Nurse strategies to prevent elderly suicide attempts

Investigation into nurse strategies to prevent or minimise attempted suicide in patients aged 65 and over.

Abstract

This dissertation considers the rationale for positive nurse-based intervention in consideration of issues relating to suicide in the elderly. The introduction sets the context, including the historical context, of the issues and discusses the negative effects of ageism on issues relating to suicide in the elderly.

The literature review considers selected texts which have been chosen for their specific relevance to the issue and particularly those that espouse the view that ageism is counter productive to a satisfactory quality of life outcome for the elderly person.

Conclusions are drawn and discussed with specific emphasis on those measures that are of particular relevance to the nursing profession whether it is in a secondary care facility, a residential home setting or in the primary healthcare team and the community.

We can observe, from a recent paper (O'Connell H et al. 2004), the comments that, although there is no doubt that the elderly present a higher risk of completed suicide than any other age group, this fact receives comparatively little attention with factors such as media interest, medical research and public health measures being disproportionately focused on the younger age groups (Uncapher H et al. 2000).

Perhaps we should not be surprised at the fact that both suicidal feelings and thoughts of hopelessness have been considered part of the social context of

growing old and becoming progressively less capable. This is not a phenomenon that is just confined to our society. We know that the Ancient Greeks tolerated these feelings in their society and actively condoned the option of assisted suicide if the person involved had come to the conclusion that they had no more useful role to play in society (Carrick P 2000). Society largely took the view that once an individual had reached old age they no longer had a purpose in life and would be better off dead. In a more modern context, we note the writings of Sigmund Freud who observed (while he was suffering from an incurable malignancy of the palate:

It may be that the gods are merciful when they make our lives more unpleasant as we grow old. In the end, death seems less intolerable than the many burdens we have to bear.

(cited in McClain et al. 2003)

We would suggest that one of the explanations of this apparent phenomenon of comparative indifference to the plight of the elderly in this regard is due to the fact that the social burden of suicide is often refered to in purely economic terms, specifically relating to loss of social contribution and loss of productivity. (Brechin A et al. 2000).

This purely economic assessment would have to observe that the young are much more likely to be in employment and less likely to be a burden on the economic status of the country whereas with the elderly exactly the converse is likely to be true. This results in economic prominence being give to the death of a younger person in many reviews. (Alcock P, 2003). There is also the fact that, despite the fact that we have already highlighted the

increase in relative frequency of suicide in the elderly, because of the demographic distributions of the population in the UK, the absolute numbers of both attempted suicides and actual suicides are greater in the younger age ranges and therefore more readily apparent and obvious.

The elderly are a particularly vulnerable group from the risk of suicide. In the industrialised world males over the age of 75 represent the single largest demographic group in terms of suicide attempts. Interestingly (and for reasons that we shall shortly discuss) although there is a general trend of increasing suicide rate with age the excess rates associated with the elderly are slowly declining in the recent past (Cattell 2000).

We can quantify this statement by considering the statistics. If we consider the period 1983 to 1995 in the UK then we can show that:

The suicide rates for men reduced by between 30% and 40% in the age groups 55–64, 65–74 and 75–84

The rates for the most elderly men (males over 85 years) remained fairly static, this group still having the highest rates of any group

By way of contrast, the 25- to 34-year-old male group exhibited a 30% increase in suicide rate during the same period, this group are becoming the group with the second highest rate, while the 15- to 24-year-old male group demonstrated a 55% increase in suicide rates. (WHO 2001)

Female suicide rates have shown a similar overall decrease, reducing by between 45 and 60% in the 45–84 age group.

Elderly women, however, retain the highest rates throughout the life span (Cattell 2000)

The ratio of male to female elderly suicide deaths remains approximately 3: 1 (Fischer L R et al. 2003)

We can suggest that these trends in reduction of suicide, particularly in the elderly are likely to be due, amongst other things, to:

The improved detection of those at risk together with the advent of aggressive treatment policies relating to mental illness in the elderly. (Waern M et al. 2003)

One of the main reasons, we would suggest, for this obviously changing pattern and the discrepancies in the suicide rates between the age ranges, is the fact that, in direct consideration of the context of our topic, the elderly are more likely to be both amenable to professional help and also, by virtue that a higher proportion are likely to be in direct contact with healthcare professionals either through failing health or nursing homes and hospitals, (Suominen K et al. 2003), have the warning signs of impending suicide recognised and acted upon more promptly than the younger, arguably more independent age group.

In specific consideration of the elderly group we should also note that attempted suicide is more likely to be a failed suicide attempt rather than a parasuicide. (Rubenowitz E et al. 2001).

There is considerable evidence that the incidence of depression is increased in the presence of a concurrent physical illness (Conwell Y et al. 2002) and

clearly this is going to be more likely in the elderly age group. Some sources have cited association rates of between 60-70% of major depression with physical illness in the over 70yr olds. (Conwell Y et al. 2000).

Another significant factor is that it is commonly accepted that an attempted suicide is a strong independent risk factor in the aetiology of further suicide attempts. (Conwell Y et al. 1996) This trend is much more marked in the elderly group with a ratio of about 4: 1 which compares very badly with the ratios in the younger age groups of between 8: 1 and 200: 1 (depending on age range, definition and study). (Hepple J et al. 1997)

In this dissertation it is intended to gain evidence based knowledge of the scope and significance of the phenomenon of attempted suicide in the elderly. In addition it is intended to gain evidence based knowledge in the use of strategies to ameliorate attempted suicide in the elderly to highlight gaps in the literature available and to suggest recommendations for change in nursing practice It is hoped to be able to suggest areas for research into the phenomenon of attempted suicide in the elderly.

The initial strategy was to undertake a library search at the local post graduate library and the local university library (Client: you might like to personalise this) on the key words “ suicide, elderly, prevention strategies, industrialised societies”. This presented a great many papers. About 40 were selected and read to provide an overview of the literature in this area. During this phase, references were noted and followed up and key literary works were assimilated. The bulk of the papers accessed and read were published within the last decade, however a number of significant older

references were also accessed if they had a specific bearing on a particular issue. The most significant references were accessed and digested. The dissertation was written referencing a selected sub-set of these works.

To increase nurses knowledge and understanding of attempted suicide in the older age group and to highlight through the literature review, evidence based strategies that an be employed to ameliorate attempted suicide amongst the elderly.

Literature review

Before commencing the literature review, it is acknowledged that the literature on this subject is huge. The parameters of the initial search have been defined above. In addition it should be noted that there is a considerable literature on the subject of assisted suicide which has been specifically excluded from these considerations

The literature base for suicide in the elderly is quite extensive and provides a good evidence base for understanding, appropriate action and treatment. (Berwick D 2005)

One of the landmark papers in this area is by Hepple and Quinton (Hepple J et al. 1997) which provided a benchmark, not only on the aetiology of the subject, but also in the long term outcomes, which, in terms of potential nursing care input, is extremely important. The paper points to the fact that there is a good understanding of the absolute risk factors for suicide in the elderly but a comparative lack of good quality follow up studies in the area. It set out to identify 100 cases of attempted suicide in the elderly and then

follow them up over a period of years. The study was a retrospective examination of 100 consecutive cases of attempted suicide that were referred to the psychiatric services over a four year period. The authors were able to make a detailed investigation (including an interview of many of the survivors), about four years later. Their findings have been widely quoted in the literature.

Of particular relevance to our considerations here we note that they found that of the 100 cases identified, 42 were dead at the time of follow up. Of these, 12 were suspected suicides and five more had died as a result of complications of their initial attempt. There were 17 further attempts at suicide in the remaining group. Significantly, the twelve women in the group all made non-lethal attempts whereas all five of the men made successful attempts. The authors were able to establish that the risk of further attempts at suicide (having made one attempt) was in excess of 5% per year and the “ success” rate was 1. 5% per year in this group. From this study we can also conclude that the risk of successful repeat attempted suicide is very much greater if the subject is male. The authors were also able to establish that, because of their initial attempt, those at risk of self harm were likely to be in contact with the Psychiatric services and also suffering from persistent severe depression.

We can examine the paper by Dennis (M et al. 2005) for a further insight into the risk factors that are identifiable in the at risk groups. This paper is not so detailed as the Hepple paper, but it differs in its construction as it is a control matched study which specifically considered the non-fatal self harm scenario. The study compared two groups of age matched elderly people

both groups had a history of depression but the active study group had, in addition, a history of self harm. The significant differences highlighted by this study were that those in the self harm group were characterised by a poorly integrated social network and had a significantly more hopeless ideation. This clearly has implications for intervention as, in the context of a care home or warden assisted setting, there is scope for improving the social integration of the isolated elderly, and in the domestic setting community support can provide a number of options to remove factors that mitigate towards social isolation. This would appear to be a positive step towards reducing the risk of further self harm.

The O'Connell paper (O'Connell et al. 2004) is effectively a tour de force on the pertinent issues. It is a review paper that cherry-picks the important information from other, quite disparate, studies and combines them into a coherent whole. It is extremely well written, very detailed, quite long and extremely informative. While it is not appropriate to consider the paper in its entirety, there are a number of factors that are directly relevant to our considerations here and we shall restrict our comments to this aspect of the paper.

In terms of the identification of the risk factors associated with attempted suicide in the elderly, it highlights psychiatric illnesses, most notably depression, and certain personality traits, together with physical factors which include neurological illnesses and malignancies. The social risk factors identified in the Dennis paper are expanded to include " social isolation, being divorced, widowed, or long term single".

The authors point to the fact that many of the papers refered to tend to treat the fact of suicide in reductionist terms, analysing it to its basic fundamentals. They suggest that the actual burden of suicide should also be considered in more human terms with consideration of the consequences for the family and community being understood and assessed. (Mason T et al. 2003)

In terms of nursing intervention for suicide prevention, we note that the authors express the hypothesis that suicidality exists along a continuum from suicidal ideation, through attempted suicide, to completed suicide. It follows from this that a nurse, picking up the possibility of suicidal ideation, should consider and act on this as a significant warning sign of possible impending action on the part of the patient.

The authors point to the fact that the estimation of the actual significance of the various prevalences of suicide varies depending on the study (and therefore the definition) (Kirby M et al. 1997). In this context we should note that the findings do not support the ageist assumptions expounded earlier, on the grounds that the prevalence of either hopelessness or suicidal ideation in the elderly is reported as up to 17% (Kirby M et al. 1997), and there was a universal association with psychiatric illness, especially depressive illness.

If we consider the prevalence of suicidal feelings in those elderly people who have no evidence of mental disorder, then it is as low as 4%. It therefore seems clear that hopelessness and suicidality are not the natural and understandable consequences of the ageing process as Freud and others

would have us believe. This has obvious repercussions as far as nursing (and other healthcare) professionals are concerned, as it appears to be clearly inappropriate to assume that suicidality is, in most cases, anything other than one of many manifestations of a mental illness. It also follows from this, and this again has distinct nursing implications, that suicidal ideation and intent is only the tip of the iceberg when one considers the weight of psychological, physical and social health problems for the older person. (Waern M et al. 2002)

If one considers evidence from studies that involve psychological autopsies, there is further evidence that psychopathology is involved. Depressive disorders were found in 95% in one study. (Duberstein P R et al. 1994) Psychotic disorders and anxiety states were found to be poorly correlated with suicidal completion.

Further evidence for this viewpoint comes from the only study to date which is a prospective cohort study in which completed suicide was the outcome measure. (Ross R K et al. 1990). This shows that the most reliable predictor of suicide was the self-rated severity of depressive symptoms. This particular study showed that those clients with the highest ratings were 23 times more likely to die as the result of suicide than those with the lowest ratings. It also noted that other independent risk factors (although not as strong), were drinking more than 3 units of alcohol per day and sleeping more than 9 hours a night.

One further relevant point that comes from the O’Connell paper is the fact that expression of suicidal intent should never be taken lightly in the older

age group. The authors cite evidence to show that this has a completely different pattern in the elderly when compared to the younger age groups. (Beautrais A L 2002).

The figures quoted show that if an elderly person undertakes a suicide attempt they are very much more likely to be successful than a younger one. The ratio of parasuicides to completed suicides in the adolescent age range is 200: 1, in the general population it is between 8: 1 and 33: 1 and in the elderly it is about 4: 1. (Waern M et al. 2003). It follows that suicidal behaviour in the elderly carries a much higher degree of intent. This finding correlates with other findings of preferential methods of suicide in the elderly that have a much higher degree of lethality such as firearms and the use of hanging. (Jorm A F et al. 1995).

The paper by Cornwell (Y et al. 2001) considers preventative measures that can be put in place and suggests that independent risk factors commonly associated with suicide in the elderly can be expanded to include psychiatric and physical illnesses, functional impairment, personality traits of neuroticism and low openness to experience, and social isolation. And of these, t is affective illness that has the strongest correlation with suicide attempts. We have discussed (elsewhere) the correlation between impending suicide and contact with the primary care providers. Cornwell cites the fact that 70% of elderly suicides have seen a member of the primary healthcare team within 30 days of their death and therefore proposes that the primary healthcare setting is an important venue for screening and intervention. It is suggested that mood disorders are commonplace in primary healthcare

practice but, because they are comparatively common, are underdiagnosed and often inadequately treated (ageism again).

The authors suggest that this fact alone points to the fact that one of the suicide prevention strategies that can be adopted by the primary healthcare team. they suggest that clinicians, whether they are medically qualified or nursing qualified, should be trained to identify this group and mobilise appropriate intervention accordingly. Obviously the community nurses can help in this regard as they are ideally placed to maximise their contact with vulnerable and high risk groups.

We have identified the role of a major depressive illness in the aetiology of suicide in the elderly. Bruce (M L et al. 2002) considered the role of both reactive and idiopathic major depression in the population of the elderly in a nursing home setting. This has particular relevance to our considerations as firstly, on an intuitive level, one can possibly empathise with the reactive depressive elements of the elderly person finding themselves without independence in a residential or nursing home and secondly, this is perhaps the prime setting where the nurse is optimally placed to monitor the mood and other risk factors of the patient and continual close quarters. The salient facts that we can take from this study are that there was a substantial burden of major depressive symptomatology in this study group (13. 5%). The majority (84%) were experiencing their first major depressive episode and therefore were at greatest risk of suicide. The depression was associated with comorbidity in the majority of cases including “ medical morbidity, instrumental activities of daily living disability, reported pain, and a past history of depression but not with cognitive function or sociodemographic

factors.” All of these positive associations which could have been recognised as significant risk factors of suicide in the elderly.

Significantly, in this study, only 22% of all of the seriously depressed patients were receiving antidepressant therapy and none were receiving any sort of psychotherapy. In addition to this the authors point to the fact that 31% of the patients who were put on antidepressants were taking a subtherapeutic dose (18% because they were purposely not complying with the dosage instructions). The conclusions that the authors were able to draw from this study were that major depression in the elderly was twice as common in the residential setting as opposed to those elderly patients still in the community. The majority of these depressed patients were effectively left untreated and therefore at significant risk of suicide. There was the obvious conclusion that a great deal more could be done for this study population in terms of relieving their social isolation and depressive illnesses. And, by extrapolation, for their risk of suicide.

Ethical considerations.

In consideration of the issue of suicide in the elderly we note that there are a number of ethical considerations but these are primarily in the field of assisted suicide which we have specifically excluded from this study. (Pabst Battin, M 1996)

Having established the evidence base in the literature that defines the risk factors that are known to be particularly associated with suicide in the elderly, we take it as read that this will form part of the knowledge base for the nurse to be alert to, and to identify those patients who are at particular

risk of suicide. It is equally important to be aware of those factors that appear to confer a degree of protection against suicide. This will clearly also help to inform strategies of intervention for the nurse.

Studies such as that by Gunnell (D et al. 1994) point to the fact that religiosity and life satisfaction were independent protective factors against suicidal ideation, and this factor was particularly noted in another study involving the terminally ill elderly where the authors noted that higher degrees of spiritual well-being and life satisfaction scores both independently predicted lower suicidal feelings. (McClain et al. 2003).

The presence of a spouse or significant friend is a major protective factor against suicide. Although clearly it may not be an appropriate intervention for nursing care to facilitate the presence of a spouse (!) it may well be appropriate, particularly in residential settings, to facilitate social interactions and the setting up of possible friendships within that setting (Bertolote J M et al. 2003)

This Dissertation has considered the rationale behind the evidence base for nursing intervention and strategies to prevent or minimise suicide attempts in the elderly age group. We have outlined the literature which is directed at identification of the greatest “ at risk” groups and this highlights the importance of the detection and treatment of both psychiatric disorders (especially major depression), and physical disorders (especially Diabetes Mellitus and gastric ulceration). (Thomas A J et al. 2004)

Although we have been at pains to point out the relatively high and disproportionate incidence of suicide in the elderly, we should not loose sight

of the fact that it is not a common event. One should not take the comments and evidence presented in this dissertation as being of sufficient severity to merit screening the entire elderly population. (Erlangsen A et al. 2003) The thrust of the findings in this dissertation are that the screening should be entirely opportunistic. The evidence base that we have defined should be utilised to identify those who are in high risk groups, for example, those with overt depressive illnesses, significant psychological and social factors, especially those who have a history of previous attempted suicide. The healthcare professional should not necessarily expect the elderly person to volunteer such information and if the person concerned is naturally withdrawn or reserved, minor degrees of depressive symptoms may not be immediately obvious. (Callahan C M et al. 1996).

In terms of direct nursing intervention, this must translate into the need to be aware of such eventualities and the need to enquire directly about them. The nurse should also be aware that the presence of suicidal feelings in a patient with any degree of depression is associated with a lower response rate to treatment and also an increase in the need for augmentation strategies. The nurse should also be aware of the fact that these factors may indicate the need for secondary referral. (Gunnell D et al. 1994).

If we accept the findings of Conwell (Y et al. 1991), then the estimated population at risk from significant mood disorder and therefore the possibility of attempted suicide in the elderly, is 74%. This can be extrapolated to suggest that if mood disorders were eliminated from the population then 74% of suicides would be prevented in the elderly age group. Clearly this is a theoretical viewpoint and has to be weighed against the facts that firstly “

elimination” of mood disorders (even if it were possible), would only be achieved by treatment of all existing cases as well as prevention of new cases, and the secondary prevention of sub-clinical cases.

We know, from other work, that the detection and treatment of depression in all age ranges is low, and even so only 52% of cases that reach medical attention make a significant response to treatment (Bertolote J M et al. 2003). These statistics reflect findings from the whole population and the detection rates and response rates are likely to lower in the elderly. (Wei F et al. 2003).

It follows that although treatment of depressive illness is still the mainstay of treatment intervention as far as suicide prevention is concerned, preventative measures and vigilance at an individual level are also essential. Nursing interventions can include measures aimed at improving physical and emotional health together with improved social integration. Sometimes modification of lifestyle can also promote successful ageing and lead to an overall decrease in the likelihood of suicidal feelings. (Fischer L R et al. 2003)

On a population level, public health measures designed to promote social contact, support where necessary, and integration into the community are likely to help reduce the incidence of suicide in the elderly, particularly if we consider the study by Cornwell (Y et al. 1991) which estimated the independent risk factor for low levels of social contact in the elderly population as being 27%. Some communities have provided telephone lines and this has been associated with a significant reduction in the completed suicide in the elderly (Fischer L R et al. 2003)

To return to specific nursing interventions, one can also suggest measures aimed at reducing access to, or availability of the means for suicide such as restricting access to over the counter medicines. (Skoog I et al. 1996),

Some sources (Cattell H 2000) point to the possibility of introducing opportunistic screening in the primary healthcare setting. The rationale behind this suggestion is the realisation that there is a high level of contact between the suicidal elderly person and their primary healthcare team in the week before suicide (20-50%) and in the month before suicide (40-70% make contact). This is particularly appropriate to our considerations here because of the progressively increasing significance of the role of the nurse within the primary healthcare team particularly at the first point of contact. (Hogston, R et al. 2002)

The evidence base for this point of view is strengthened by reference to the landmark Gotland study (Rutz W et al. 1989) which examined the effect of specific training in suicide awareness and prevention in the primary healthcare team by providing extensive suicide awareness training and measures to increase the facilitation of opportunistic screening of the population. Prior to the intervention, the authors noted that, when compared to young adults, the elderly were only 6% as likely to be asked about suicide and 20% as likely to be asked if they felt depressed and 25% as likely to be refered to a mental health specialist. This balance was restored almost to normality after the intervention.

Suicide in the elderly is a multifaceted and complex phenomenon. It appears to be the case that the elderly tend to be treated with different guidelines

from the young suicidal patient insofar as the increased risk is not met with increased assistance. (Lykouras L et al. 2002). We have presented evidence that the factors included in this discrepancy may include the higher overall number of young suicides, the higher economic burden that society appears to carry for each young suicide together with ageist beliefs about the factors concerning suicide in the elderly.

From the point of view of nursing intervention, both in a hospital and in a community setting, there should be greater emphasis placed on measures such as screening and prevention programmes targeted at the at risk elderly. There is equally a need for aggressive intervention if depression or suicidal feelings are overtly expressed, particularly in the relevant subgroups where additional risk factors may be active, for example those with comorbid medical conditions or social isolation or recent bereavement. (Harwood D et al. 2001),

Many of the elderly spend their last years in some form of sheltered accommodation, whether this is a nursing home, a hospital, warden assisted housing or being cared for by the family. (Haupt B J et al. 1999) In the vast majority of cases this is associated with a loss of independence, increasing frailty and an increasing predisposition to illness that comes with increasing age. (Juurlink D N et al. 2004). This loss of independence and increasing predisposition to illness is also associated with depressive illnesses of varying degrees. (Bruce M L et al. 2002). These patients are arguably, by a large, more likely to come into contact with the nurses in the community. (Munson M L 1999) The comments that we have made elsewhere relating to the nurse’s role in being aware of the implications for the depressed elderly

patient are particularly appropriate in this demographic subgroup. As a general rule, it may be easier to keep a watchful eye on patients who are exhibiting early signs of depressive illness or mood disorder in this situation by making arrangements to visit on a regular basis or on “ significant anniversaries” such as the death of a spouse or a wedding anniversary. (Nagatomo I et al. 1998) when the risk factors for suicide increase dramatically (Schulberg H C et al. 1998)

The literature in this area is quite extensive and covers many of the aspects of suicide in the elderly. It is noticeable however, that there is a great deal of literature on the subject of risk factors and associations of suicide together with plenty of papers which quote statistics that relate the various trends and incidences. There are, by comparison, only a few papers which emphasise and reflect on the positive aspects of nursing care. The positive steps that can be taken by the nursing profession specifically to help to minimise the burden of suicidal morbidity. There is clearly scope for studies in areas such as the impact that a dedicated community nurse might have on the levels of depression in the community if regular visits were timetabled. It is fair to observe that the community mental health nurses fulfil this role to a degree, but are severely hampered in most cases by sheer weight of numbers in the caseload. (Mason T et al. 2003)

Having made these observations, we must conclude that there appears to be an overwhelming case for opportunistic screening of the at risk elderly at any point of contact with a healthcare professional. It is part of the professional remit of any nurse to disseminate their specific professional learning with others. (Yura H et al. 1998). This can either be done on an informal

professional basis in terms of mentorship or, if appropriate in a lecture or seminar situation. (Hogston, R et al. 2002). There clearly is little merit in critically evalua