Suicidal Ideation and Reasons for Living in Elderly and Younger Adults with Depression

And Research Portfolio

Doctor of Clinical Psychology Degree

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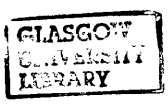

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Chapter 1

Major Research Project Literature Review

Suicidal Ideation in Elderly and Younger Adults with Depression

Prepared in accordance with the submission requirements of the
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(See Appendix 1)

Abstract

Purpose. To review the literature relating to age and parasuicide, and to highlight gaps in the current knowledge of psychological features which relate to parasuicide in the elderly.

Methods. Relevant studies relating to suicide and parasuicide in the elderly, as well as those detailing psychological risk factors found amongst younger adults were obtained through CD-ROM search. The main findings are summarised below.

Results. Studies investigating elderly suicidal behaviour have consistently found high rates of depression and suicide intent, and high rates of physical illness. The evidence does not support the assumption that depression and suicide in the elderly are the rational response to a negative life situation and ill health. Several psychological features of parasuicide amongst younger adults have been identified. These include deficits in memory and problem solving, hopelessness, and the absence of certain positive and adaptive attributes.

Conclusions. Psychological features which have been linked to suicide risk amongst younger adults warrant further investigation amongst the elderly.

Introduction

Epidemiological data clearly highlight differences in the suicidal behaviour of elderly and younger adults. Rates of suicide are comparable in both populations. Figures for Scotland in 1995 reveal rates of suicide per 100,000 population of 29 for males aged 35-44, and 19 for males aged 75-84, whilst males older than 85 have a rate of 27 per 100,000 (NHS Information and Statistics Division). Females have lower rates of suicide overall, but show a similar pattern of relatively high rates in the elderly. Rates of parasuicide are markedly different, (Platt, 1992; Lindesay and Murphy,1987; Pierce,1987) with rates of parasuicide declining steadily with age in both males and females, although females tend to have a higher rate of parasuicide overall. There has been relatively little research to date examining possible reasons for this difference.

Age and Parasuicide

Two key studies have investigated the impact of age on suicidal behaviour. Kreitman (1976) compared three age groups of parasuicide patients, admitted to a Poisoning Treatment Centre

in 1968 and 1969, on various demographic and clinical features. All three age groups were found to have high rates of depression, between 50 and 60%. The highest rate of chronic physical illness was found in the older age group, with the lowest rate occurring in the youngest age group. Merrill and Owens (1990) conducted a similar study, noting that theirs was the first to replicate Kreitman's study. Their findings were broadly similar. Depression again emerged as an important factor, with a similar rate of roughly 60% in younger and middle aged subjects, however it was found to be even higher amongst elderly subjects at 96%. This difference may be due to different definitions of 'elderly', (Kreitman's elderly group were over 55 years, whilst Merrill and Owens' were over 65 years). Again, physical illness was most common amongst the elderly. Merrill and Owens also compared the age groups on level of suicidal intent, and found this to be much higher in the elderly group. They concluded that elderly suicide attempters more closely resemble suicide completers than they do suicide attempters in younger age groups. This conclusion has been well supported by studies of attempted and completed suicide in the elderly.

Suicide and Parasuicide in the Elderly

High rates of depression have consistently been noted, both amongst those attempting suicide (Hepple and Quinton, 1997; Draper, 1994; Nowers, 1993; Nieto et al, 1992; Upadhyaya et al, 1989; Pierce, 1987; Frierson, 1991), and those completing suicide (Shah and Ganesvaran, 1997; Cattell and Jolley, 1995; Conwell et al, 1991). Estimates range between 60 and 90%. Similarly, high rates of physical illness (around 50%) have been found in both populations, (Hepple and Quinton, 1997; Cattell and Jolley, 1995; Draper, 1994; Nowers, 1993; Nieto et al, 1992; Conwell et al, 1991; Upadhyaya et al, 1989; Pierce, 1987). Further, in those studies of attempted suicide which have measured suicide intent, this has been high amongst a large proportion of the elderly (Hepple and Quinton, 1997; Draper, 1994; Nowers, 1993; Upadhyaya et al, 1989; Pierce, 1987). This is in comparison with younger suicide attempters, up to 50% of whom may report having had no wish to die at any stage (Williams, 1986). Beyond these

three features, the studies cited above have tended to document demographic features, as well as previous psychiatric history, previous parasuicide, and rate of repetition of parasuicide.

There is some evidence that elderly individuals with late onset of depression (60 years or above) may constitute a group at particular risk of suicide. Conwell et al (1991) conducted 'psychological autopsies' of 18 elderly suicides and found that most had had late-onset of depression. Lyness et al (1992) conducted a retrospective chart review of the 168 patients over 60 years treated at an in-patient psychiatric unit over a 6 year period. The 25 patients who had made a suicide attempt were significantly more likely to have had a late-onset depression, and were also more likely to have a history of parasuicide. Rifai et al (1994) found that 11 elderly patients with a history of parasuicide had higher hopelessness scores than the 52 patients without, a difference which remained after treatment. The authors suggested that due to continued high level of hopelessness these patients were at particular risk of further parasuicide.

It has repeatedly been observed that elderly suicide attempters closely resemble elderly suicide completers in many demographic and clinical characteristics (Hepple and Quinton, 1997; Nowers, 1993; Lindesay, 1991; Merrill and Owens; Pierce, 1987, Frierson, 1991). This is in marked contrast to the literature which highlights differences in the characteristics of younger adults attempting or completing suicide (Williams and Pollock, 1993; MacLeod et al, 1992). What can account for this difference between older and younger suicide attempters?

It has been suggested that there is an apparent rationality to suicide in the elderly, and that this view has hampered the investigation of psychological factors contributing to suicidal behaviour in this population (Kerkhof et al, 1991; Kerkhof and de Leo, 1991; Lindesay, 1991). Negative life events such as bereavement, isolation and serious physical illness are all more common, and may often be taken as sufficient explanation for the seriousness of suicidal behaviour in the elderly. The evidence does not support this assumption, and suggest that, whilst physical illness and negative life events may contribute to suicidal thinking in the elderly, it is depression which has the most important role.

In a survey of the population aged 85 years and over in a city in Sweden, Skoog et al (1996) found that suicidal thoughts were reported by only 4% of mentally healthy adults, none of whom reported seriously considering suicide. By contrast, roughly 60% of adults diagnosed as having mental disorders, and depression in particular, reported suicidal thoughts, and 18% reported having considered suicide. They found that although a significant proportion of the sample were suffering from physical disorders, this did not, on the whole correlate with suicidal thoughts unless the individual was suffering from three or more physical disorders. The findings of this study strongly suggest that it is depression and depressive thinking which contribute to suicidal behaviour in the elderly, with physical factors having a lesser contributing effect. Rao et al (1997) found that in 118 community residents over 80 years, only nine showed evidence of suicidal ideation, and that this was related to depression. Hepple and Quinton (1997) found that although 53% of their sample of 100 suicide attempters over 65 years were suffering from significant physical illness, less than half of these did not also have a psychiatric diagnosis. Similarly, Nieto et al (1992) found that whilst 50% of their sample of 38 elderly adults who had made serious suicide attempts were physically ill, of these, 95% were concurrently depressed. They conclude that serious suicidal behaviour in the elderly is generally the result of treatable affective disorder. Lindesay (1991), in a review of research on elderly suicide, notes that even in terminally ill elderly people, suicidal thoughts are associated with depression, and respond to treatment.

This may also be true of the general adult population. Brown et al (1986) interviewed 44 terminally ill adults and found that all ten who reported that they desired death were suffering from depression. In a review of the evidence linking medical illness and suicide, MacKenzie and Popkin (1990) suggest that although the link seems plausible, it is not well proven. Of eleven studies reviewed, none had a well matched control group. Those committing suicide in the presence of medical illness tended also to exhibit depression or psychiatric illness. The possibility that depression preceded the medical illness was generally not investigated. It is also suggested that the high rates of physical illness noted in elderly suicidal patients may

simply be a consequence of the higher rates of physical illness in the elderly population in general.

None of the studies reviewed so far have considered the particular features of depression in the elderly which may contribute to the observed high levels of suicidal intent. In a recent review of current knowledge, Dennis and Lindesay (1995) point out that since depression is so common in the elderly, it is not a useful predictor of suicidal behaviour in itself, and highlight the need for a focus in research on specific cognitive features of depression relating to suicide. The need for research aimed at furthering understanding of the psychological characteristics of both elderly and younger suicide attempters is well documented, (e.g. Hawton, 1997; Hawton and Fagg, 1990). Despite the neglect of this topic in the elderly population, relatively more research has been directed at the identification of psychological characteristics in the younger population.

Cognitive Features of Suicide and Parasuicide - Hopelessness and Reasons for Living

In a comprehensive review of knowledge about suicidal behaviour, MacLeod et al (1992) identified several relevant psychological features. These included memory for personal events, interpersonal problem solving and hopelessness. Several studies have attempted to clarify the links between hopelessness and suicidal behaviour.

Hopelessness. Hopelessness, has been defined as a pervasively negative view of the future, particularly one's own. The concept of hopelessness was first formalised by Beck, with the development of the Beck Hopelessness Scale, (HS, Beck et al, 1974). The HS was developed partly due to an awareness that hopelessness could be a more important indicator of suicidal intent than depression alone. Following the development of the Scale for Suicidal Ideation (SSI, Beck et al, 1979) the relationships between these variables could be formally tested. Beck et al (1979) found positive correlations between the HS, Beck Depression Inventory (BDI, Beck et al, 1961), and the SSI amongst 90 in-patients with suicidal ideation. Whilst the positive correlation remained between the SSI and HS when the BDI was controlled, the

relationship between the BDI and SSI did not remain when the HS was controlled. Hopelessness mediated the relationship between depression and suicidal intent as measured by the SSI. Whilst the SSI was designed to assess suicidal intent of individuals who had not made a recent suicide attempt, the Suicidal Intent Scale (SIS, Beck et al, 1974) was designed to measure suicidal intent in recent parasuicides. Dyer and Kreitman (1984) tested the relationship between depression, hopelessness and suicidal intent using the SIS amongst 120 parasuicides, finding the same links as Beck et al (1979) found amongst suicidal ideators. Further evidence of the importance of hopelessness in suicide was reported by Beck et al, (1985; 1990). In the first of these two studies, a cut-off score of 9 on the HS correctly identified 91% of the eventual suicides amongst 207 in-patients with suicidal ideation. In the second study, the same cut-off score successfully identified more than 94% of the eventual suicides amongst 1,958 psychiatric out-patients. In both these studies, a high rate of false positives showed that hopelessness, whilst an important risk factor for suicide, was not able to account for all of the variance between those who attempt suicide and those who do not. It has been suggested that certain protective factors may be present amongst some individuals with suicidal ideation and hopelessness, which help to prevent them from attempting suicide.

Reasons for Living. The Linehan Reasons for Living Inventory (RFL, Linehan et al, 1983), was designed to assess the positive and adaptive attributes thought to be important in preventing individuals from becoming suicidal. The inventory was found to discriminate between those with a history of parasuicide and those without, both amongst 197 non-clinical subjects, and 175 psychiatric in-patients. Those with a history of parasuicide reported weaker reasons for living. Factor analysis revealed six factors: Survival and Coping Beliefs, Responsibility to Family, Child-Related Concerns, Fear of Suicide, Fear of Social Disapproval and Moral Objections, of which the first proved to have the best discriminative power. Dyck (1991) investigated the links between the HS and the RFL. The two scales were found to correlate strongly with one another, and with measures of suicidal intent. However, they were also found to measure two separate constructs. The HS was found to be more strongly related to depression than to suicidal intent, whilst the RFL did not correlate with depression measures

or diagnoses. Thus the RFL does not seem to measure lack of hopelessness, but rather a separate construct, linked to suicidal intent and independent of depression, which may therefore prove to be useful in differentiating depressed patients from those at risk of suicide.

These studies reflect a growth in understanding of the complex cognitive and psychological features linked to suicidal behaviour in younger adults. In depressed individuals, high levels of hopelessness and the absence of positive attributes, particularly a sense of one's own capability, seem to be strongly associated with suicide risk. Little is known about the way in which these variables relate to suicide risk amongst the elderly. The few studies which have examined these factors in the elderly have produced inconclusive results. Rifai et al (1994) tested a sample of 63 elderly depressed out-patients, and found higher HS scores amongst those with a history of parasuicide. However Trenteseau et al (1989) found that whilst hopelessness as measured by the Geriatric Hopelessness Scale (GHS, Fry, 1984) was associated with depression amongst 50 psychiatric in-patients over 55 years, it was not related to suicidal variables. Whilst Hill et al (1988) found that the HS predicted suicidal ideation amongst 120 depressed elderly, it accounted for a much smaller variance in suicidal ideation than has been found amongst younger adults.

Features of Depression in the Elderly

A number of features of depression in the elderly have been highlighted in the literature relating to cognitive therapy in this population. The increased likelihood of depressed elderly patients presenting with somatic symptoms has been noted, (Koder et al, 1996; Morris and Morris, 1991; Thompson et al, 1986; Steuer and Hammen, 1983). It has also been noted that elderly people are more likely to seek medical than psychiatric advice prior to suicide attempts, (Cattell and Jolley, 1995; Conwell et al, 1991). Elderly people may not associate somatic symptoms with depression, and see them as physical complaints, or part of the normal ageing process. Retrospective studies of elderly completed suicides which have noted poor physical health as a precipitant, (Cattell and Jolley, 1995; Conwell et al, 1991), may in fact be

uncovering mislabelled depression. It seems that health professionals may also fail to identify depression in the elderly correctly. Several investigators have found that depression in the elderly is often either untreated, or mistreated. Crawford et al (1998) intervewed all residents over 65 years old in an electoral ward in London, as well as the GPs responsible for their care. Of 370 residents for whom complete data was obtained, 18% were diagnosed with depression by the authors. GPs recognised only 50% of these as suffering from depression. Of these, only 38% were receiving active treatment, and only 9% were referred to mental health services. Skoog et al (1996) noted that in a sample of elderly community residents reporting suicidal ideation, anxiolytic treatment was far more common than anti-depressant medication. Similarly, Draper (1994) found that amongst 69 depressed elderly attempting suicide treatment with benzodiazepines was common. Further studies have noted low rates of antidepressant medication amongst depressed elderly parasuicide and suicide patients, (Hepple and Quinton, 1997; Cattell and Jolley, 1995; Schmid et al, 1994; Conwell et al, 1991). The elderly constitute a very small proportion of psychiatric in-patient suicides, (Shah and Ganesvaran, 1997; Modestin, 1989). This is surprising given the high rates of elderly suicide found in the community. It has been suggested that this may be because depression is under-detected in the elderly, who are therefore not hospitalised, and commit suicide in the community. These findings are consistent with the existence of beliefs, noted earlier, that depression and suicide in the elderly are the rational response to life situation. Understanding of suicidal behaviour in the elderly is likely to be improved by a greater emphasis on the investigation of depression and psychological features of depression in the elderly.

Research Implications

The extent to which the psychological features of suicide risk noted in younger adults may also be relevant to the elderly is not known. Given the high suicidal intent of elderly parasuicides, and the higher rates of completed to attempted suicide amongst the elderly, it could be that the cognitive and psychological features are simply evidenced in the elderly parasuicide population to a greater degree than amongst younger parasuicides. If so, the reasons for this phenomenon

would require clarification. However, given that elderly parasuicides do not seem to resemble younger parasuicides so much as they do completed suicides, it may be that there is something qualitatively different in the cognitive and psychological features of these patients which could help to explain the observed differences in behaviour. Differences noted in the presentation of depression in the elderly deserve further investigation, and the relevance to the elderly of known psychological measures of risk of suicide needs to be clarified. The proposed study will be a preliminary investigation of some of the known aspects of the psychological profile of suicide risk amongst depressed elderly and younger adults with depression.

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Chapter 2

Major Research Project Proposal

Suicidal Ideation and Reasons for Living in Elderly and Younger Adults with Depression

Major Research Project Proposal

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Title: **Suicidal Ideation and Reasons for living in Elderly and Younger Adults with Depression: A pilot study**

Summary

The rate of suicide in the elderly population is high, and comparable to that amongst younger adults. By contrast, the rate of parasuicide decreases steadily with age in both males and females. There has been very little research aimed at the clarification of this difference in suicidal behaviour between elderly and younger adults. Of the two studies which have compared older and younger suicide attempters, depression was identified as an important feature in both population samples. Suicidal intent was found to be higher in the elderly sample, and was the main difference between the two samples. Studies investigating suicidal behaviour in the elderly have consistently found high levels of depression and suicidal intent, and have noted that elderly suicide attempters more closely resemble suicide completers than they do younger suicide attempters. In younger population samples, depression, hopelessness, suicidal ideation and reasons for living have been found to be important features in those at risk of suicidal behaviour. It may be that there are differences between elderly and younger adults on these variables, which would help to explain the observed differences in suicidal behaviour. A sample of depressed elderly and of depressed younger adults will therefore be compared on these cognitive features.

Introduction

Rates of suicide in the elderly are comparable to those amongst younger adults. Figures for Scotland in 1995 reveal rates per 100,000 population of 29 for males aged 35-44, and 19 for males aged 75-84, whilst males older than 85 have a rate of 27 per 100,000 (NHS Information and Statistics Division). Females have lower rates of suicide overall, but show a similar pattern of relatively high rates in the elderly. A consistent finding, however, has been of a low rate of parasuicide in the elderly, (Lindesay and Murphy,1987; Pierce,1987; Platt, 1992), with rates of parasuicide declining steadily with age in both males and females, although females tended to have a higher rate of parasuicide overall.

There have been very few studies investigating the impact of age on suicidal behaviour. Kreitman (1976) compared three age groups of parasuicide patients admitted to a Poisoning Treatment Centre in 1968 and 1969. As well as demographics and social factors, he compared various clinical features. Of note are the following findings. Rates of depression in all age groups were high, at between 50 and 60%. Physical illness was found to be most common in the elderly group, and lowest in the youngest group. Merrill and Owens (1990) conducted a similar study, noting that theirs was the first to replicate Kreitman's study. Their findings were broadly similar. Depression again emerged as an important factor, with a similar rate of roughly 60% in younger and middle aged subjects, however it was found to be even higher amongst elderly subjects at 96%. Again, physical illness was most common amongst the elderly. Interestingly, Merrill and Owen also compared the age groups on level of suicidal intent, and found this to be much higher in the elderly group. They concluded that elderly suicide attempters more closely resemble suicide completers than they do suicide attempters in younger age groups.

Whilst it remains a relatively small body of work, there have been a number of studies which have investigated features of elderly attempted and completed suicide. One of the most consistent findings has been that amongst elderly individuals attempting or completing suicide, depression is common (between 60 and 90%), (Cattell and Jolley, 1995; Nowers, 1993; Draper, 1994; Frierson, 1991; Pierce, 1987; Hawton and Fagg, 1990; Hepple and Quinton, 1997; Conwell et al, 1991; Shah and Ganesvaran; 1997; Upadhyaya et al 1989 and Nieto et al, 1992). A second common finding is that a high proportion of this population also suffer from significant physical problems. This has generally been measured at around 50%, (Cattell and Jolley, 1995; Conwell et al, 1991; Nowers, 1993; Draper, 1994; Hepple and Quinton, 1997; Nieto et al, 1992 and Pierce, 1987). It has been suggested that elderly adults with late-onset of depression may be at particularly high risk of suicide (Conwell et al, 1991; Lyness et al, 1992). It has been repeatedly observed that elderly suicide attempters show high levels of suicidal intent, and more closely resemble suicide completers than they do younger suicide attempters (Merrill and Owens, 1990; Draper, 1994; Hepple and Quinton, 1997; Lindesay, 1991; Pierce, 1987 Upadhyaya et al, 1989 and Nowers, 1993).

Kerkhoff and de-Leo (1991), point out that there is an apparent rationality of suicide in the elderly. Negative life events such as bereavement, isolation and serious physical illness are all more common, and are often taken as sufficient explanation for the serious suicidal behaviour in the elderly. The evidence does not support this assumption, and suggest that, whilst physical illness and negative life events may contribute to suicidal thinking, it is depression which has the most important role. In a survey of the population aged 85 years and over in a city in Sweden, Skoog et al (1996) found that suicidal thoughts were reported by only 4% of mentally healthy adults, none of whom reported seriously considering suicide. By contrast, roughly 60% of adults diagnosed as having mental disorders, and depression in particular, reported suicidal thoughts, and 18% reported having considered suicide. They found that although a significant proportion of the sample were suffering from physical disorders, this did not, on the whole correlate with suicidal thoughts unless the individual was suffering from three or more physical disorders. The findings of this study strongly suggest that it is depression and depressive thinking which contribute to suicidal behaviour in the elderly, with physical factors having a lesser contributing effect. Similarly, Nieto et al (1992) found that whilst 50% of their sample of elderly adults who had made serious suicide attempts were physically ill, of these, 95% were concurrently depressed. They conclude that non-fatal serious suicidal behaviour in the elderly is generally the result of clinically significant, treatable affective disorder. Lindesay (1991), in a review of research on elderly suicide, notes that even in terminally ill elderly people, suicidal thoughts are associated with depression, and respond to treatment.

None of the studies cited above have considered the particular features of depression in the elderly which may contribute to the observed high levels of suicidal intent. In a recent review of current knowledge, Dennis and Lindesay (1995) point out that since depression is so common in the elderly, it is not a useful predictor of suicidal behaviour in itself, and highlight the need for a focus in research on specific cognitive features of depression relating to suicide. In fact, even in the general adult population, psychological processes implicated in suicidal behaviour are not well understood. However, factors such as hopelessness, suicidal ideation

and a lack of reasons for living have been implicated, (MacLeod et al, 1992; Williams and Pollock. 1993; Hawton, 1997).

Suicide is a considerable problem amongst the elderly. There seem to be differences in the suicidal behaviour exhibited by elderly and by younger adults. It is not yet clearly understood why this may be so. Given that depression is so clearly implicated in the suicidal behaviour and thinking of both elderly and younger adults, a sample taken from the population of depressed adults would be a sensible choice for the investigation of differences in suicidal ideation and intent between younger and elderly adults.

Aims and Hypotheses

Aims

To investigate specific cognitive features of depression which relate to suicidal intent and ideation in a sample of depressed elderly patients, and to compare these with a sample of younger depressed adults.

Research Questions

Are there differences between elderly and younger depressed adults on measures of suicidal ideation and intent?

Specific hypotheses include the following:

It is expected that elderly patients will exhibit more hopelessness than younger patients; that they will have higher levels of suicidal intent as measured by the Scale for Suicidal Ideation and will report weaker reasons for living as measured by the Reasons For Living Inventory.

Plan of Investigation

Subjects

A sample of adults aged between 25 and 55yrs, and one of adults aged over 65yrs, drawn from consecutive referrals to psychology and psychiatric services. Those fulfilling clinical criteria for a primary diagnosis of depression, will be interviewed on one occasion on a range of measures outlined below.

It is hoped that 20 adults in each age group will be interviewed, with roughly equal numbers of each sex in each age band.

Exclusion criteria

All participants will initially be screened using the Mini Mental State Examination (Folstein, Folstein and McHugh, 1975), to exclude those suffering from dementia. A cut-off score of 23 will be used in accordance with that generally recommended (Tombaugh and McIntyre, 1992).

Individuals with a diagnosis of psychotic illness will be excluded, as will those with serious current substance misuse.

Physical illness has consistently been identified as an important feature of both attempted and completed suicide in the elderly. The relationship between physical illness and depression is not well understood, but current evidence suggests that physical illness is not itself either necessary or sufficient to cause suicidal ideation or intent. It is therefore intended to include all patients with a primary diagnosis of depression, regardless of physical status, although participants will be asked about physical problems.

Measures

Diagnostic Interview: Structured Clinical Interview for DSM IV (APA, 1994)

Hospital Anxiety and Depression Scale (Zigmond and Snaith, 1983)

Scale for Suicidal Ideation (Beck et al, 1979)

Hopelessness Scale (Beck et al, 1974)

Linehan Reasons for Living Inventory (Linehan et al, 1983)

Design and Procedure

Consecutive referrals of older and younger adults, to in and out-patient psychology or psychiatric services in Glasgow, will be selected and asked to participate in the study. Participants will be interviewed on one occasion in the department or ward to which they have been referred.

The Hospital Anxiety and Depression Scale (HADS): a measure of the severity of depression and anxiety which is designed to be relatively unaffected by concurrent physical illness. Its use with depressed adults has been extensively researched, and it has also been identified as a valid and reliable screening instrument for use with the elderly, (Kenn et al, 1987).

The Scale for Suicidal Ideation (SSI): a measure of the degree of suicidal intention in individuals who have not made any recent overt suicide attempt.

The Hopelessness Scale (HS): a scale designed to assess levels of hopelessness and negative expectancies. A mean score of 4.45 (SD 3.09) was found in a general population sample (Greene, 1981), and a score of 9 or above recommended as indicative of suicide potential (Beck et al, 1985; 1990).

The Linehan Reasons for Living Inventory (RFL): designed to assess features which may be important in preventing an individual from becoming suicidal. Unlike the majority of scales relating to suicide which identify and quantify negative attributes of suicidal individuals, the RFL focuses on positive and adaptive attributes which may help to prevent an individual becoming suicidal. Each of the 48 items are rated from 1 (not at all important) to 6 (extremely important) as reasons for not committing suicide. Individuals receive a total mean score out of 6. A greater number of reasons rated as important signifies 'stronger' reasons for living, whilst fewer reasons endorsed as being important signifies 'weaker' reasons for living.

Participants will also be asked about marital status, living situation, number of children, previous episodes of depression, length of current episode, and previous parasuicide.

NB. Any individuals assessed who are identified as being at risk for suicide will be referred for appropriate help using the procedures employed in standard clinical practice.

Data Analysis

As well as descriptive statistics and qualitative analyses of the results, a number of bivariate and multivariate analyses will be undertaken using SPSS-PC, to identify differences between the two samples, and to measure the degree of association between the questionnaires used.

Chi square: Age group by demographic details, including previous parasuicidal acts

T-tests: Age group by scores on: SSI, HS and RFL

Correlations: Associations between the measures in each age group

If numbers allow, the same comparisons will also be made between elderly participants with early and late-onset of depression

Ethical Approval

This project was approved by the Research Ethics Committee of Greater Glasgow Community and Mental Health Services NHS Trust on 6 August 1997.

Practical Applications

Reduction in the rate of suicide by the year 2000 is one of the targets outlined in the government policy document 'The Health of the Nation' White Paper (Department of Health, 1992). The elderly constitute a significant proportion of those attempting and completing suicide. Better understanding of the psychological processes implicated in producing suicidal behaviour in the elderly, such as depression and suicidal ideation, will assist in identification of those at risk, and in guiding treatment interventions to reduce the rate of suicide.

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Chapter 3

Major Research Project Paper

Suicidal Ideation and Reasons for Living in Elderly and Younger Adults with Depression

Prepared in accordance with the submission requirements of the British Journal of Clinical Psychology

(See Appendix 1)

Abstract

Objectives. This study examines the relationships between hopelessness, suicidal ideation and reasons for living amongst a sample of depressed elderly in comparison with younger depressed adults. The utility of these factors as indicators of suicidal risk in the elderly is discussed.

Design. A cross-sectional comparison of elderly and younger adults with depression.

Methods. 18 adults over 65 years, and 20 aged between 25 and 55 years completed assessments of depression, hopelessness, suicidal ideation and reasons for living, as well as giving a range of demographic and clinical details.

Results. Significantly more of the younger adults reported high levels of suicidal ideation and weaker reasons for living than the elderly. In the younger group suicidal ideation was associated with high levels of hopelessness and weaker reasons for living. Amongst those in the elderly group reporting late onset of depression, higher level of depression was associated with low reported suicidal ideation and stronger reasons for living, whilst higher suicidal ideation was related to weaker reasons for living.

Conclusions. Differences between the elderly and younger groups suggest that cognitive indicators of suicidal risk may not be the same in elderly and younger adults. Specifically, low reports of suicidal ideation in elderly depressed adults may mask serious risk of suicide. The efficacy of the Scale for Suicide Ideation and the Reasons for Living Inventory in assessing the suicide risk of elderly adults is called into question.

Introduction

There is a considerable body of research which has aimed to clarify the cognitive features of depression which are associated with risk of suicide amongst younger adults. Several features have been identified, and the relationships between these and suicidal ideation and intent assessed. The bulk of the literature relating to elderly suicide has been concerned with clinical and demographic characteristics of elderly suicide attempters and completers (see Chapter 1), and there has been little assessment of the cognitive features which may increase suicide risk amongst depressed elderly. Although it has been recommended that self report scales such as the Beck Hopelessness Scale (HS, Beck et al, 1974) and the Scale for Suicidal Ideation (SSI, Beck et al, 1979) be used in the assessment of suicide risk amongst the elderly (Gallacher-Thompson and Osgood, 1997; McIntosh, 1994), it is not clear whether these measures relate to suicide risk in the same manner amongst elderly and younger adults.

The purpose of the present study was to examine the relationships between depression, hopelessness, suicidal ideation and reasons for living in a sample of elderly depressed adults in comparison with younger depressed adults. The research question was: can it be assumed that elderly depressed adults responses to these self report questionnaires are comparable to the responses of younger adults with depression? Given the differences in the suicidal behaviour of elderly and younger adults, and the higher intent found amongst elderly parasuicides, it was hypothesised that the elderly would respond differently. Specific hypotheses were that the elderly would report more hopelessness and weaker reasons for living than the younger adults.

Method

Participants

Two groups of people participated in the study: an elderly group, aged over 65 years, and a younger group, aged between 25 and 55 years. These age bands were chosen in order clearly to differentiate the two age groups. All participants were currently receiving treatment or services from Greater Glasgow Community and Mental Health NHS Trust, and had been identified as having a current primary diagnosis of depression. This was confirmed using the Structured Clinical Interview (SCID) for DSM IV, depression section, with all participants. All were screened with the Mini Mental State Examination (MMSE; Folstein, Folstein and McHugh, 1975) to exclude those with dementia or serious cognitive impairment. A cut-off score of 23 was chosen, consistent with that generally recommended (Tombaugh and McIntyre, 1992). Those with a diagnosis of psychotic illness were also excluded.

Elderly Group. This consisted of 18 participants aged between 65 and 93 years (mean 73.67 years, SD 5.82), 7 males and 11 females. 11 were out-patients, 4 of whom attended a day unit one day a week. 7 were in patients in acute psychogeriatric wards. 11 of those approached declined to take part in the study, or refused to complete the assessment. 5 did not fulfill diagnostic criteria for depression, and 2 were excluded due to low MMSE scores.

Younger Group. This consisted of 20 participants aged between 25 and 55 years (41.3 years, SD 7.12), 8 males and 12 females. 19 were out-patients, and 1 an in-patient in an acute psychiatric wards. 10 people in this age group declined to take part. There were no other exclusions.

Procedure and Measures

All participants were interviewed on one or two occasions by the author. Participants were asked about marital status, living situation, whether they had children, the duration of the current episode of depression, and the number of previous episodes. Information regarding current physical health and disability was collected using the short screening method recommended by Burvill, Mowry and Hall (1990). This entailed asking participants how much they considered any health problems interfered with their daily activities. The following measures were administered in the form of a semi-structured interview:

The Scale for Suicide Ideation (SSI; Beck et al, 1979), the Hopelessness Scale (HS; Beck and Weissman, 1974), and the Linehan Reasons for Living Inventory (RFL; Linehan et al, 1983) were administered to access cognitive styles and specific thoughts known to be associated with depression and suicidal behaviour. Further details of these questionnaires can be found in Chapter 2. The Hospital Anxiety and Depression Scale (HADS; Zigmond and Snaith, 1983), a measure of current levels of anxiety and depression which is designed not to be influenced by current physical problems, was chosen due to anticipated high levels of physical illness in the elderly group. The HADS depression scale is widely used, and has been found to be a valid screening measure amongst the elderly (Kenn et al, 1987). A cut-off score of 8 was chosen as predictive of clinically significant depression (Hamer et al, 1991). Participants were also asked about parasuicidal behaviour and number of previous suicide attempts.

Data Analysis

Demographic and clinical characteristics of the two groups were compared using the chi square and Fisher's Exact tests. Comparisons between the elderly and younger groups on test variables were made using the Mann-Whitney test, since the data did not meet parametric criteria. Relationships between the test variables in the elderly and younger groups were assessed using the Spearman correlation.

Elderly participants reporting onset of depression prior to age 60 years (early onset) were compared with those reporting onset of depression after age 60 years (late onset) on the same range of variables.

Results

Characteristics of the elderly and younger groups

Table 1 details the demographic and clinical characteristics of the elderly and younger participants. There were no significant differences between the two groups in terms of gender ratio or living situation, and similar numbers in each group had children. Not surprisingly, those in the elderly group were more likely to be widowed. However, when numbers of those who were single, widowed or divorced were combined and compared with numbers of married participants, there was no significant difference between elderly and younger groups in numbers of participants currently in a spousal relationship (χ^2=.986, df=1, n.s.). There was no significant difference between the groups on numbers of those reporting 'a great deal' of interference from physical symptoms, compared with a combination of those reporting 'only a little' or no interference. There was no significant difference between the two groups in the ratio of those who had or had not made prior suicide attempts, or in number of previous episodes of depression reported (either none, one or several). A greater proportion of elderly than younger participants were in-patients at the time of testing (p=.016). MMSE scores were significantly lower amongst the elderly group (U=90.5, p<0.01).

Insert Table 1 here

Suicidal ideation - elderly and younger groups

Several differences were found between the elderly and younger groups on the test measures (see Table 2). Whilst elderly and younger participants were well matched for level of

depression (as measured by the HADS depression scale; HADS-D), those in the younger group were significantly more likely to report high levels of anxiety on the HADS anxiety scale, (HADS-A, $U=110.5$, $p<0.05$). Younger participants were significantly more likely to report high levels of suicidal ideation as measured by the SSI ($U=86$, $p<0.01$), with significant differences between the two groups on all factors. Younger participants were also significantly more likely than the elderly to report weaker reasons for living on the RFL ($U=94$, $p<0.05$). An examination of the individual factors of the RFL showed that the groups differed only on the Survival and Coping Beliefs, and Moral Objections factors, with elderly participants more likely than younger participants to rate items in these categories as important reasons for living ($U=94.5$, $p<0.05$; and $U=101.5$, $p<0.05$, respectively). Three of the elderly participants did not complete the RFL. Their scores were pro-rated to obtain total scores. The two groups did not differ significantly in HS scores, and all but 2 subjects (both younger) had a total score of 9 or above.

Insert Table 2 here

Associations between the measures: elderly and younger groups

Different associations between the measures were found amongst the elderly and younger groups (see Table 3).

Younger Group. Amongst the younger group there was a positive correlation between HS scores and SSI scores ($r=0.62$, $p<0.01$), and a negative correlation between RFL scores and SSI scores ($r=-0.593$, $p<0.01$). Thus, younger participants reporting high levels of hopelessness tended also to report high levels of suicidal ideation, and those reporting a high level of suicidal ideation tended also to report weaker reasons for living.

Elderly Group. Amongst the elderly group there was a positive correlation between HADS-A scores and RFL scores ($r=0.471$, $p<0.05$), with those reporting a high level of anxiety tending also to report stronger reasons for living. There was a negative correlation between HADS-D

scores and SSI scores ($r=-0.704$, $p<0.01$), with those reporting a high level of depression tending to report less suicidal ideation.

Insert Table 3 here

Comparisons between early onset and late onset depression

Six of the elderly participants reported onset of depression prior to age 60 years, with 12 reporting onset after age 60 years. Details of the demographic and clinical characteristics of the early and late-onset participants are shown in Table 5 (see Appendix 3). No significant differences were found on any of the demographic variables. Comparing clinical variables, those with early-onset were significantly more likely to report previous parasuicide, and more previous episodes of depression than those with late-onset ($p=0.043$, and $p=0.043$, respectively). There was no significant difference in MMSE scores. No significant difference was found in HADS-A or HADS-D scores. Nor were there any significant differences in scores on the SSI, or RFL scores between early and late-onset groups. The only significant difference between the two groups was found on the Loss of Motivation factor of the HS. Late-onset participants were significantly more likely than early-onset participants to report hopelessness on items loading on this factor ($U=14$, $p<0.05$). Details of these test scores can be found in Table 6, Appendix 3.

Associations between the measures: early onset and late onset depression

Differences in the associations between the measures amongst early and late onset elderly groups are detailed in Table 4.

Early-Onset Group. The only association found between measures in this group was a positive correlation between HADS -A and HADS-D scores ($r=0.883$, $p<0.05$). Thus, those reporting a high level of anxiety were also more likely to report a high level of depression.

Late-Onset Group. In this group there was a positive association between RFL scores and both HADS-A ($r=0.75$, $p<0.01$) and HADS-D scores ($r=0.59$, $p<0.05$). Thus, those reporting stronger reasons for living were more likely to report both higher levels of anxiety and depression. HADS-D scores were negatively correlated with SSI scores ($r=-0.696$, $p<0.05$), and SSI scores were negatively correlated with RFL scores ($r=-0.654$, $p<0.05$). Those reporting higher levels of depression were more likely to report less suicidal ideation, however amongst those reporting a high level of suicidal ideation, there was a tendency also to report weaker reasons for living.

Insert Table 4 here

Discussion

The main hypothesis of this study, that elderly participants would respond differently on the test questionnaires, was supported. Specific hypotheses regarding higher hopelessness and weaker reasons for living amongst the elderly were not supported. In fact, there was no significant difference in level of hopelessness between the elderly and younger groups, and high levels of hopelessness were found in both groups. Only 2 participants, both younger, scored below 9 on the HS, the cut-off score identified as being strongly predictive of suicide risk (Beck et al, 1985, 1990). Furthermore, similar numbers in both groups (about 50%) reported a history of parasuicide. Both groups, therefore contained a high proportion of participants who were at risk of suicidal ideation and parasuicide. However, younger participants were significantly more likely than the elderly to report high levels of suicidal ideation and weaker reasons for living.

Demographic features of the two groups were broadly similar, with some predictable differences. Whilst elderly participants were more likely to be widowed than younger participants, they were no less likely to be in a spousal relationship, and no more likely to be living alone. The elderly were no more likely than the younger adults to report significant impairment due to physical illness, although a larger proportion of the younger group reported no physical problems. Significantly more of the elderly group were in-patients at the time of testing than the younger participants. This may reflect the fact that rates of referral of elderly depressed to mental health services are very low (Crawford et al, 1998), and referrals may therefore be of those having particular difficulty in coping in the community. Significantly lower MMSE scores were found amongst the elderly participants. This is unlikely to signify early dementia in the elderly group, however. Beats et al (1996) tested depressed elderly and found they were mildly impaired on a broad range of cognitive functions, a pattern of deficits which clearly differentiated them from those with dementia. In contrast, Alpert et al (1995) found that the MMSE was not associated with severity of depression or concentration problems amongst younger depressed adults. Differences in demographic features of the two groups do not provide an explanation for the observed differences on the test measures.

It is possible that the very much lower levels of suicidal ideation reported by the elderly participants simply reflect cultural differences between the two groups. Wetzel (1987) highlighted the difficulty in separating period and cohort effects from age effects when studying suicide, citing differences in suicide rates and in changes of rates in different countries as clear evidence of cultural and social effects on suicide. Suicide only lost its criminal status in Britain in 1961, when the youngest of the elderly participants in the present study was 29 years old. By contrast, the oldest of the younger participants would have been still in her teens. Their adult experience of suicide as a crime is likely to have influenced the elderly participants view of suicide. This is a possibility supported by the significantly higher numbers of elderly reporting strong Moral Objections to suicide on the RFL.

A further cultural difference between the elderly and younger groups, also reflected by the scores on the Moral Objections sub-scale, is that of strong religious beliefs. The influence of religion on society in Britain has been steadily decreasing over the past few decades. Koenig (1998) found that amongst 94 medically ill patients over 60 years with depression, those with strong religious beliefs experienced remission of depression significantly more quickly. It may be that as well as protecting against depression, religious faith is a protective factor against suicidal thoughts, and one which was unevenly represented across the elderly and younger groups in this study.

Holden et al (1989) examined the links between SSI and HS scores and 'social desirability' in 97 patients with suicidal ideation. It was found that the link between SSI and HS scores was mediated by an aspect of social desirability relating to 'a sense of one's own general capability'. Amongst those with high levels of hopelessness, those with a strong sense of their own capability were less likely to report suicidal ideation than those without. This appears to be similar to the findings of this study. Those with a strong sense of their own capability (evidenced by high scores on the Survival and Coping Beliefs sub-scale of the RFL) and high hopelessness (i.e. the elderly group) reported less suicidal ideation than those with a lower sense of capability and high hopelessness (i.e. the younger group). Perhaps the elderly, having

lived longer, and with more religious faith, have developed more personal resources to cope with adverse experiences, and are therefore protected from suicidal ideation.

Could the lower level of suicidal ideation amongst elderly participants simply be due to their different cultural background which has resulted in stronger moral objections to suicide, combined with greater personal resources to cope? How then can the high rates of suicide amongst the elderly population in Britain be explained? Several of the findings of this study point to a more complex explanation of the differences between elderly and younger participants.

Possible Age Effects

Elderly and Younger comparisons. Notable differences were found in relationships between the test measures in the two groups. Two main points emerge. Firstly, it is clear that the relationships between test scores amongst the younger group were as predicted by previous studies of younger adults, the elderly participants responded quite differently. Amongst the younger adults, high suicidal ideation was associated with high hopelessness and weaker reasons for living. The lack of correlation between these measures and depression scores could be due to the use of the HADS in this study, rather than the more commonly used Beck Depression Inventory (BDI, Beck et al, 1961). The HADS focuses on anhedonic features of depression (Zigmond and Snaith, 1983), whilst the BDI includes items relating to cognitive features more closely linked with hopelessness such as pessimism and sense of failure. Amongst the elderly participants, high anxiety was associated with stronger reasons for living, and high level of depression was associated with less suicidal ideation. Secondly, a simple absence of suicidal ideation amongst elderly participants would not explain these differences. When the elderly group was split into those with early and those with late-onset depression, these differences became even more striking.

Early and Late-onset comparisons. Both early and late-onset groups were very similar in terms of most of the demographic, clinical and test measures obtained. However, those with

early-onset of depression were significantly more likely to report previous episodes of depression, as well as previous parasuicide. This is in line with other comparisons of elderly adults with early or late-onset depression (Benazzi, 1998; Holroyd and Duryee, 1997). Those with early-onset depression were also less likely to score highly on the Loss of Motivation factor of the HS than those with late-onset depression, suggesting that those with late-onset depression are more likely to have 'given up'. The lack of significant correlations between the test measures in the early-onset group may have been due to the small numbers in this group. However, amongst the larger late-onset group, there were significant correlations between several of the measures. For those elderly participants with late-onset of depression, high anxiety and high level of depression were both associated with stronger reasons for living. High level of depression was also associated with less reported suicidal ideation. However, as with the younger participants, high level of reported suicidal ideation was associated with weaker reasons for living. Small numbers in this group (n=12) suggest the need for caution in the interpretation of these results. However, they do point to some intriguing possibilities.

The differences could be explained by the moral objections to suicide theory. For an individual with strong objections to suicide, cognitive dissonance would arise in the context of suicidal ideation. In an attempt to deal with the resulting distress and anxiety, the individual could resort to cognitive avoidance of the subject. When forced to confront the suicidal thoughts (e.g. when asked directly during testing) such an individual might experience distress and anxiety, and might over-compensate by strongly affirming a desire to live. This over-compensatory effect could be expected to be greatest in those with the strongest potential for suicidal ideation. Thus high levels of depression and anxiety in combination with high levels of hopelessness would be associated with stronger reasons for living, and low suicidal ideation. Such an effect would not be expected in those openly acknowledging suicidal thoughts, thus those with high suicidal ideation would be expected to report weaker reasons for living. Extending this hypothesis, a switch mechanism would be predicted, whereby when suicidal ideation reached a critical level, cognitive avoidance would no longer be possible and the individual would be engulfed by unmanageable suicidal feelings and at risk of serious suicidal behaviour. This is similar to a theory of masking of suicidal ideation amongst the elderly

proposed by Schmid et al (1994). When combined with the under-diagnosis of depression in the elderly, this theory could help to account for the high intent and high success rate amongst elderly parasuicides.

Strosahl et al (1992) assessed the ability of the BDI, HS and the Survival and Coping Beliefs sub-scale of the RFL to predict suicide intent amongst 51 in-patient parasuicides. Whilst Survival and Coping Beliefs were found to be strongly predictive of level of suicide intent in the group as a whole, amongst the 50% highest-intent parasuicides, this relationship was reversed. A negative relationship was found between BDI and HS scores and suicidal intent, and a positive relationship between suicidal intent and Survival and Coping Beliefs. The authors conclude that these measures are not an accurate means of identifying individuals at high risk. The pattern of responses amongst high-intent parasuicides was therefore very similar to that found in the late-onset elderly group in the present study. Differences between elderly with early and late-onset depression cast doubt on a cultural explanation since both groups come from the same population cohort. A second possible explanation for the findings is therefore that low reported suicidal ideation masks more serious risk of suicide in the late-onset group. This possibility is supported by previous research. There is evidence to suggest that elderly adults with late-onset of depression are at particularly high risk of suicide. Further, previous parasuicide and high hopelessness, both common in the late-onset group in the present study, have also been found to be risk factors in the elderly (see Chapter 2). Finally, seven of the elderly participants, whilst reporting no suicidal ideation, did report either weak will to live or a strong wish to die, both of which are thought to be indicative of possible suicide risk in the elderly (Gallagher-Thompson and Osgood, 1997).

Some observations of responses to the SSI and RFL amongst the elderly participants in the present study cast further doubt on the validity of these questionnaires as assessments of suicide risk amongst elderly depressed. Several of the elderly participants reported that they found the RFL upsetting to complete. In fact, it was not possible to complete the questionnaire in three cases. All three were female, all with late-onset depression, all with HS scores 14 or above, and none with SSI scores >4. One of these participants reported previous parasuicide, and a second caused staff involved in her care serious concern with suicidal intent in the days

immediately following testing. A further three participants with late-onset depression reported previous parasuicide. All three also scored 14 or above on the HS, yet none scored above 4 on the SSI. The SSI is discontinued at a very early stage if an individual denies suicidal intent, however, all 48 items of the RFL are administered in all cases. Thus, whilst it is possible to avoid the issue of suicide with the SSI, an individual is forced to consider the issue with the RFL, which could explain why it was experienced as more upsetting than the SSI.

Conclusions

It was the aim of this study to assess the applicability of cognitive measures of suicidal intent to a group of depressed elderly in comparison with younger adults with depression. Elderly participants were found to respond differently to younger adults on measures of hopelessness, suicidal ideation and reasons for living. The findings of this study suggest that suicide risk can not be accurately judged in elderly individuals by means of the self report scales commonly used amongst younger adults. Low levels of reported suicidal ideation and strong reported reasons for living when combined with high levels of hopelessness and depression may mask serious risk of suicide in some elderly individuals, particularly those with late-onset of depression.

Table 1. Comparison of demographic and clinical characteristics of elderly participants (n=18) and younger participants (n=20)

Variable	Elderly N(%)	Younger N(%)	χ^2(df)	*p*
Gender				
Male	7(38.9)	8(40)		
Female	11(61.1)	12(60)	.005 (1)	n.s.
Marital status				
Married/cohabiting	7(38.9)	11(55)		
Single	4(22.2)	7(35)		
Widowed	7(38.9)	0		
Separated/divorced	0	2(10)	.986 (1)	n.s.
Living situation				
Alone	11(61.1)	8(40)		
Family/spouse	7(38.9)	12(60)	1.69 (1)	n.s.
Children				
yes	13(72.2)	11(55)		
no	5(27.8)	9(45)	1.21 (1)	n.s.
Interference of physical symptoms				
Not at all	6(33.3)	15(75)		
A little	5(27.8)	1(5)	Fisher's	
A great deal	7(38.9)	4(20)	Exact test	n.s.
Previous parasuicide				
Yes	8(44.4)	10(50)		
No	10(55.6)	10(50)	0.12 (1)	n.s.
Previous episodes of depression				
None	5(27.8)	7(35)		
One	5(27.8)	6(30)		
Several	8(44.4)	7(35)	0.39 (2)	n.s
Patient Status				
Out-patient	11(61.1)	19(95)	Fisher's	
In-patient	7(38.9)	1(5)	Exact test	.016
	Median (range)	Median (range)	M-W U	*p*
MMSE score	27 (23 - 29)	29 (23 - 30)	91	<.01

Table 2. Test scores: Comparisons between Elderly (N=18) and Younger (N=20) participants

Variable	Elderly N=18 Median (range)	Younger N=20 Median (range)	M-W U	*p*
HADS-A	14 (2 - 19)	16.5 (5 - 21)	110.5	<.05
HADS-D	15.5 (10 - 21)	16 (11 - 21)	152.5	n.s.
HS				
Total	14 (9 - 20)	17 (4 - 20)	128	n.s.
Feelings About Future	4 (1 - 5)	4.5 (0 - 5)	143	n.s.
Loss of Motivation	4.5 (2 - 8)	6.5 (0 - 8)	123	n.s.
Future Expectations	5 (3 - 5)	5 (3 - 5)	174	n.s.
SSI				
Total	4 (0 - 21)	14.5 (0 - 30)	86	<.01
Active Suicidal Desire	4 (0 - 13)	10.5 (0 - 17)	83	<.01
Preparation	0 (0 - 3)	2 (0 - 5)	93.5	<.01
Passive Suicidal Desire	0 (0 - 4)	1 (0 - 5)	113.5	<.05
RFL				
Total	3.96 (2.19-5.5)	2.96 (1.12-5.27)	94	<.05
Survival and Coping Beliefs	3.67 (2.08-5.62)	2.5 (1.29-5.33)	94.5	<.05
Responsibility to Family	4.78 (3.14-6)	3.78 (1.14-6)	145	n.s
Child-Related Concerns	4.33 (1 - 6)	4.5 (1 - 6)	168.5	n.s.
Fear of Suicide	3.43 (1 - 5.28)	2.93 (1 - 5)	166	n.s.
Fear of Social Disapproval	2.66 (2.33- 6)	3 (1 - 5.33)	114.5	n.s.
Moral Objections	3.88 (1.25- 6)	1.25 (1 - 6)	101.5	<.05

Table 3. Spearman's Correlations between test scores by age group

	HADS-A	HADS-D	HS	RFL	SSI
Elderly					
HADS-A	-				
HADS-D	.187	-			
HS score	.034	.222	-		
RFL score	.471*	.467	-.044	-	
SSI score	-.156	-.704**	-.073	-.422	-
Younger					
HADS-A	-				
HADS-D	.229	-			
HS score	.290	.320	-		
RFL score	.034	-.313	-.406	-	
SSI score	.131	.064	.620**	-.593**	-

*$p<.05$; **$p<.01$

Table 4. Spearman's Correlations between test scores in the elderly group by age of onset

	HADS-A	HADS-D	HS	RFL	SSI
Early onset					
HADS-A	-				
HADS-D	.883*	-			
HS score	-.058	-.388	-		
RFL score	.086	.029	-.551	-	
SSI score	-.580	-.508	-.103	.058	-
Late onset					
HADS-A	-				
HADS-D	.200	-			
HS score	.221	.285	-		
RFL score	.750**	.590*	.134	-	
SSI score	-.336	-.696*	.032	-.654*	-

*p<.05; **p<.01

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Chapter 4

Small Scale Service Evaluation Project

An Evaluation of Out-Patient Non-Attendance Across Three Localities

Prepared in accordance with the submission requirements of the
Clinical Psychology Forum

(See Appendix 4)

Introduction

A significant number of people fail to attend out-patient appointments. Estimates range from around 20 per cent (Weighill et al, 1983), to as many as 40 per cent (Trepka, 1986). This represents a considerable drain on resources, and poses service providers with a serious problem. A number of attempts have been made to establish which factors are associated with poor attendance. Munro and Blakey (1987) suggested that prior discussion between client and referring agent on more than one occasion, resulted in better attendance rates. This could reflect appropriateness of referral, which was found to be a significant factor in initial appointment attendance by Farid and Alapont (1993). Trepka (1986), also found that clients whose referring agent had less close contact with the psychologist to whom he or she was referring, were more likely to drop out of treatment. Several studies have found factors associated with social class or socioeconomic status to be related to attendance rates (Berrigan and Garfield, 1981; Farid and Alapont, 1993; Trepka, 1986; and Weighill et al, 1983), however this has not been a universal finding. Hershorn (1993) found that attenders and non-attenders at a community mental health centre did not differ on such variables as income, educational attainment or public assistance.

Studies have generally used fairly small samples from local populations, and methods of data collection vary from questionnaires sent to clients or to referring agents, case note review, or reports from psychologists about their current case load. Several studies have looked at ways of increasing attendance rates such as supplying information (Huws, 1992), and using a system of opting in (Markman and Beeney, 1990), and on finding that these improve attendance rates in the sample, conclude that the variables in question contribute to non-attendance. Studies also vary in their definitions of DNA or non-attendance, with some considering only initial appointment DNA, and others looking at subsequent attendance failures and drop out rates. Trepka (1986), found that different factors affect non-attendance and drop out at these different stages. He distinguished between non-attenders, who were referred but never attended; non-engagers, who attended, but dropped out before treatment was underway; and non-completers,

who dropped out once treatment was underway. It would seem, then, that clients who fail to attend out-patient appointments remain a poorly understood population, and an attempt to clarify patterns of non-attendance in particular areas remains a useful and potentially informative exercise.

The department of Clinical Psychology, Stobhill covers three localities which are different in a number of ways. Two of the localities, one covering Springburn and Possilpark, the other Maryhill and Shawpark have a similar size of adult population aged 16-64 years of 32,600 and 36,200 respectively, and cover relatively deprived areas, with Jarman scores of 29.4 and 33.2 respectively. The third locality, Strathkelvin, has a population of 58,700 adults aged 16-64 years, and a Jarman score of -0.3[1]. Given that several studies have found that social class variables affected DNA rates, it was predicted that DNA rates would be higher in Springburn and Maryhill than in Strathkelvin, a prediction supported by the impressions of staff working in the department. All three localities deal with both primary care and CMHT referrals. Clients referred through a CMHT differ from those referred through primary care, in that their mental health problems are generally more severe or more chronic, and they therefore represent heavier users of the psychology service. It was predicted that there would be differences in DNA rates between clients referred through primary care and clients referred through CMHTs.

Method

Staff within the department submit forms each month detailing numbers of first and return appointment attendances and non-attendances, as well as numbers of cancellations over the previous month. Separate forms are completed for both primary care and CMHT referrals. Forms submitted over the four month period from March to June 1996 were used to establish the number of DNAs, and the number of attendances in each of the three localities over that

[1] Figures taken from the report of the Locality Profiling and Resource Allocation Project, Adult Community Mental Health Service.

period. The chi square test was used to examine differences between the three localities in DNA rates, where DNA was defined in four categories: first appointment DNA, return appointment DNA and cancellation, as well as total DNA rate, which included all three. The chi-square test was also used to examine differences in DNA rates between primary care and CMHT referrals, as a whole, and within each of the three localities.

Results

Significant differences were found between the three localities in total DNA rate, which included first and return appointment DNA as well as all cancellations. There were significantly more DNAs in Springburn over the four months than in either of the other two localities (χ^2=102.9, df=2, p<0.001). When the DNA rate was broken down into different categories, it was found that while there was no significant difference between the rate of first appointment DNA between the localities (χ^2=5.33, df=2, n.s.), there were significantly more return DNAs (χ^2=51.5, df=2, p<0.001) and significantly more cancellations (χ^2=46.6, df=2, p<0.001) in Springburn than in either of the other localities. These results are listed in Table 1.

Table 1: Non-attendance rates in each of the three localities

Non-attendance	Locality			*p*
	Springburn N(%)	Maryhill N(%)	Strathkelvin N(%)	
Total DNA	205 (38.9)	67 (17.9)	165 (16.7)	***
First appointment DNA	37 (31.9)	16 (27.1)	31 (19.6)	n.s.
Return appointment DNA	83 (20.2)	26 (8.0)	60 (7.2)	***
Cancellations	111 (25.3)	34 (10.2)	108 (12.3)	***

* p<0.05; ** p<0.01; ***p<0.001

An examination of differences in DNA rates across the localities between primary care and CMHT referrals revealed that whilst there was a significantly higher rate of DNAs overall amongst primary care than CMHT referrals (χ^2=4.6, df=1, p<0.05), this could be accounted for

by a higher rate of cancellations in primary care (χ^2=6.3, df=1, p<0.05). There was no significant difference between primary care or CMHT referrals in the rate of either first DNAs (χ^2 =.03, df=1, n.s.) or of return DNAs (χ^2=1.2. df=1, n.s.). Further, when differences in the rate of primary care and CMHT DNAs was examined within each of the localities separately, the significant difference between primary care and CMHT referrals in the rate of cancellations was found only in Strathkelvin (χ^2 =7.6, df=1, p<0.01), with no significant difference in DNA rate found between primary care and CMHT referrals in either of the other two localities. These results are listed in Table 2.

Table 2: Non-attendance in primary care and CMHT referrals

Non-attendance	Locality	Source of Referral		*p*
		Primary care N (%)	CMHT N (%)	
Total DNA	Sprinburn	124 (42.3)	81 (34.6)	n.s.
	Maryhill	25 (23.1)	42 (15.7)	n.s.
	Strathkelvin	135 (18.1)	30 (12.2)	*
First appointment DNA	Sprinburn	22 (34.4)	15 (28.8)	n.s.
	Maryhill	6 (25.0)	10 (28.6)	n.s.
	Strathkelvin	25 (20.2)	6 (18.2)	n.s.
Return appointment DNA	Sprinburn	53 (23.1)	30 (16.5)	n.s.
	Maryhill	9 (9.8)	17 (7.3)	n.s.
	Strathkelvin	46 (7.4)	14 (6.6)	n.s.
Cancellation	Sprinburn	66 (28.1)	45 (22.7)	n.s.
	Maryhill	12 (12.6)	22 (8.9)	n.s.
	Strathkelvin	93 (13.2)	15 (6.5)	**

* p<0.05; ** p<0.01; ***p<0.001

Discussion

The results confirmed that there were differences in DNA rates between the three localities, however this did not follow the predicted pattern. Firstly, there was no significant difference in first appointment DNA rates between the three localities, despite differences between the three, particularly in a measure of social deprivation. Secondly, it is surprising that given this lack of difference between the localities in rates of first appointment DNAs, there were

significant differences in return DNA and cancellation rates. Trepka (1986) differentiated between non-attenders, non-engagers and non-completers, in a study of DNAs at an out-patient psychology clinic. Whilst little demographic information was available for non-attenders, Trepka found that non-engagers, dropping out early in treatment, were generally of lower social class and were more likely to be unemployed than non-completers, dropping out later in treatment. The figures used in this study do not allow for differentiation along these lines within the category of 'return DNA', which includes non-attendance at any appointment following initial appointment. It would be useful to examine whether there are differences between the localities in rates of early as compared with late DNA rates.

The association between return DNAs and cancellations is consistent with previous findings. Weighill et al (1983), found that patients who missed one appointment were also more likely to miss a second, and that this was related to lower social class. A similar finding was also reported by Berrigan and Garfield (1981), who found an association between missing appointments and premature termination of therapy, both more common amongst clients of lower socio-economic status. It seems that there may be some clients who are likely to miss several appointments, and such clients could appear on the attendance forms used in the department in both the return DNA and the cancellation figures.

Given that factors related to lower social class have been found to affect attendance rates by several researchers, (Berrigan and Garfield, 1981; Farid and Alapont, 1993; Trepka, 1986; and Weighill et al, 1983), it is surprising that Maryhill was more similar to Strathkelvin in rates of return appointment DNAs and cancellations than it is to Springburn, despite having a similar deprivation score to Springburn as measured by Jarman scores. It may be that the Jarman scores do not accurately reflect the level of social deprivation of clients seen by psychologists in each of the localities. Jarman scores are based on a subjective assessment of GP's opinions on the importance of various factors in contributing to increased demand on their time and services. It may be that factors which increase demands on GPs are different to the factors which have been found to affect DNAs in psychology services. Certainly, the factor given the

highest weighting in creating a Jarman score is 'elderly living alone', weighted 6.62, with the second highest weighting given to 'population aged under 5', weighted 4.64[2]. These are perhaps less likely to influence the attendance of adult clients to a psychology service than some of the factors given a lower weighting in the Jarman score, such as 'social class V' (3.74), 'unemployment' (3.34) or 'overcrowding' (2.88), which are more in keeping with factors identified in the literature. Since the figures used in this study do not relate to individual patients, but rather to overall attendance rates, it has not been possible to examine the relationship between non-attendance and social class, but this would be a useful exercise for future research, and might reveal differences between Springburn and Maryhill which were not apparent in comparisons of Jarman scores.

Farid and Alapont (1993), found that the quality of referral letter was significantly worse for non-attenders than attenders at psychiatric out-patient appointments. Whilst this was studied in relation to first appointments, Trepka (1986), also found that less contact between referring agent and psychologist was related to non-engagement in therapy and early drop-out. It may be that differences in contact with referring agents between the localities could account for some of the differences in return DNA and cancellation rates.

Philip (1983) found that attendance for appointments with clinical psychologists was affected by the venue of the appointment, and Crawford et al (1988) found clear client preferences of some venues over others. The Springburn locality covers two areas which are seen as separate and distinct by locals. It may be that some of the DNAs in this area reflected a dissatisfaction with the venue of appointments, as venue for appointments is determined by source of referral, rather than by residence of the client.

Very little difference was found between non-attendance rates of clients referred through primary care or CMHTs. Trepka (1986) found that non-attenders were more likely to have had previous psychiatric contact than attenders, however Weighill et al (1983) did not find any

[2] Details taken from information issued by Depatment of Public Health, Glasgow

relationship between previous treatment, or length of history of the presenting problem, a finding which was repeated in a study by Hershorn (1993), which found no relationship between attendance and previous mental health treatment. The findings of the present study would suggest that source of referral, whether primary care or CMHT, has less of an effect on DNA rates in these localities than other variables such as social class or venue of appointment. The higher rate of cancellations amongst primary care referrals in Strathkelvin may be related to longer waiting time for primary care referrals than for CMHT referrals in this area.

This study has revealed differences in DNA rates between the three localities covered by the Department of Clinical Psychology, Stobhill NHS Trust, and a similar pattern of DNAs amongst primary care and CMHT-referred clients. It has highlighted the need to investigate possible differences between the localities, particularly social class differences of clients attending in each of the localities, as a means of clarifying reasons for differences in the rate of return appointment DNAs. A more detailed study of individual clients who fail to attend out-patient appointments is likely to prove informative.

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Chapter 5

Three Single Case Research Studies (Abstracts)

Response to Sexual Assault: The impact of pre-existing psychological morbidity

Abstract

Current theories of the psychological impact of rape and sexual assault have led to an emphasis on treatment of the posttraumatic stress (PTS) response through exposure, desensitisation and anxiety management. A case is presented in which successful resolution of PTS response to sexual assault was achieved through cognitive-behavioural treatment of depression, and pre-existing self schemata. It is suggested that treatment which directly addresses the trauma response may be unnecessary in cases where pre-existing psychological morbidity has played a key role in shaping the response.

Low Self Esteem in the Development and Maintenance of an Obsessional Problem

Abstract

Rachman's (1997) cognitive theory of obsessions without compulsions pointed to the importance of an obsessional individual's catastrophic misinterpretation of intrusive thoughts. A case is presented which illustrates the contribution of low self esteem in the development and maintenance of an obsessional problem. It is suggested that a cognitive model of low self esteem (Fennell, 1997) may be helpful in understanding the catastrophic misinterpretation of intrusive thoughts in some individuals.

Issues in the Assessment and Treatment of a Disordered Sense of Self in an Individual with Schizophrenia

Abstract

A disordered sense of self, although common in individuals with psychosis, is one of the less well understood aspects of schizophrenia. Hemsley (1998) proposed an information-processing deficit with a neurological basis to explain the disorder. Others have postulated cultural and psychological explanations. Definitions remain tentative, and little is known about the possibilities of treating the disorder. A case is presented which illustrates the utility of the Repertory Grid in describing and quantifying a disordered sense of self. Issues regarding the treatability of the disorder in an ongoing case are explored.