England felt lonely, equivalent to about 1.4 million people. This is predicted to increase to 2 million by 2026. Lockdowns and social distancing meant that people of all ages interacted less with each other. For several months, those living in care homes could not be visited by their friends and families. Face-to-face services switched to online or telephone services which led to digital exclusion. Although many older adults had a positive impact by increasing their online experience, a significant number of people who could not use online services found themselves isolated from services or meaningful contact.

There is evidence that loneliness and social isolation increase morbidity and mortality risk. This effect has been compared to smoking 15 cigarettes daily. Some long-term impacts of loneliness and social isolation include hypertension, depression, strokes, cardiovascular disease, decreased cognition, weight gain and alcohol use. Furthermore, there is an association with reduced resistance to infection and dementia. A meta-analysis showed that older adults with strong social connections have a 50% greater likelihood of survival than individuals with poor social networks. Moreover, a study revealed that individuals with a well-established social network have 50% lower rates of dementia and reduced incidence of cardiovascular disease. Social isolation and loneliness are associated with suicide across all ages and are independent contributing factors to increased suicide attempts.[16]

Older adults are the most significant healthcare consumers. Studies have shown that loneliness can contribute to a fourfold increase in readmission rates. Tackling loneliness and social isolation will be a cost-effective method to manage the rising healthcare costs, the pressures hospitals in the UK face and improve our patient's QoL.

In the United Kingdom (UK), the 'Campaign to End Loneliness' commenced in 2010 and aimed at establishing connections amongst older aged people. The UK government implemented initiatives such as the 'Tackling Loneliness' charity and provided funds to charities that reduce loneliness. Similar campaigns have started in other countries to raise awareness and tackle the issue. Research shows that loneliness is alterable and can improve or worsen. Interventions that enhance social connectedness can change self-perceptions, improve the quality of social interactions and reduce feelings of loneliness.[17]

Interventions to address loneliness and social isolation can be categorised as attempts to[18]:

- Optimise medical conditions - for example, providing hearing or visual aids if needed
- Improve social skills
- Enhance social support
- Increase opportunities for social interaction
- Address maladaptive social cognition

Solutions for addressing loneliness include

- Connecting older adults to community services run by local councils or charities
- Volunteering for and supporting local charities such as Age UK

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• Digital inclusion
• Transport and access to services

Group activities include services such as day centres, lunch clubs, social clubs, creative activities, self-help and support groups, and health or exercise groups. Community engagement is another way to enhance social connections. It encourages people to use already established community programmes such as libraries, civic participation and volunteering. Some people prefer one-to-one interventions such as befriending services. These can also be very effective in reducing loneliness.[19]

There are many challenges and barriers to tackling loneliness and social isolation. By definition, socially isolated people are difficult to reach and identify. There is a stigma associated with loneliness; therefore, people may be less willing to identify as being lonely. Another barrier is the perception some older people have. Examples of this include: not wanting to burden others, low expectations of services, limited awareness of relevant local services and fear of external action being taken if they do express a need.

Patients are rarely asked about loneliness or social isolation. General practitioners could be in the best position to provide anticipatory care as they tend to be aware of a patient's personal circumstances. Pre-hospital practitioners are another avenue through which those vulnerable to loneliness or social isolation can be identified. Clinicians and physicians tend to be poorly trained and equipped to deal with loneliness.[20]

THE PRE-HOSPITAL IMPACT

Pre-hospital practitioners encounter many older adults, especially now with an ageing population. As health issues associated with advancing age can be complex and multifactorial, pre-hospital practitioners must practise comprehensive assessments of physical health issues alongside psychological and social needs. Pre-hospital practitioners are in a unique position to interact with and assess patients in their homes, allowing them to form a more holistic view of the environmental and social determinants of health.

Pre-hospital practitioners could observe older patients' living conditions—for example, whether they have adequate food in the house or live in tidy or unkempt surroundings. The loss of function or lack of support can lead to poor living conditions amongst older adults. The observations made by pre-hospital practitioners could attest to a patient's ability to maintain daily living standards unaided. A hospital physician can only ask patients whether they are coping or managing at home, with no assurance of an accurate answer. Patients may deny the true nature of their situation due to fear of being institutionalised, losing independence, being embarrassed, or not having insight into the severity of their situation.[21]

Loneliness and social isolation are predictors of frequent ED attendance. A study based in Canada looked at high-intensity users of emergency medical services (EMS). Emergency departments (EDs) have become progressively more overwhelmed and the proportion of use by high-intensity users is potentially avoidable. Many of those included in the study stated that they felt lonely and not managing at home. Some studies show that high intensity EMS users rely on emergency care for their regular medical care due to the lack of proper access to primary care.[22] Therefore, they may request ambulances or attend EDs with non-urgent issues inappropriately.

One study showed benefits to the development of a resource card for pre-hospital practitioners to give to patients who are often unaware of what other services are available for them in the community.[23] Support and community services have been successful in helping older adults remain in their environment, maintain a higher QoL for longer and reduce loneliness. Resource cards could include contacts for local services that provide geriatric assessments, home help, and meals on wheels. Depending on the situation, pre-hospital practitioners could contact the services on the patient's behalf or leave relevant details with the patient or their family for them to contact. Patients with psychosocial issues not requiring transport to the hospital could therefore be cared for and supported in their own environment.[24]

METHODS

Thirty (30) patients were recruited whilst on 6 ambulance observer shifts in Berkshire, UK. The ambulance observer shifts took place between January 2023 to February 2023. The patients were asked a simple questionnaire on loneliness and social isolation. The questionnaire took less than 5-minutes to complete. The study did not impact on which patients ambulances were allocated and dispatched. Verbal consent was gained by asking patients who met the inclusion criteria if they would be interested in answering a few questions on loneliness and isolation. Pre-hospital professionals play a crucial role in identifying those at highest risk of loneliness and social isolation as they are able to see patients in their homes, better understand how they are managing, and identify any barriers to seeking more support. At the end of the questionnaire, all patients were offered information leaflets with local services and their contact details that they might find helpful to alleviate loneliness and social isolation. The local services included befriending services, lunch clubs, day centres, community transport schemes, and meal delivery services. Patients were also offered a follow-up telephone call to assess the impact of the intervention or if help was needed with contacting the local services.

Charities were approached to see if creating a rota for some of their volunteers to spend a few hours in the local Emergency Department on certain weekdays would be possible. The aim was that these volunteers would spend time with any older adult coming to the Emergency Department and provide them with companionship during their hospital visit. Unfortunately, due to funding and being short-staffed, initiating this at this stage was impossible, but is an area to be explored.

Inclusion Criteria

- Men and women aged 65 and above

- Patients with a GCS of 15
- Patients were clinically stable enough to answer the questionnaire (i.e. they did not have a significant medical issue such as sepsis or acute respiratory distress that would take priority in medically assessing the patient and conveying them to the hospital)

Exclusion Criteria

- Moderate to severe dementia (if the patient had mild dementia or cognitive impairment, they were included in the questionnaire as long as they were able to understand the questions and retain the information)
- Age below 65
- The patient is too clinically unwell

RESULTS

Of the 30 patients interviewed, 15 were male and 15 were female (Figure 1).

The youngest patient was 66-years-old and the oldest patient interviewed was 98-years-old. The average age was 80.4. The majority (56.7%) of patients lived in a house, followed by 26.7% living in a flat (Figure 2).

Thirty-six point seven percent (36.7%) of patients indicated they did not have any friends or family within 15-minutes of where they lived (Figure 3). These 15-minutes could be any mode of transport - on foot, public transport, cycling or motor vehicles.

The questionnaire showed that within a week, patients talk to friends and family more often than they meet them. 50% of the patients saw their friends or families less than twice a week and 46.6% spoke to their friends and families less than twice a week. (Figures 4 and 5).

The question 'When Was the Last Time You Had a Face-To-Face Conversation with Friends Or Family?' revealed interesting and poignant responses. Several patients had not had a conver-

Figure 1. *Gender of the Patients Interviewed*

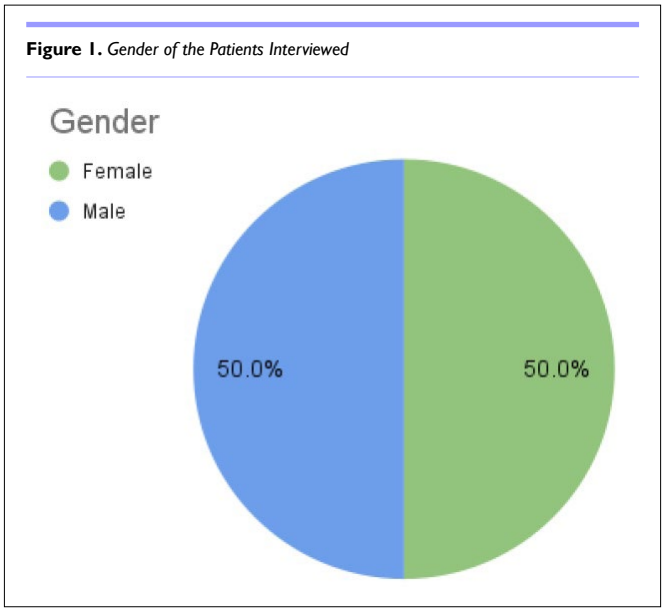


Figure 2. *Accommodation of the Patients Interviewed*

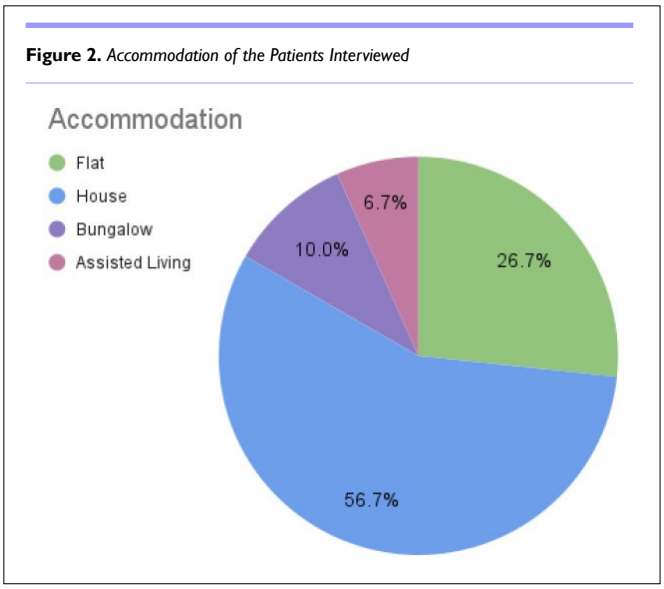


Figure 3. *Does the Patient have Friends and/or Family within 15 mintues from their Accommodation?*

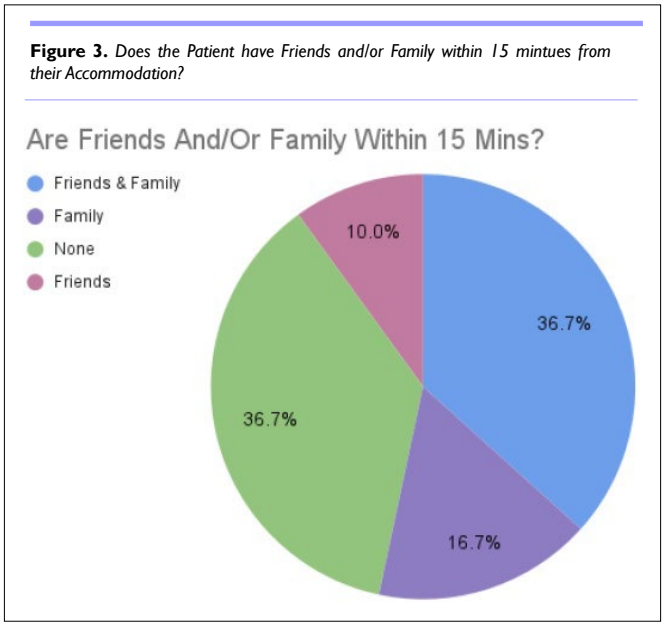


Figure 4. *How often does the Patient Talk to Friends and/or Family?*

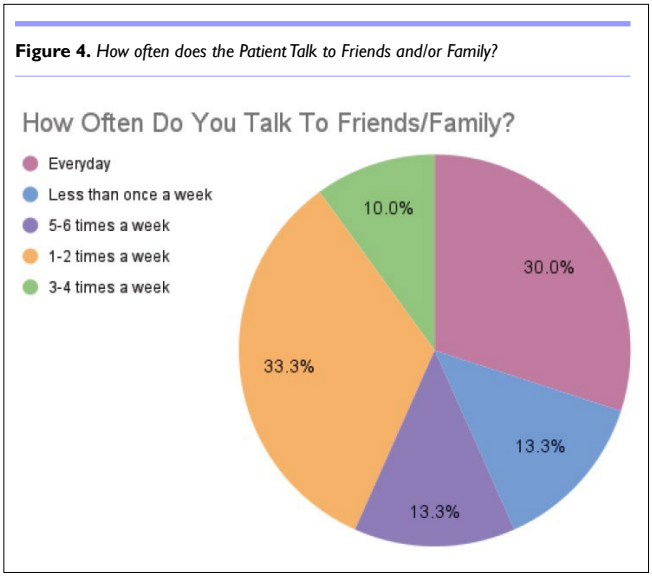


Figure 5. *How often does the Patient Meet Friends and/or Family?*

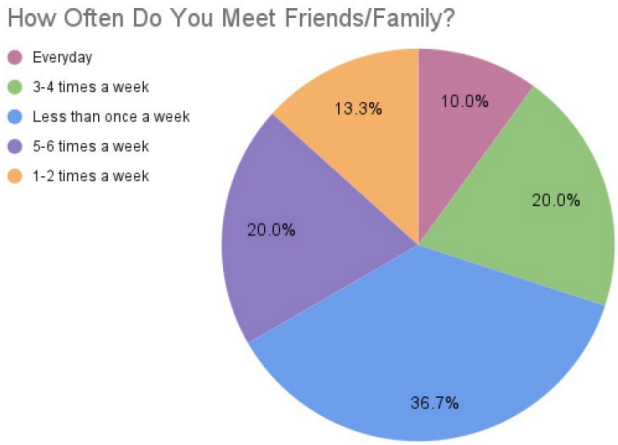


Figure 6. *When was the Last Time the Patient had a Face-to-Face Conversation with Friends and/or Family?*

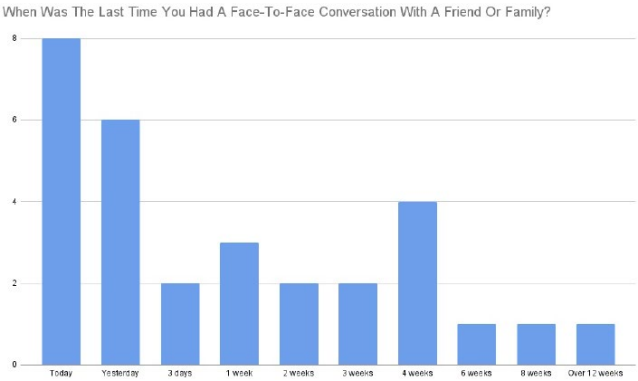


Figure 7. *How Lonely Does the Patient Feel?*

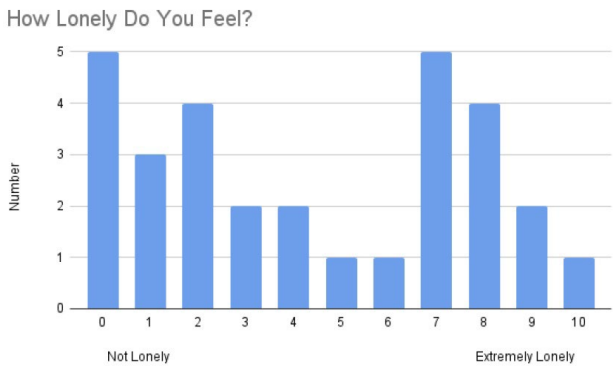


Figure 8. *How well Does the Patient Feel they are Coping at Home?*

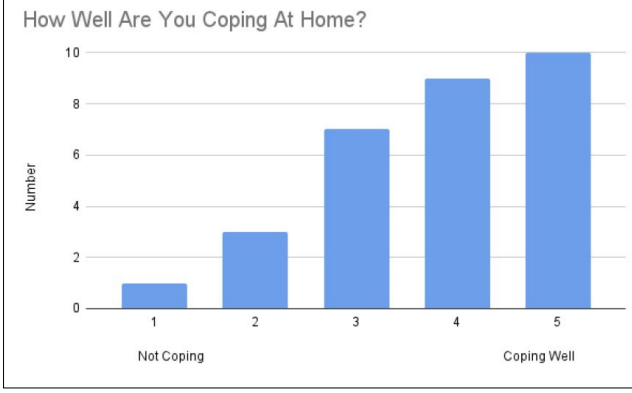
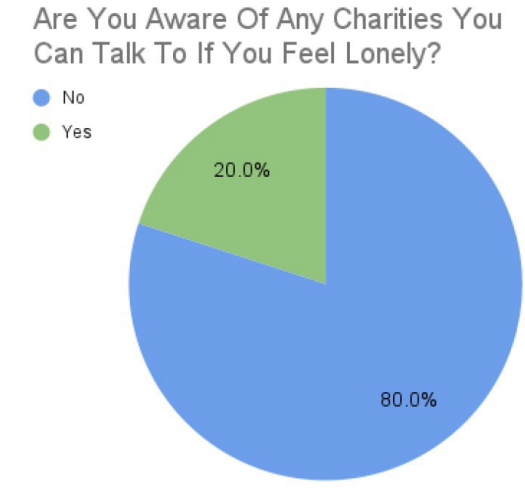


Figure 9. *Is the Patient aware of any Charities or Local Services that Help Alleviate Loneliness?*



sation with friends or family for several weeks, with one response being 'over 3 months ago' (Figure 6).

Twelve (12) patients (40%) scored 7 and above on the question of 'How lonely do you feel?', with 10 being extremely-lonely. (Figure 7). In terms of coping at home, most patients interviewed said that they are managing. (Figure 8).

The vast majority (80%) of patients interviewed did not know that charities and local services were in place to alleviate loneliness and social isolation (Figure 9). As part of the intervention, patients were offered information leaflets about local services available. These were printed on A4 paper or emailed to the patients if they preferred a digital copy.

CONCLUSION

As the ageing population in the UK grows, we can expect the number of older adults experiencing loneliness and social isolation to increase. Loneliness and social isolation are epidemics on the rise, and their effects transcend not only mental wellbeing but physical health. Intervening in the pre-hospital setting is pivotal because pre-hospital practitioners are uniquely positioned to observe and assess patients in their environment and gather firsthand evidence about the determinants of the patient's health. Reviewing patients at home brings insight that would not be possible when reviewing them in hospitals or clinics. The benefits will be multifold if we can help our patients before they get admitted to hospitals. Apart from the economic benefits of reduced admissions, patients will not be admitted unnecessarily and put at risk of deconditioning or nosocomial infections. Most importantly, these interventions aim to improve the patient's overall QoL by enhancing their social connections and reducing loneliness.

CONSENT

The author have received verbal informed consent from the patient.

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