Effects of a fall on the quality of life of someone over the age of 65

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Abstract

Background: Care of the older person will become more important in the future due to the expected increase in this area of the population. Falls and fall related injuries are the most common cause of admission to the community hospital. Finding out how a fall affects the quality of life of an older person can provide the multidisciplinary team with the information needed to assist the older person in improving that quality of life.

Aims/Objectives: This study will be carried out in a rural Irish setting, with the aim to find out the effects of a fall on the quality of life of someone over the age of 65.

Materials/Methods: A total of 7 participants were recruited for the study. All of these participants have had a recent stay in a community hospital and have been discharged home. The methodology used was that of semi-structured telephone interviews, with each participant receiving the same set of questions.

Results: The main themes identified were that of fear of falling with over half of participants mentioning developing a fear of falling. The other prominent theme was that of social isolation. The majority of participants had lived in the town, however they still felt socially isolated and this may have been due to the research taking place during the coronavirus pandemic.

Conclusion: For those who have fallen, there has been a reduced quality of life, however the participants recognised the importance of family support in assisting them to stay in their own environment which was important to them. In the current pandemic, social isolation was very prominent, regardless of fall status and this must be addressed. There are a variety of different services available to older people, however some are only in certain areas of Ireland. Developing a process to ensure these facilities are rolled out to all areas can only help to improve social isolation and in turn the quality of life of those over 65. Providing care within the home environment albeit virtually should reduce isolation, and improve fear of falling which were the common themes identified.

Chapter 1 – Introduction

Hockey (1984) has described research as the attempt to increase what is known, by the discovery of new information or facts which follow a systematic rigorous scientific enquiry which is otherwise known as the research process. Nonetheless, regardless of the sector of society which is chosen for the research, additional knowledge will be added to what is already known, resulting in a positive outlook for the future of nursing in that area. Research in nursing can be difficult when dealing with vulnerable human beings, therefore, ethical principles must be vigilantly adhered to. One such vulnerable population is that of the older person and this area of nursing will undoubtedly be extensively researched in the years ahead due to the expected increase in the population. It has been recognised that the Irish elderly population is the fastest growing sector of society, with an increase of 19.1% from the previous census (Central Statistics Office (CSO) 2016). The older population are more likely to experience complex health needs which will place additional demands on an already pressurised health service. One of the implications of ageing is that falls and falls related injuries are more common in the older population (Esain et al 2017). The WHO (2018a) in their data agree that the population of older people will continue to increase with the population going from 12 to 22 % over the next 30 years, and an implication of that expected increase, is that there will be an increase in the number of falls resulting in negative effects on the quality of life and independence. With greater longevity, better health and higher expectations for old age among the older generation, the well-being of this population has become a focus for researchers not just in Ireland but internationally. Due to this expected increase in life expectancy, there is an added need to focus on factors capable of promoting a high level of health-related quality of life (HRQoL) (Bjerk et al 2017). The main focus of this research is to find out from an Irish rural perspective how the quality of life of someone over the age of 65 who has fallen, has been affected by their fall.

Falls are common amongst the older population and they can have disabling effects to the physical and psychological aspects of an individual and in turn their quality of life (Smith et al 2017). Esain et al (2017) found that one third of people over the age of 65 fall at least once a year, and these falls can cause mortality and morbidity with negative effects on quality of life and independence. There has been an abundance of literature worldwide which established that there has been a strong link between falls and reduced quality of life in the elderly (Bjerk

et al 2019, Noh et al 2017, Theim et al 2014, Vennu and Bindawas 2014,) are some of these studies. Quality of life can mean different things to different people, therefore depending where in the world the research is taking place, there may be a difference in the older persons opinion of the meaning of quality of life. The World Health Organisation (WHO 2018b) has defined quality of life as the individual's perception of their life taking into account their culture and value systems in which they currently live in relation to their own goals, expectations, standards and concerns, which can be affected by a person's physical, psychological, social relationships, their personal beliefs, and also their relationship to the significant features of their environment. Quality of life is clearly a broad, complex subject that depends on cultural and social circumstances (Schoene et al 2019). Although it has been widely recognised that there is a link between falls and quality of life worldwide, there have been no studies found which have shown an Irish perspective.

Gannon et al (2008) in their study for The Centre for Ageing Research and Development in Ireland (CARDI) recognised that the population of older people in Ireland from 2006 to 2031 will more than double and simultaneously the cost of falls from 2010 to 2030 will almost quadruple. This expected increase in falls will no doubt have negative effects on both the health service and increase the demand for community hospital services in the future. Mary et al (2019) agree that falls in the elderly have a considerable cost on the health service and are a barrier to active ageing. Should the falls reach the expected increase from the CARDI (2008) study, it must be recognised that this will increase the possibility of a reduced quality of life. Parry et al (2016), in their study found that falls cause fear, anxiety social isolation and increasing frailty which will undoubtedly affect the quality of life of the person with a fall. The difficulty with falling is that patients will adopt a fear of falling and Whipple et al (2018), agree that the fear of falling is linked with reductions in social and physical activities as well as reduced quality of life. Javasinghe et al (2014) concur that unintentional falls are the most common traumatic event of late life, and with this in mind it was decided to undertake research as to how a patient's quality of life is affected following a fall that resulted in an admission to a community hospital.

The Irish Longitudinal Study on Ageing (TILDA) (2019) study found that falls are the most common reason for older people to visit the emergency department. They found that there was

an increase in the number of falls from the ages of 65-74 years of age from anything between 20-52%. From clinical practice, it has been noted that the majority of admissions to a community hospital have been related to a fall at home, with most of the elderly patients living alone prior to admission. It is from these admissions which at times result in an extended stay for patients, that the author has developed the research question which involves the effects of a fall on the quality of life of someone over the age of 65, who was admitted to a community hospital. The TILDA (2020) study also recognised the significant cost of a fall not just on the health service, but also on the quality of life of the older person and their ability to remain at home independently. Their analysis recommends an improved system for risk factors for falls, such as fear of falling or impaired mobility, that will advance treatment and management of conditions, improving quality of life and positively affecting active ageing which will benefit not just the individual, but also families, the health care system that allows the individual to stay at home safely, and the health service. Kenny et al (2017) through the TILDA study also recognised the significant importance of quality social relationships within the elderly social support networks which are essential for long term health and wellbeing. They believe that this social engagement and participation are a positive impact on active ageing and also quality of life in ageing populations (Ward and McGarrigle 2017).

The World Health Organisation (WHO 2015) produced a report on a Framework for Policy for Health Ageing and this has brought a new insight into the lives and wellbeing of older people in general. Their policy included environmental supports for healthy ageing in the older person and recognised the importance of the wider environment to the wellbeing of the older person. When considering the rural environment in which the study is to take place, the older population will undoubtedly need the social support from their communities, which was also recognised from the TILDA (2017) study. Stephens et al (2018) in their research article also found the importance of social provisions of neighbourhoods and housing to be positively associated with quality of life among older people. Nevertheless, Davis et al (2015) believe that older people with mobility impairments are prone to reduced quality of life, and a fall can have a detrimental impact on their mobility. Davis et al (2015) also found that ascertaining factors regarding individuals' perceptions of quality of life is essential for healthy ageing. This is a significant function of this research study, whereby it is the individuals own perception of their quality of life, and how it is affected that will be researched with the focus on the effects of their fall on this quality of life.

Falls in the elderly have become a serious consequence both psychologically, socially, physically and financially, and this would negatively affect their quality of life. Noh et al (2017) agree that a fall in the elderly can cause serious consequences with a loss of confidence, reduction in social activity and physical injury which would undoubtedly change the patient's current lifestyle and quality of life. Zanker and Duque (2020) state that as falls and injury from falls are generally associated with age, then due to the ageing population the incident of falls are expected to rise negatively affecting their quality of life. Schoene et al (2019) have mentioned that maintaining or improving quality of life is an essential part of any clinical intervention in older people and this statement is significant for this research study. As the need for services in the community will increase over the next few years due to the expected increase in the older population, maintenance of quality of life has to be one of the most important outcomes (Leeuwen et al 2019).

Although it has been recognised that HRQoL changes over time (Vennu and Bindawas 2014), due to the ageing process, many studies above had recognised that falling negatively affects quality of life of those over the age of 65 (Ho et al 2020, Pandaya et al 2016, Taguchi et al 2016). There have been several international studies recognising this difficulty, however the process in undertaking the research varied from each country. Falls not only cause disability, fear of falling and a decrease in quality of life but also lead to an increase in morbidity and mortality (Ozturk et al 2017).

Vappio et al (2008) believe that an important part in assessing the effects of treatment in the health care services on patient's well-being is the measure of the quality of life. Falls can pose a major threat to the well-being and quality of life of older people with decline in physical function and loss of autonomy (Lord and Close 2018). Although it is not possible to prevent falls completely, those who fall more often may be enabled to fall less, if areas are identified area which would assist them to remain safely in their own environment. As the majority of the older population live alone, social support is essential to allow the participant to stay in their own environment. From practice, it is evident that for the older person to be content in their life, to remain in their own home is paramount. When considering this, there may become issues which would affect the quality of life of the individual and these include physical, psychosocially, mentally, financially or socially. Without a doubt, anyone who falls regardless

of age can be affected, however for an older person the effects are almost always negative. It is anticipated that through this research, these effects are identified by the participants, providing the author with the opportunity recognise what the effects are, and discover ways in which to ensure that they continue to have a quality of life which is individualistic. This information is essential for the multidisciplinary team, to gain an understanding on how to improve the quality of life for patients post a fall, and what, if any adaptations would be needed to allow the patient to stay in their own home in order to provide a better service for the patient.

Chapter 2 – Literature Review

A literature review allows the reader to interpret what is already known and will eventually point out any contradictions or gaps in the existing knowledge (Jesson et al 2011). This literature review was undertaken using articles from CINAHL, ELSEVIER, EbscoHost, Google Scholar and Medline using academic English articles only with full text. When looking at the databases available, the key words of falls, and quality of life brought an abundance of articles which needed to be whittled down to ensure that the studies selected were relevant to the research to be undertaken. Although it has been widely recognised that there is a link between falls and quality of life worldwide, there have been no studies found which have shown an Irish perspective. There is a need to identify if there are any differences with an Irish setting due to the location of the study as 41.4% of the general population of this area live in highly rural or remote areas (Central Statistics Office 2018).

The aim of this literature review is to find out the effects of a fall on the quality of life of someone over the age of 65 who has had a recent admission to a community hospital. A fall has been described as an event in which results in a person of coming to rest inadvertently on the ground or floor, or other lower level (World Health Organisation 2018c). Falls and fall related injuries in adults over the age of 65 are a major issue psychologically, socially, physically and mentally for the person which would undoubtedly affect their quality of life. Quality of life has also been extensively defined by the World Health Organisation, as an individual's perception of their life taking into account their culture and value systems in which they currently live in relation to their own goals, expectations, standards and concerns which can be affected by a person's physical, psychological, social relationships, their personal beliefs, and also their relationship to the significant features of their environment (WHO 2018). It has been recognised that the Irish elderly population is the fastest growing sector of society, with an increase of 19.1% from the previous census (CSO 2016). With greater longevity, better health and higher expectations for old age among the older generation, the well-being of this population has become a focus for researchers not just in Ireland but internationally. The CARDI study (2008) found that the number of people who died after a fall in Ireland was 250-300 and this is expected to almost treble by 2031. They also estimated that the cost of falls in 2020 will be 922million -1077 million and this is expected to double in the next ten years (CARDI 2008). Due to the expected increase in life expectancy, there is an increased need to

focus on factors capable of promoting a high level of health-related quality of life (HRQoL) (Bjerk et al 2019). Vappio et al (2008) believe that an important part of assessing the effects of treatment in the health care services on patient's well-being is the measure of quality of life. Therefore, for nurses, gaining an understanding from patients of how to improve quality of life can only aim to improve nursing care in the elderly.

Roe et al (2009) carried out a qualitative study to focus on older persons experiences of a fall and its impact on their health, lifestyle, and quality of life but they also focused on the care networks, prevention of falls and the participants views on service use. They used a relatively small study of 27 participants over 65 years of age who had a fall within the previous 10 days, using a qualitative approach with recorded interviews and follow up interviews 3-4 months later with 18 participants. The study found that an individual's perception of quality of life is a critical factor in predicting falls risk. They also recognised that co-morbidities were an issue, and that vision related health problems contributed to the fall correlating with the Chang et al (2010), and Thiem et al (2014) studies. Roe et al (2009) also found that a minority of participants were independent prior to the fall and fewer after which, perhaps due to the size of this qualitative study, could negatively contribute to its reliability and validity. It may have been more beneficial to recruit more independently mobile participants and there may have been richer knowledge obtained as to the changes in their quality of life. In contrast to the Roe et al study (2009), another more recent study by Blain et al (2019) found that a falls prevention programme can help reduce the risk of falling, the fear of falling and helps maintain mobility and functional status. It could be argued then, that attending a falls prevention clinic would undoubtedly improve the participants quality of life with regards to their mobility. The results are similar to the earlier Palvanen et al (2014) study which took place in Finland have found that by attending the falls clinics, the number of falls and fall related injuries were reduced by 30%. Chang et al (2010) also concur that attending these clinics would strengthen the confidence of the elderly and reduce fear of falling. Roe et al (2009) found that people adopted strategies themselves in order to prevent any further falls, however at the time of this study, falls clinics were not readily available to older people in the community, which may have made their study quite dated. Nevertheless, evidence suggests from the other studies that attending a falls clinic is beneficial for the participant in reducing falls (Blain et al 2018, Davis et al 2018). The majority of the Roe et al (2009) study were women, and this could be also seen as a limitation, as it is not giving an overall view of the population in general. As Berg et al (1997)

found in an old study that men fell most during the winter and women fell more in the summer, however the time of year for this study was not known. A strength found in the study is that they recognised that alcohol may have been a factor, which was also mentioned in the Patil et al (2013) study, which may have contributed to a fall. Regardless of age or gender, alcohol could be one of the contributing factors in falls and discussing alcohol intake may help in the prevention of falls going forward. Roe et al (2009) did state that those living in rural locations would have the potential to become more isolated post a fall which is relevant for the research to be undertaken as the majority of the participants will live in rural areas. Their recommendation is that a more accessible equitable service should be provided by working with local communities and agencies.

Stenhagen et al (2014) carried out a large study of 1321 participants who were randomly recruited, and included everyone who had recorded fall history, and completed data on health-related quality of life and life satisfaction, with the exception of those who were unable to speak Swedish. Their aim was to examine long term relations between falls and HRQoL over six years in the general elderly population. They used questioning skills by purpose-trained physicians at the baseline and followed it up by using a structured questionnaire. They included social factors within their initial questionnaires at the baseline which included the prevalence of higher education, co-habiting and urban or rural living. Their participants ranged in age from 60-93 and took place over 6 years, however this could be a limitation to the study as it could be elicited that due to the patients age and co-morbidities, they may not be alive in six years, with 15% of their study were aged between eighties and nineties. By including everyone, could affect the validity and reliability of any study when considering a person living with dementia who lacks the ability to produce linguistic information as their working memory systems are compromised (Bayles et al 2020). The study believed that anyone scoring below 24 points on the Mini Mental State Examination were defined as those having cognitive impairment. This test involved writing and drawing exercises, therefore someone who has arthritis in their hands may be unable to carry out this part of the assessment, and according to Stenhagen et al (2014) analysis they are cognitively impaired which could be untrue. Another limitation that has been recognised is that over six years they may not have the same amount of people for the study due to the natural age cycle. Nevertheless, their study found that one or more falls has a long-term reduction in the physical component of health related quality of life in the elderly population.

They recognised however, that they had no specific scientific definition of a fall which could affect the reliability of the study, as some elderly participants may have different classifications of a fall. A finding from the study did find that a fear of falling became a major issue related to HRQoL and this can be supported by the findings of Chang et al (2010) who also identified fear of falling as a major issue.

Stenhagen et al (2014) recognised at the beginning of their study, that those who have fallen had a reduced quality of life and they continued to have a reduced quality of life after 6 years, resulting in a reduced state of health related quality of life and life satisfaction. They found that those who have fallen may have an element of depression, which was associated to general frailty, physical and functional decline, and co-morbidity. These results are similar to those reported by Ozturk et al (2017) who believe that those in the high risk of falls category more commonly experience frailty, and this was an important syndrome in elderly hospitalised patients. The Ozturk et al (2017) study differs from the Stenhagen et al (2014) study, whereby they involved hospitalised patients, nevertheless the results remain the same.

The study by Chang et al (2010) in Taiwan focused on the community setting over the course of 3 years and concentrated on residents over the age of 65 years of age. Their study used face to face interviews and had a total of 4,056 participants, following the exclusion of those not eligible. The researchers used interviews based on a structured questionnaire and they also used the SF-36 form to assess the quality of life. Again, the social aspect to include age, gender and marital status was taken into account with educational levels also included which correlates with the Stenhagen et al (2014) study. This study did recognise the definition of a fall as an event in which a person comes to rest on the ground inadvertently on the ground or other lower level unlike the Stenhagen et al (2014) study. Chang et al (2010) found that over half of the participants (53.4%) had reported a fear of falling and this increased to 75.1% when those who fell with an associated injury were questioned. Fear of falling was also mentioned in the earlier study by Iglesias et al (2009), and in a later study by Patil et al (2013). This fear of falling would be detrimental to the quality of life of a person as this will increase anxiety and may limit social interaction (Scheffer et al 2008), and this was another finding in the Stenhagen et al (2014) study. Whipple et al (2018) concur in their study, as they believe that fear of falling is associated with reduction in social and physical activity as well as reduced quality of life.

As this study being undertaken is being carried out in a predominantly rural location, it is thought that more social support will be required and perhaps the sourcing of outside help within the home. Noh et al (2017) concur that the number of elderly living alone is increasing, and that the elderly population are receiving more support and care from family and friends. Considering the Chang et al study (2010), they mentioned educational levels in their assessment of falls, however they found no difference between the educational levels with falling history of fear of falling. Another study which mentioned educational levels was the Stenhagen et al (2014) who believed it was a social factor when carrying out the questionnaire at baseline. It is questionable why the educational levels were considered a risk factor in falling, with the author feeling it had to do with the participants level of knowledge in regard to taking in information regarding preventing a fall, however this is not recognised in either study.

A study by Sotoudeh et al (2018) was carried out in Iran and their study took place over a year and included both men and women over the age of 65 from 22 different settings. The methodology involved the qualitative approach of face to face interviews within the home. They defined a fall using the WHO definition of unintentionally coming to rest on the ground, floor or other lower level without loss of consciousness (WHO 2018). Interestingly enough, in contrast to the authors thinking regarding educational levels, they found that having a college or university education was a protective factor against falls, due to the fact that educated people had their own financial and social resources to engage in health recovery and they could afford home modifications or use assistive devices to improve their health condition resulting in a decreased risk of falls. The Mosca and Nivakoski (2016) study which was carried out under TILDA, agrees that income is positively associated with quality of life in older people. Whipple et al (2018) believe that environmental hazard modification may reduce fear of falling, which is similar to the Sotoudeh et al (2018) study. Depending on the location of the study, resources may differ, as those living in Ireland over the age of 65 will have the support of the occupational therapist or physiotherapist who would provide assistive devices to those if needed. However, should adaptions to the house be needed, additional support from the government by the way of grants could be applied for and this may take time. This could be an added risk factor for the elderly person as they continue to be at risk whilst waiting for these changes to their home. Sotoudeh et al (2018) also identified that housewives were more at risk of falling, and that falls in the home were more common within women and the older end of

participants. The study did recognise that the majority of the older population live with family at home and do not need to leave the house for any activity, limiting their social interaction and therefore these findings are unsurprising. A limitation from this that the author recognised is that although the participants were interviewed in the home setting, it was not discussed under what conditions this had taken place. If these participants were likely to be in their own setting, they could become influenced by those within their surroundings and may become distracted easily resulting in unreliable information. The authors did not identify the conditions under which the information was retrieved. The recommendation from their study is that developing intervention or prevention strategies which take into account falls related factors and the circumstance of the person would be useful (Sotoudeh et al 2018). This ensures an individualistic approach when planning care of the person.

Iglesias et al (2009) took a different approach in their study and they focused on health-related quality of life for women only and the cost implications of falls. This study was huge, with over seven thousand participants for the entire study which was split into two different studies. Iglesias et al (2009) carried out their research in England and they used the EQ-5D questionnaire to decipher the effect of falls on HRQoL. Their findings were that anxiety had a strong impact on HRQoL. These findings were supported by Painter et al (2012), who concurred that anxiety and fear of falling are strongly linked in the elderly who have had a previous fall, and this could lead to fall risk and activity restriction. The authors of the Iglesias et al (2009) study recognised that only 26% of the participants had a fall and only 9% had a fracture. However, from the study it was acknowledged that the majority of older women had a fear of falling and this was a major cause for reduced HRQoL. Fear of falling has also been recognised in the studies by Chang et al, (2010), and Patil et al, (2013). Therefore, it will be beneficial for the researcher to discuss fear of falling with the participants when carrying out research. The author noted however when questioning the individual, this study considered their lifestyle choices such as alcohol or smoking and this could prove a limitation, as some participant may not wish to divulge that information for fear of being judged. Iglesias et al (2009) did recommend that interventions aimed at reducing fear of falling would increase quality of life. Patil et al (2013) agree that exercise would a promising intervention to reduce fear of falling as it may prevent a decline in physical functioning and mobility.

A more recent large study by Thiem et al (2014) in Germany with 6,880 participants, used the EQ-5D scale for quality of life found that overall, the participants quality of life was negatively affected by a fall. However, although this correlates with other studies (Chang et al 2010, Iglesias et al 2009, Patil et al 2013, Sotoudeh et al 2018), this study mentioned chronic diseases and the author would wonder what they believe is a chronic disease. For Parkinson's patients, due to their unsteady gait, they may be at higher risk of falls, than a patient with a depressive mood which they included as a chronic disease. The inclusion criteria also had to ensure that the person had to have a fall within the last 12 months. A limitation of the study recognised that the majority of participants had been younger, educated people and mostly living independently at home which also correlates with the Patil et al (2013) study. This is not giving an objective view as it is focusing on people who are living at home and it could be argued that their quality of life was not adversely affected as other studies. This exclusion criteria for the study included a life expectancy of less than six months, however their follow up study was seven years. It asks the question would their participant selection have been better with a younger population, as when they followed up with interviews after the seven years had elapsed, there was a reduction of half of their initial participant group. This would undoubtedly affect the reliability of the study due to the large number who were unable to be contacted for the follow up interview.

Van Leeuwen et al (2019) believe that caring for an older adult at home will increase in coming years because of the ageing population and deinstitutionalisation. It is clear from the research reviewed that falls pose a major threat to the wellbeing of older people (Lord and Close 2018). Vennu and Bindawas (2014) established that examining quality of life contributes to a broader understanding and falls prevention in older adults. By scrutinising the literature, the main themes identified were fear of falling, anxiety and the need for social support should a person live alone. It has been noted that there have been some limitations of the studies with regard to study size, or the inclusion or exclusion criteria for the study, however each study has provided the author with the knowledge on how to carry out research and the importance of a phenomenological view from the participants. Although the majority of the studies reviewed have come from various countries worldwide, there is a lack of information from a rural Irish setting. Depending on the location of the participant, whether they live in an urban or rural area, they may require additional support from the health care system or society in general. The majority of the elderly Irish population are living rurally, therefore their support networks may

not be as easily accessible, which could result in reduction in social interaction. As this is the setting from which this research is undertaken, it is hoped that a true reflection of an Irish person's perspective of living life rurally post a fall is identified.

Chapter 3 - Methodology

A phenomenology study will seek to identify the lived experience (Creswell and Poth, 2018) which will give rich data in relation to falls when undertaking qualitative research. A phenomenological approach is easily identified as it focuses on the aims and desires to find out the essence or experience of something similar (Ellis 2016). Using a phenomenological gives the researcher an opportunity to understand, experience and interpret the views of the individual through their eyes. Qualitative research has been described a multifaceted approach which investigates people's words and actions through culture, society and behaviour through analysis and synthesis (Aspers and Corte 2019). Researchers can use a variety of techniques to include, observations, interviews, documents, and audiovisual materials, with the main aim of the researcher to expose the human part of a story (Jacob and Furgerson 2012). Qualitative research must be read by nurses using a critical eye to determine the trustworthiness of the findings, and Yates and Leggett (2016), believe that researchers must work directly and intimately with the data to identify emerging themes and categories.

The main aim of the study is to find out patients experiences of life post a fall, and if a fall has affected their quality of life. The researcher hopes to find out how participants lives have changed, and how if any adaptions to their previous lifestyle was needed. Although there have been several studies undertaken, few have been from an Irish perspective. The area chosen for the research is quite rural, and it is hoped that the information received will give the reader an opportunity to see the life of an older person living rurally in Ireland post a fall.

Before a sample is selected, there must be strict criteria within the population that share common characteristics in order to elicit the information required by the author (Cochran 1977). A sample method involves taking a representative selection or subgroup of the population and using data collected from them as research information and Boddy (2016) believes that a small sample size of one can be highly informative and meaningful. When discussing a phenomenological approach to research, the sample selected must be that of a purposive sample, as these participants have the experience of the research topic in question (Hoeber et al 2017). The researcher only has a small sample of one participant who has had a recent fall, for the open ended in-depth semi-structured interviews. It is proposed that the sample chosen will include those who have had a recent fall which resulted in a hospital stay

in the community hospital, whether or not they had a fracture is irrelevant as the focus of the research is the quality of life of a person following a fall. The World Health Organisation defined a fall as “an event which results in a person coming to rest inadvertently on the ground or floor or other lower level,” including trips and slips (WHO 2017).

There will be some exclusion criteria, and this will include:

those with a history of dementia, as it has been found that dementia impairs and finally destroys the capacity to consent (Darby and Dickerson 2017).

Those who have had a fall due to alcohol consumption. Although there were studies in the literature review by Roe et al (2009), Patil et al (2013), and Soutedeh et al (2018) that recognised alcohol as a risk factor in falls, none of the other studies reviewed have considered this as a possibility in regards to falling, which could affect the reliability and validity of a study.

For the purpose of this study, participants who will be selected, have been an inpatient in a community hospital post a fall, and have since been discharged home. The author would have been known to these participants and will be aware of their medical history. This is essential in order for participants to be chosen, as the inclusion criteria deems those with a history of dementia be excluded from the study. Participants will be invited to participate in the study, by sending out a stamped addressed envelope, and a letter of invitation outlining the reason for the study. All information regarding the aims and objectives, the researcher’s reason for carrying out the study, and the researcher contact details are included in this letter. Mick (2019) states that all this information must be on the letter to the participant, to ensure that informed consent is secured. It is the responsibility of the researcher to make the participant aware of a realistic time frame as to how long the interview will last (Jacob and Furgerson 2012). A consent letter will also be sent out simultaneously and on receipt of this consent form, a semi structured telephone interview will take place. A semi structured interview involves the researcher asking some questions from the prepared list, and is similar to a structured interview, however they may also be some probe or follow up questions (Chu and Ke 2017), and this is the method undertaken. The participants will be made aware that their interview will be recorded, in order for the researcher to add any more data in the analysis, in case it was not

identified in the original interview. The participants will be interviewed over a few weeks due to time constraints, and only then will data analysis begin. For the purpose of this study 8-10 participants will be invited to the take part, with 6-8 being selected.

In order for access to be granted, ethical approval has been sought and granted from the Letterkenny Institute of Technology ethics committee. Ethical approval has also been sought from the Director of Nursing of the community hospital and also the Service Manager for Older people who have both agreed to the research being undertaken and the research subjects being contacted. Research approval is essential in all research involving human participants and must be obtained before participants are approached or before data can be collected (Gelling 2016). Should the participants wish to withdraw from the study, then they can do so without any issue before data analysis. Due to the nature of the study, there will be no expected risk to the participants as the research will be via telephone interviews. When the research has been completed, both the Director of Nursing and the Service Manager will be made aware of the findings, and how if any recommendations could be implemented to improve the service. Older people are becoming a common focus for researchers due to the increase in this population, and the expected increase within the next 30 years, this section of the population has become will be extensively researched. The main goal of most elderly people is to stay in their own environment, with or without added support, therefore by finding out various methods in which this can happen will be of benefit for both the individual and the health service in the future.

Bowling (2002) believes that the ethical principle governing research is that respondents should not be harmed as a result of participating and they should give their informed consent to participate. The participants will be informed of their rights and there will be a discussion on the confidentiality aspect of the study. Colosi et al (2019) state that confidentiality allows for authorised persons to disclose information in certain contexts, while continuing to remain protective of the privacy rights of individuals, and protective of the information being imparted. Each of these letters distributed will ensure the participants that their involvement in the study is voluntary, and they can leave the study at any time. It is also envisaged that each participant will have the necessary contact details of the researcher to clarify any questions they may have. Any person who participates in research has the absolute right to full disclosure, so that they are clearly informed of the subject, types of interview and other data collection procedures such

as questionnaires that will occur and the scope and nature of the persons involvement (DePoy and Gitlin 1998). The confidentiality of the participant must be adhered to at all times and it is proposed that all information from the research will be stored in a password encrypted computer that only the researcher can access. The participant must be ensured that no one other than the researcher can have access to the data, and this must be relayed to the person before their participation. The individual who agrees to participate in the study has the right to refuse to answer a question or withdraw from the study completely and this must also be acknowledged.

A theoretical framework is derived from an existing theory that has already been tested and validated by others in the literature and is considered a generally acceptable theory, whereby it is the researcher's lens with which to view the world (Merriam 1997). For this research, the author has decided upon the qualitative method of interviews and these will be carried out over the phone, where the patient will be in the comfort of their own environment. A telephone interview can obtain data through interpersonal communication without a face to face meeting (Carr and Worth 2001). The rationale for carrying out this type of qualitative method is that a recent pandemic has meant that elderly people over the age of 65 have been asked to cocoon in their own house to avoid any risk of becoming ill, and this forced the researcher to take an alternate approach to interviewing the participants. Historically, it was thought that carrying out an interview by telephone is not suited to the task of qualitative interviews (Irvine 2018), however in the past three decades, interviewing by telephone has become increasingly common. One of the benefits of having a telephone interview, is that there will be reduced cost for both the researcher and the participant, with neither having to travel for the interview to take place, and there may also be a reduction in interview time frame (Oltmann 2016). Although due to the recent pandemic, social distancing has become a term from which the public are exasperated hearing, a positive of the phrase in regards to research, which has been recognised by several authors, is that there will be a reduction in awkwardness with telephone interviews due to an increase in social distance (Carr and Worth 2001, Lechuga, 2012, Mealer and Jones 2014). This can be of benefit to the researcher if living rurally, as the geographical location of the research will not become an issue when telephone interviews are taking place.

Although technology has escalated in recent years with the introduction of smart phones and messenger where people can visually see their loved ones, it can be of benefit to those carrying out phone interviews in order to assess the non-verbal communication which can be very rich, when identifying body language, mannerisms and facial expressions. Often, observation methods in face to face interviews can identify social interactions with individuals in a comfortable setting and may also provide the researcher with clues from their non-verbal communication, as to whether they are comfortable with the course the interview is taking. Visual methods are by far the method of choice in qualitative interviewing the vulnerable populations to uncover the intricacies of lived experiences, however little is known about whether these visual timelines can be effective in telephone interviews (Pell et al 2020). Although this method has been successful, in the elderly this may be difficult, as the participants selected may not be technology minded, and visual methods may not be available to them. Therefore, in order to ensure the rigor in the research, telephone interviews for all participants without visual methods will be carried out. Telephone conversations and interviews naturally take an agenda driven format which is initiated by the caller, with the process similar to semi structured interviews (Cachia and Millward 2011). It is essential therefore, that the researcher when analysing the data relies on auditory cues which could be as beneficial as non-verbal observation methods.

In order to carry out semi-structured interviews, the interviewer will have a series of probes or prompts to address issues relevant to the research. Therefore, the researcher is facilitating the flow of the interview and, it is essential that the researcher will be mindful of their own values, preconceptions and behaviours as this may affect the responses given by the participants. Each participant will be asked the same questions to ensure a high degree of reliability (Appendix 1). The rigor of qualitative interviews is directly related to the study's trustworthiness, and this in turn establishes the worth of the study by demonstrating that procedures are appropriate, evidence is sound, and findings are neutral and unbiased (Christenbery, 2017). The aim is to interview the participants for approximately sixty minutes, however this could become longer or shorter depending on the participant. A limitation that this researcher has recognised is that, although the aim is not to develop a therapeutic relationship, this may become an issue as the participants will be known to them which may affect the outcome of the results.

By carrying out telephone interviews, there will be a reduction in biasing due to the lack of face to face interaction, which might result from the personal characteristics of the researcher and the manner in which they carry out the interview. Alternatively, Novick (2008) believes that the lack of visual clues results in the loss of non-verbal data and it could compromise rapport, probing and interpretation of results.

The open-ended questions that will be used have been created by the author to obtain information relevant to the research, and by using this approach, more detailed answers will be elicited. A qualitative research approach has been chosen as this approach ensures that an understanding and interpretation of meaning, as well as intention underlying human interaction are reinforced, allowing the reader to have a more personal view of experiences of the participants, and an understanding of the core of their lives (Holloway and Galvin 2016).

The researcher needs to be organised in order for the interview to go well and that the data will be rich and useful to the research. As the interviews are being taken over the phone, the participants will be made aware that they are being recorded. This will be done using a dictaphone and all information received will only be accessed by the researcher to which the participants will be informed via the consent form. There will also be field notes taken throughout the interview. Field notes have been widely recommended as a means to documenting needed contextual information (Phillippi and Lauderdale 2018). This information will be then be listened to several times to identify themes, and categories, phrases and types of behaviour. Any notes taken will be read and re-read and notes will also be studies to recognise similarities between each participant if any. Qualitative data analysis begins at the same time as data collection, and put simply, content analysis is how many times words, phrases and items have been found in the text (Neale 2016). Analysing the data will be systematic and rigorous in order to extract the true experiences of those who have had a fall.

The expectation is that these interviews will be recorded and then transcription will be done at a later date manually by listening to the recording. Field notes will be taken throughout the interview and the participant will be made aware of this prior to the process. This method can be a positive when considering this research process, due to the fact that note-taking will be

unobtrusive when carrying out telephone interviews (Novick 2008), as the participant will be unable to see the researcher, avoiding distraction. When transcribing data it would be foolish of author not to mention that time may be an issue. As the research is intended to be carried out within a short space of time, this could be a limitation as to the quality of the data received, due to the fact that there would be more data collected if there was an increase in the number of participants used. It is the researcher's responsibility to ensure that the interviewee is aware that any information imparted will be strictly confidential and only the research will have access.

From reviewing the literature the main themes that were identified were that of fear of falling of the participants, and the social support that the participants rely on whilst at home. Fear of falling was very evident in the majority of studies (Iglesias et al 2009, Chang et al 2010, Patil et al 2013, Stenhagen et al 2014), and they all agree that following a fall that the older person has developed a fear of falling. This fear of falling has become a question for the participants in the interview, with the aim of the researcher to discover if those living rurally continue to have a fear of falling post a fall. Another theme that has been recognised is that of social support and this was found in each of the studies of Chang et al (2010), and Soutedeh et al (2018). This social support is important for this study as again, those living rurally will depend on their environment and social supports to ensure they stay at home successfully independently.

Rigor in research is an essential part of the process and it the basis that ensures that the researcher has confidence in the research findings (Houston 2019). Rigor is not just a buzzword, it is essentially the basis that the researcher has confidence in the research findings (Houston 2019). Christenbery (2017) believes that the rigor of qualitative interviews are directly related to the studies trustworthiness and this in turn establishes that the study procedures are appropriate, evidence is sound and that findings are neutral and unbiased. Qualitative research interviews must follow the same process to ensure and they provide in-depth information about the lived experiences and viewpoints about a particular phenomenon. Therefore to ensure that the study is trustworthy, strategies to enhance rigor which include participants have the freedom to speak their experiences, accurate transcription, on-going attention to detail when transcribing data, and flexible sampling are essential. When mentioning trustworthiness, it must also depend on the initial research question, and the

drawing up of a research question which is both topical and interesting to both the researcher and anyone who reads the study.

When considering any research, it is essential that avoiding bias is an integral part of the research process. Bias is when error is introduced into the sampling or testing by encouraging one outcome over another, and it can occur at any time of the research, including study design, or data collection, as well as during data analysis or publication (Pannucci and Wilkins 2010). In other words, this can happen at any time during the research process, from sample selection, right through to data analysis, and this can impact on the reliability and validity. For example, some might say that the researcher could be biased in choosing the study population, as they may favour the answers that are expected from this group. When considering the impact of this on the reliability and validity of any study, it could be seen as a negative, as the outcome may be what the researcher was expecting.

Informed consent is one of the most integral parts of the process, as the research cannot be commenced without it. Normally, the researcher would meet with participants prior to the interview taking place and inform them of the nature of the research and afford time for the participant to ask any questions they need to ask. This process alone builds trust and confidence between the two parties and increase the probability of the participants sharing their experiences (Jacob and Furgerson 2012). For this research study, a consent form was sent out with the information about the study, along with the contact details of the researcher to allow the participant to ask any details about the study. Following receipt of this consent form, when contacting the participant to perform the interview, they will be asked again if they consent to the study and any questions that they have will be answered. The reason they will be asked again, is that they may have found some issue that is concerning them regarding the research and may not wish to continue, as is their right. The researcher must be mindful not to coerce the participants to make them feel under pressure as this will result in the data being untrustworthy.

However, when considering the interview, a disadvantage of the researcher is that the interview will be taking place in the participants own home. The major issue with this is that, the

researcher cannot control people within the participants household interrupting the interview. This is out of the hands of the researcher and may become a difficulty as interruptions may distract the flow of the conversation and result in data that could be rich in content being lost. It could also result in participants not completing the full interview, which would affect the outcome of the study.

In order to collect data, the researcher must have a specialised set of skills, knowledge and experience to carry out the interview. Turner (2010) states that qualitative research design can be a complicated process depending on the level of experience that the researcher has regarding a specific methodology. As this researcher is a novice, no doubt issues will arise, however this can only serve for growth in knowledge and experience in future research investigations. Interviews and focus groups are the most common methods of data collection, and for this study the researcher has decided on the method of semi structured interviews which is used to explore the views, experiences, beliefs and motivations of individual participants (Gill et al 2008). By using these semi-structured interviews, the areas which to be explored are created to pursue an idea in more detail. Ahuja (2019) agrees that interviews are goal specific and can be intensive in approach, however by using semi-structured interviews this allows data flexibility whilst still following the domains of the questions. When developing the questions for this interview, it is essential that the researcher is mindful of the aims and objectives of the research in order to achieve as much information as possible about the phenomenon. Effective communication skills of the researcher is a must to elicit information successfully. These skills must include active listening, empathy, open-mindedness, respect, friendliness, clarity and confidence in their own ability.

Polit (2015) believes that reliability is a key for all health measures, and in order to have a high degree of reliability, the same semi structured questions will be asked to everyone which allows the researcher to have some leeway when questioning the participants. It is the task of the researcher to facilitate the interview with as little interruption as possible, however, due to the nature of this study, interruption may become an issue, as the researcher as no control over visitors to the participants home. Validity in qualitative research has been defined as the integrity and the application of the methods undertaken and the accuracy in which the findings truthfully reflect the data (Noble and Smith 2015). However, Oluwatayo (2015) believes, that

recent views on validity are more concerned with the interpretation and measuring of the scores. The validity of this research is essential due to the limited numbers included for the study, and it expected that the results should be on par with other studies that have previously been done.

A pilot study has been described as when a smaller version of a study has been carried out before the actual investigation is done and the information gathered is used to refine or modify the methodology for a study (Doody and Doody 2015). As this is a relatively small study with only 6-8 participants it has been decided to carry out a small pilot study of only one participant due to the time constraints of the study. The pilot study allows the researcher to do a test run to the proposed method to be undertaken. As this research aims to use a set of questions which the researcher has developed, it is important to do the pilot study to allow the researcher to add any further questions or adapt the questions to focus on the topic of the research. When carrying out the pilot for the interview, the location of the interview will be checked for any distractions, sound difficulties with the recordings and time frames for interview.

When considering the data analysis, the first step has to be to produce a good quality transcript which needs to be detailed to include tone of voice, speed, pausing, timing and emphasis (Bailey 2008). If the researcher is unsure of the information from the field notes, all data will be read and reread, and all recordings will be listened to, in order to ensure that no rich information has been missed. All of the information needs to be analysed in minute detail to ensure that themes, meaning and understanding are included in the outcome. This method will take time and effort by the researcher, as notes will be added to the text from memory, whereby the researcher will almost relive the interview, and experience what is heard and not heard over the telephone. The aims and objectives will be at the forefront of the researcher's mind, as the outcome of the study is to find out the effects of a fall on the quality of life of someone over the age of 65. These effects may not be easily identified by just listening to the interview, therefore it is the job of the researcher to become creative and work quickly, imaginatively and methodically to elicit the emerging themes and raw material connected to the research question.

All findings from the research study will be presented as facts that have been stated in the interviews. Participants experiences will be relayed in the research exactly as they have stated to the researcher so that no false information will be included in the end report.

Chapter 4 – Results and Discussion

Noh et al (2017) state that with the rapid growth of the elderly population, the maintenance of this population in the future is of critical importance. This research aimed to find out the effects of a fall on the quality of life of a person over the age of 65 who has been admitted to a community hospital and has since being discharged. This research question can result in a myriad of answers, all of which can have both detrimental, and positive effects on both the physical, mental, social, psychological and financial aspects of the older person. Quality of life is a broad subject which also incorporates social and cultural circumstances (Schoene et al 2019). From a review of the research, the most typical themes identified is that of fear of falling and the social isolation. Given the rural location, the assumption of the researcher was that the results would not differ much from other researchers' findings. A qualitative approach of telephone interviews as mentioned in chapter three is the method that was undertaken. This method involved the researcher giving each participant the same set of questions to ensure reliability and validity.

Communication in particular between nurses and their patients are a key principle in providing person centred care (Bruton et al 2016). Active listening has been widely recognised as an essential part of this communication process, and this skill had to be carried out by the novice researcher due to the type of methodology chosen. Rogers and Farson (1957) in their seminal work, when discussing person centred care mentioned active listening and believed that listening provides more information than any activity, builds deep positive relationships and tends to alter constructively the attitudes of the listener. When taking part in research via telephone therefore, the researcher ensured that the participants were listened to as accurately as possible, enforcing the importance of recording the interview. By allowing the participant to talk, more information appeared to be obtained than that from the questions fabricated by the researcher. Semi-structured interviews are beneficial in delving past the superficial responses to obtain true meanings that individuals assign to events and the complexities of their attitudes, behaviours and experiences, by allowing the participant to tell their own story in their own words with prompting from the interviewer (Bowling 2002).

By carrying out a qualitative study, the aim of the researcher is to collect people's life stories to allow them to study the various aspects of the human experience from different contexts

(Bengtsson 2016), and this allows the researcher to achieve high quality rich and relevant data (Silverman 2019). Assarroudi et al (2018) state that qualitative content analysis involves the provision of descriptive knowledge and the understandings of the phenomenon of the study. In other words, qualitative content analysis ensures that the information received can validate, refine or extend a theoretical theory. The literature review identified that fear of falling as a major theme, and that the support that those who have fallen have received socially as an important factor in ensuring a good quality of life. Quality of life can of course, mean different things to different people, therefore when measuring quality of life of an older person after a fall, it is important to understand this concept.

As when undertaking any assessment related to a participant, the holistic approach is essential to ensure that all aspects of a person's life are taken into account. Jasemi et al (2017) define holistic care as an in-depth understanding of patients and their needs for their care which can contribute to patient satisfaction and result in a better understanding into the effects of illness. The questions in the interview also considered the holistic view of the participants post a fall, by recognising the support of the family, social support via use of the occupational therapist and also the introduction of home help support for those whose physical activity has been affected. Four of the participants who identified the physical aspect as the part most affected by their fall and out of these four participants, three required home help before they go home. This was a reason for their extended stay in a community hospital, and although they were happy to be in the hospital, they felt more socially isolated due to the fact that they were not allowed any visitors for the duration of their stay. All of these participants were also under the care of the occupational therapist, and this they felt was essential in ensuring that they remain at home safely.

When carrying out the study, the participants were equally divided between three male and four females, to include seven participants in total for the research. Out of these seven participants, three lived alone and four lived with family. There were three people living in a bungalow, three in a two-storey house and one person lives in sheltered accommodation. Three of the participants were married, three were widowed and one was single. The majority of the participants lived in the town with almost 72% of people and over 28 % of people living in the countryside.

Of the participants that did fall, four of the participants were not injured, two had serious injuries requiring surgery, and one participant required stitches. Two of the participants felt that their activities were not limited. Whereby, five of the participants found their activities were indeed limited, and of these five, two had fractures. Anyone who has had a fracture, their activities indeed would be limited, and Alexiou et al (2018) agree in their study that a hip fracture has seriously affected the physical and mental functioning and in turn has had a severe impact on their health-related quality of life. Mariconda et al (2016) concur that of those who have had a fracture, only 57% return to pre fractural functional status, which would negatively affect their quality of life. Two participants used to love gardening, and this was now stopped due to the injuries from the fall.

One major theme that was noted from the interviews was that of social isolation, with one participant saying, 'they wouldn't socialise a lot now', another saying 'they couldn't go to mass or bingo now'. Newell and Menec (2017) believe that over the past twenty years, there has been acceptance of the importance of social isolation and loneliness to the health and well-being of the older population. Although this research has taken place during the recent Corona Virus pandemic, the theme of social isolation was almost expected as any elderly person over the age of 75 was advised to cocoon for their own protection, as this was the population who were deemed most at risk. Social isolation from both their family and friends is due to cause a difference within their mental health, and this was recognised from one of the participants. They said that they 'were able to go and visit their neighbour daily just to talk and they had been doing this for the past thirty years', and due to the public health advise to stay indoors and stay safe, they limited this interaction. The Kenny et al study (2017) believe that the more interaction between friends and family members on a normal basis has a positive effect on their mental health. The recommendation from their study is to target social isolation in the older person to ensure better physical and mental health (Kenny et al 2017). However, the location of the study is quite rural, and Robins et al (2018) identified that living in a rural location as well as those with a history of falls, living alone, poor health, restricted mobility and increasing age are at increased risk of social isolation. Regardless of the location of the participant, the author believes social isolation would occur should a serious injury happen if the participant is unable to mobilise.

Although there has been previous research on social isolation and loneliness in the older population, social isolation during corona virus has been more severe for the participants. Regardless or not whether the participant was living the country or the town, social isolation is significantly higher at the time of the study. Therefore, the researcher must be mindful of the fact that the participants whether they live in the town or countryside would be socially isolated, and, unable to keep in touch with their neighbours perhaps due to the necessity to cocoon, or perhaps due to the fear of what might happen when they go out. When listening back to the audio recordings, two of the participants clearly sounded upset when they were unable to see their loved ones and relatives.

Robins et al (2018) have found that increasing participation of household physical activity can be related to older people being less socially isolated for those living in the community, due to the increase in functional physical ability. They also believe that these higher levels of physical ability can increase confidence in the ability to engage in social activities such as meeting friends and family. When reverting back to the interview with the participant who was unable to see his family and friends, this intervention may be beneficial for him. However, it must be recognised that every individual is unique, therefore, each intervention needs to differ according to each participant.

Although the majority of the participants, felt that their physical health was most affected, one mentioned mental health, only one participant mentioned psychosocial. It asks the question, did the participants know the meaning of the word psychosocial as they all mentioned social isolation, however they did not think that the psychosocial aspect was the most affected. Education was mentioned in the studies by Chang et al (2010), Sotoudeh et al (2018) and Stenhagen et al (2014), and this may be the reason that they included this in the criteria for the study. Depending on the education levels of the participants, their ability to comprehend the varied questions may be diminished and this could have an adverse effect on the possible outcomes of the research, which is why the researcher needed to adapt the questions. Again, the difficulty with this is that being unable to visualise their facial expressions when asking the questions denies the researcher the ability to change the course of the interview to the level of the participant.

Two of the participants mentioned that previously they used to drive a car and were able to go for a run which was a great day out for them. Due to their fall, this activity was now curtailed, and this had a huge effect on their social activities and in turn their mental health. Aydeniz et al (2015) in their study believed that driving a car, as opposed to being a passenger is strongly linked to better social participation and quality of life, and that relying on lifts was related to poorer psychosocial well-being. This strongly correlates with the message received from the participants interviewed, with one participant stopping driving 'for their own safety' which limited their independence, as they had to rely on other people.

The participants were quite nostalgic and were happy to reminisce about their younger days and their activities. By using reminiscence, the older adult develops feelings of social connectedness and meaning of life, reduces loneliness and reduces intensity of negative events resulting in positive effects on physical and mental health and well-being (Henkel et al 2017). Interestingly enough, only one participant felt that their safety was compromised, which was unexpected as over half stated that they had a fear of falling. Fear of falling has been widely recognised in the studies reviewed as a major effect in the research of falls (Chang et al 2010, Iglesias et al 2009, Painter et al 2012, Patil et al 2013, Stenhagen et al 2014, Whipple et al 2018). This study was no different, in that four of the participants have also agreed that fear of falling is a major factor since they have had a previous fall. The participants all believed that they are more careful now when mobilising as the fear of injuring themselves is high. Of those that mentioned fear of falling now, two of them were seriously injured when they fell, requiring surgery. The other two people who mentioned fear of falling were not injured, nevertheless, they felt as though having that constant fear was worse than actually injuring themselves. Regardless of the gender of the participant, it was evenly divided the fear of falling with each sex. The other three participants felt that they did not develop a fear of falling, however these participants were not injured when they fell, which may have made a difference to their answer if they had. The consequences of fear of falling can include decreased quality of life, mobility or activity restriction, and the development of deconditioning, which in turn can lead to loneliness, subsequent falls, and a reduction in physical, psychological and mental function (Rahman 2018). Abyad and Hammami (2017) also concur that fear of falling can lead elderly patients to be cautious, and in turn, this can lead to lower quality of life, increased institutionalisation, reduction in physical activity and lower physical health status.

All of the participants with the exception of one, has had home help initiated since their discharge home. This for the participants has been such a positive outcome in allowing the participants to stay in their own environment. Each of the participants recognised the work in which the home help did in improving their home situation. One of the participants stated that without their home help, they would have to go into a nursing home as they would not be able to cope. Their tone of voice when mentioning a nursing home was very serious and the researcher felt that this would no doubt be a negative effect on the quality of life of the individual. Pluzaric et al (2016) disagree with this in their study as they found that the quality of life of those within their home did not differ from those in a nursing home.

Due to the recent Coronavirus pandemic, an intervention by the Health Service Executive (HSE), Embrace Attend Anywhere Technology aims to provide a community health service for those isolating due to age or medical condition. This service ensures that those who are unable to attend health care facilities remain part of the programme to improve aspects of their life such as reduced mobility which could affect their quality of life. This process is encouraging for future preparation in case of any further pandemic arrivals, so that active ageing can be delivered in a cost-effective way. Although beneficial, health care professionals must be mindful of the results of the Ismail et al (2018) and Hager et al (2019) studies, whereby the individual must be the prime focus of any intervention.

Tripathy et al (2020) in a recent study found that COVID-19 had a mixed effect on society, whereby those elderly who lived alone and had little access to health care may have struggled, however those who lived with family members living with them were more supported. In spite of this, they also found that those elderly population whose family members could not stay with them were more vulnerable and felt deprived of their family support negatively affecting their quality of life. Ang et al (2019) believe that carers or family are an essential part of the support network for older people which enables them to stay at home longer, and the majority of the participants agreed that their family were pivotal in providing support, such as home improvements. Before the participants came home, adaptions were needed to almost all of the participants home environment. Three participants lived in a two-storey house and all of these participants required their bedroom to moved downstairs. To do this, the room which was normally used as a sitting room was adapted which could be a major change in the home setting.

This change could also affect the psychosocial aspect of a participant's health whereby, if visitors did come, then how would they be entertained. The facilities may not be available to greet their visitors depending on the layout of the house, and they might have to be brought into the participants newly adapted environment. For the participant, this could have both positive and negative effects on their quality of life. They may feel embarrassed to bring someone into their home where they have to entertain them in their bedroom, however, they may be happy to have some kind of normality and enjoy the social interaction.

A difficulty that arose from the study, was that with the study taking place in the participants own environment, and this in turn was challenging that anyone who was living with the participant did not become involved in the interview process. Two of the participants required assistance with the phone and this was then also put on speaker for the participant. The difficulty with this is that the carer who lived in the house with the participant also felt that they could answer the questions posed by the researcher, and this in turn could have affected reliable answers as the participant may have been guided to agree with their carers interpretation of the question. The role of the researcher is to facilitate the flow of the interview and this was done by reverting the question back to the participant to ensure that it was their answer that was accepted. The skill set of the researcher must include the ability to be flexible in situations like this, to ensure the rapport is withheld between both the researcher and the participant (Roulston and Choi 2018). The researcher also had to be mindful not to be dismissive of the contribution of the carer, as this could have posed a problem with the participant.

Parker et al (2019) consider that some of the key research priorities for older people are to prevent social isolation and promote well-being to ensure optimal service delivery, also recognising the benefits of involving older people and their family in each research agenda. When relating this to the limitation mentioned above in that the family did interrupt the flow of the interview, then maybe this limitation could become a recommendation. By involving the family of the participant, the interviewer may find that the family member will have more information for the study, as they may remind the participant of some facts that may have been overlooked.

The Health Service Executive set up an Active and Healthy Ageing Falls Prevention and Assessment Clinic across seven community hospitals within one county. The health care professional will refer the patient to the clinic if they feel that they are at risk of falling, or they have had a previous fall. Each appointment takes into account a holistic view of the person, including environmental factors and their risk of falling. However, there will also be information given to the participant on how to live well at home and reduce their risk of falling. This process also interlinks with the positive ageing research strategy which involves the HSE Well-being Division, the Department of Health, the Atlantic Philanthropies and Age Friendly Ireland which aims to improve and maintain the health and well-being of older people. Fear of falling was identified by four of the participants, with one stating 'they are getting their confidence back slowly'. According to Blain et al (2018) falls clinics help reduce the fear of falling and injury due to falls and may also help maintain mobility and improve functional status, and this is important when considering this study. Nevertheless, these participants were unable to attend the falls clinics locally, as they were all cancelled due to the pandemic.

Kwok and Tong (2014) carried out a study regarding these evidence-based programmes and they found that programmes that the programmes were centre based and carried out by the physiotherapist were more beneficial and improved quality of life and the number of falls. Alternatively, those exercise-based programmes carried out by a home-based carer had no effect on physical health or self-rated health status. These findings although from another country, could have implications for any exercise-based programmes for those adults living rurally who may not have access to a clinic. Now, with the ongoing pandemic, these exercise programmes would not be taking place together due to social distancing measures, and this could affect the outcome of such a programme. The Kwok and Tong (2014) study differs from the Parry et al (2016) study, in that the Parry study found that a new cognitive behavioural therapy intervention improved the fear of falling in older adults. As identified above, an individualistic approach when carrying out an assessment of falls, and identification of corrective measures can help prevent falls and their consequent effects on health and well-being of the elderly and in turn quality of life (Sirohi et al 2017).

Initially the small pilot study was completed to ensure no issues with sound, malfunction of equipment, or any issues with the questions of the interview. The pilot study only used one

participant due to the small sample size of the study. Following this study, it was found that the novice researcher was unfamiliar with the equipment, which resulted in the interview not actually being recorded at the beginning. This participant was again asked the questions at the beginning of the study and they were content to do so. When carrying out this pilot study, it was found that the wording of the questions could be quite difficult. Although a few of the studies in the literature review mentioned education (Chang et al 2010, Sotoudeh et al 2018, Stenhagen et al 2014) the researcher did not include this as an interview question. Consequently, when asking questions for the other participants, the wording of the questions was rephrased to ensure that the participant understood the question. An option was given from the age of the participants and this confused the participant, therefore going forward, the participant was asked their age, as opposed to the options into which age group they were.

A methodological challenge that was identified in the research is that of the participants ability to hear the researcher ask the questions. When the interview was being recorded, the interviewer had the phone on loudspeaker, and this alone caused difficulty for the participants to hear the question. If you compare this to the method of one to one interview, the ability to physically write the question for those participants who were hard of hearing would be more beneficial, however this was impeded due to the safety concerns of having participants within two metres of the researcher during the interview for their own safety concerns.

Although the method of telephone interviews was initially rejected by the researcher, this method did indeed prove to be beneficial, and made valuable contributions to the research. There was a reduction in bias, due to the fact that the participant could not see the researcher for any non-verbal signs throughout the interview, which limited the assumption that they would be judged on their experiences, allowing the participants to talk honestly and openly about their experiences. Although visual timelines have been used historically to uncover the intricacies of lived experiences in vulnerable populations (Pell et al 2020), the lack of this visuality can become a positive in carrying out research. King et al (2018) state that a threat of the qualitative interview is that there is potential for the participant to misunderstand the interaction. When doing telephone interviews, due to the fact that the researcher cannot visually see the participant, a focus must be on the tone of voice of the individual. The participants when talking during the interview changed their voice when discussing different aspects of

their health. Family members were talked about using an upbeat voice, and the contribution they gave to their loved ones. When discussing fear of falling, there was a more serious tone, likewise whenever the curtailment of social activities was mentioned, there was a sadness in their voice, perhaps due to loss of contact from their friends and family.

The Centre for Ageing and Research Development in Ireland (CARDI) funds, publishes and disseminates research related to older people across the north and south of Ireland (CARDI 2008). This research project changed to Ageing Research and Development Commission in 2015, however its mantra remained the same. The research by Murtagh et al (2014) through the CARDI study, found unsurprisingly that physical activity declines with age, and considering the positive impact that mobility has on health and well-being, keeping this physical activity constant could improve quality of life. This would also be a recommendation of the researcher, to ensure that activity is maintained when the participant is in their own home to ensure a positive quality of life.

Simultaneously, The Irish Longitudinal Study on Ageing (TILDA) is a large scale nationally representative study on ageing in Ireland, which collects information on all aspects of health, economic, and social circumstances over a period of 2 years, which is essential to understand the immediate and long-term effects of people and their families and communities. The McCrory et al (2010) study which was carried out under the TILDA study, believes that quality of life of those participants in the study is indeed high, however they also recognised that after the age of 68 that quality of life steadily declined. This is important when overviewing the study undertaken, in that it could be the fall causing the quality of life of an individual to be decreased or is due to the fact that they are getting older and due to the natural ageing process, this would be decreased anyway. It could be argued that regardless of age, quality of life of some participants may be maintained at a level which the individual perceives as good, as long as they remain in home and this was recognised by some of the participants. It shows the importance of remaining in the home environment to the older person regardless of medical or physical condition.

Chapter 5 - Conclusion

The older population is increasing in size and this expected increase will be crucial for nursing care of this sector of the population in future. A worldwide increase of those over the age of 65 will have a knock-on effect on the increase in falls as this is the branch of the population where it has been recognised has the highest incidence. Falls and fall related injuries in the elderly have become a great burden for not only the person, but also for their family and the health care system and society (Bjerk et al 2017). The effects of a fall on the quality of life of someone over the age of 65 who was admitted to a community hospital, has shown some interesting findings. The study found that fear of falling is a common issue and this was mentioned by over half the participants. It has been widely acknowledged that the effects of falls can have a negative effect on the quality of life of an individual, and this has been clearly shown by the studies reviewed in the literature review and also the study that was undertaken. As noted in previous studies, a fear of falling is common among those who have fallen. Perhaps culturally though, the most common issue related to a negative quality of life found with this study, is that of social isolation and the inability to partake in social activities whilst living in a rural part of Ireland. Quality of life means different things to different people, however the most important outcome of care services in the older person is maintenance of quality of life (van Leeuwen et al 2019).

Although several studies had been reviewed on falls, it is expected that few were carried out in the middle of a pandemic and this could have affected the quality of the research. More elderly people could be focused on the actual isolation, and social distancing due to the virus, which may not have necessarily been due to their fall which could negatively affect the reliability and validity of the study. The corona virus pandemic was unprecedented in its arrival to the world, and the effects of this virus will undoubtedly be felt for a long time to come. The social support that the elderly received before the days of the corona virus allowed them to live successfully in their own environment, and the majority of the participants recognise the importance of such support. However, due to health expert's advice to socially distance, the older population could have socially isolated for health reasons and this became problematic for the researcher.

The effects on mental health which in recent years has been well established, and thankfully talked about more in all spectrums of life and it has been acknowledged that everyone's mental

health can be affected by an unforeseen event. A focus now must be on the older generation who were cocooning during the times of the corona virus for their own safety. Although the health service in general was unprepared for the arrival of the virus, the focus initially would have been on the safety of those affected, and this is important. However, it is clear from the research undertaken, that the forgotten sector of the population were those who were above 65 years of age. These patients were asked to stay indoors and not to interact with their family members, for their own safety, which has negatively affected their mental health, and in turn their quality of life. Although some participants recognised that it was actually their fall that made them curtail their social activities, prior to the corona virus, those who could visit their loved ones were asked to stop.

The Health Service Executive (HSE) has implemented a falls prevention programme and this involves the participant attending falls clinics for information on how to prevent falls in the future, which could also alleviate that fear of falling. These clinics were invaluable for advice in how to prevent any further risk of falls and provided the elderly population with tips on how to make their home safer. When mentioning the falls clinics, the author also found through the literature the benefits of having an exercise programme and it is well researched that this type of programme has been successful in increasing the quality of life of the individual post a fall.

One more recent intervention, the AgeWell project was initiated in one county for older people is an integrated model of care which support older people to remain safer and healthier in their own homes and is supported by Slaintecare Integration Fund. This project has companions who would visit or call older people who may be isolated in very rural areas. The results of the programme have seen a 75% reduction in loneliness in the participant after 18 months. The researcher would recommend that a similar programme be rolled out throughout the country which could only provide a positive outcome for any individual. Newell and Menec (2017) suggest however, that different groups who are socially isolated may have different needs and require different interventions, therefore each intervention should be individualised. When considering this AgeWell project, having the comfort of knowing that there is someone who will be in contact should alleviate concerns that the older person may have. During the pandemic, a little offering never ends (ALONE) has provided 1000 smart phones to the elderly in order for them to stay in contact with their loved ones. By using this smart phone, the older

person would have the benefit of seeing the person when talking to them, encouraging visual interaction which is beneficial for those cocooning.

Fear of falling is an ongoing issue and has been recognised in many research studies and from an Irish rural perspective this is no different. This fear of falling is hazardous for the older person wishing to return home, due to the fact that it could hinder their discharge from a hospital setting. Working with physiotherapy whilst an inpatient is beneficial, however on return home, that support is not there. Following a review of the literature, the researcher has found that attending an exercise-based programme would be beneficial for the older person, however this would need to be group based. The difficulty is with this now that social distancing means that these groups cannot take place unless there is a two-metre distance between each individual. Although the study by Kwok and Tong (2014) recognised that home-based interventions had no effect on physical health, and that the best intervention would be either health centre or hospital based. Should a home-based intervention be recommended, having a zoom call or video call whereby the professional is guiding the individual through the exercises should aim to increase confidence and reduce the fear of falling, and this is currently in place by the HSE. This project is working well, as patients are still being seen albeit via video calls, however social distancing is maintained ensuring the safety of patients.

The primary aim for any professional is to optimize health outcomes for their patients, and in care of the elderly this is significant. The effects of a fall on any individual regardless of their age can be detrimental, and on the elderly these effects can be critical. It may be that the participant needs to adapt their house, they may need to change their current living conditions, or it may be a case that they need to go into long term care. Other effects as noted from the study have shown that fear of falling and social isolation remain the most important impacts for those who have had a fall. Although fear of falling is individualistic, it can be decreased by increasing the confidence of those who fallen with positivity and encouragement when mobilising.

It is clear from the research undertaken that the effects of a fall has indeed negative effects for those elderly people interviewed. There is a strong link between fear of falling and social

isolation and for that, more research is warranted. One positive effect of a fall is that each of the participants recognised that they could not possibly cope without the support of their family members to remain in their own environment. This was ultimately the goal of any participant that was interviewed regardless of their age, gender, housing status, or living arrangements, that they wished to remain in their own environment. As mentioned previously, this section of the population is increasing and the aim is to keep those in their own environment where they feel safer, more comfortable and ultimately where they want to be.

Social isolation is becoming a major widespread health problem, and within the elderly the percentage of those who are lonely may be higher than reported as older adults may not like to admit that they are lonely (Petersen et al 2020). Hajek and Konig (2017) believe that preventing falls may reduce loneliness and prevent social isolation. The evidence from this small study corelates with these findings, and research into the area of social isolation due to falls could be warranted at a time when older people are not cocooning.

Courtin and Knapp (2015) state that social isolation and loneliness are risk factors for poor physical and mental health. When relating this to falls, these negative effects can further impede the mobility issues that the participant has post a fall. When considering the findings of the study, over half of the participants recognised the physical aspect as the part that was most affected by the fall. If this physical aspect is changed, then the risk of social isolation and loneliness is also changed. Davis et al (2015) also concur that impaired mobility is associated with lower health related quality of life.

With the current worldwide pandemic, the safety and quality of life of older people are indeed to the forefront of those working with older people. Should a patient come into a community hospital, it may be beneficial to include family members in the initial assessment regarding discharge planning. Knowing what is required to ensure a safe return home will contribute to maintaining a good quality of life, by discovering their social situation, and which aspects of life that they feel is important to them. During the research study, family members were considered a huge part of their positive transition home. Therefore, from admission the holistic approach to include social, family and professional support should be acknowledged and may

reduce the length of stay within the community hospital. By informing both the individual and the family of the social support available to those when at home, may increase confidence within the individual, that there are many projects available to ensure they continue to be safe and secure in their home ensuring that they maintain a good quality of life.

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Appendix 1

INTERVIEW QUESTIONS

Gender	Male □	Female □		
Age	65-74 □	75-84 □	85-94 □	over 95 □
Marital Status	Married □	Widowed □	Single□	
Do you live	Alone □	With family □	With friends □	
Do you live in	Bungalow □	2 Storey House □	Sheltered Accomodation □	
	Flat □	Nursing Home □	Boarding out □	
Is your home	In a town □	In the countryside □		

How many times have you fallen in the last 12 months

1-2 □ 3-4 □ more than 5 □

Where you injured when you fell Yes □ No □

Do you feel that your fall limited your normal activities? Is so, how has it limited them?

Have you curtailed any of your social activities due to your fall?

If so what have you curtailed? Why?

Have you developed a fear of falling post a fall

What is the thing that you feel has been affected most by your fall?

Physical ☐
Psychosocial ☐
Mental ☐
Financial ☐
Socially ☐

How has this been affected the most? Why?

Did you make any adaptions to your house post your fall

Do you feel that your safety is compromised now

What could be changed to allow you to continue to stay in your usual environment

Have your family made changes in order to make you safe in your home.

What do you think caused your fall?