

# Problem Solving Therapy Training: The Rationale

## Self Harm and Suicide in New Zealand/Aotearoa

As well as having personal implications for many people, suicide is a major public health concern, both internationally and in New Zealand/Aotearoa. Approximately 500 people die each year in New Zealand/Aotearoa as a result of suicide (Ministry of Health, 2005). New Zealand/Aotearoa's suicide rate in 2002 was the sixth highest among OECD countries with comparable data, and evidence indicates that intentional self-inflicted injury currently makes up the greatest proportion of all injury-related fatalities (Ministry of Health, 2005).

As well as these 500 deaths, around 5000 people a year present to hospitals in New Zealand/Aotearoa following intentional self-harm, according to the Ministry of Health (2001). This alarming figure is actually likely to be a considerable underestimate because of the way the data is collected. Hospital admissions for intentional self-harm are concerning for two important reasons. Firstly, because they place a significant burden on health care resources and, more importantly, these admissions are concerning because a history of intentional self-harm is a strong predictor of future suicidal behaviours. For example, between a third and a half of the people who die by suicide in New Zealand/Aotearoa have a history of intentional self-harm (Ministry of Health, 2003). Between 10 and 20 percent of people who have made a suicide attempt eventually die by suicide (Ministry of Health, 2003). About 1% of people who self-harm will go onto kill themselves over the next year, and a person's risk of suicide following self-harm is about 100 times that of the general population (Garland & Zigler, 1993, Hawton & Fagg, 1988). Data on hospitalisation rates for intentional self-harm show a concerning increase in the rate of non-fatal suicidal behaviours for adults over the last two decades in New Zealand (Ministry of Health, 2001). Furthermore, there is a significant morbidity and mortality rate from causes other than suicide in this group (Neeleman, 2001), in particular violent deaths, cancer and cardiovascular disease.

Suicide prevention has been identified as a national health priority in New Zealand. As we have outlined, a previous history of attempted suicide is one of the strongest predictors of future suicide attempts or completed suicide, and identification of effective treatment strategies for people following a suicide attempt is an important aspect of suicide prevention.

In 2004 researchers at the University of Auckland were contracted to investigate whether a brief psychological intervention could be effective in reducing psychological distress and

repetition of deliberate self harm in people who had presented to a hospital emergency department following an episode of self harm.

We selected problem solving therapy (PST) and we have spent the last three years conducting a large scale randomized controlled trial of PST following self harm. First we will discuss the current evidence for the effectiveness of PST then we will present preliminary three month results from our study.

## Why Offer Problem Solving Therapy?

### **The theory behind PST**

Research has provided evidence that many people who attempt suicide exhibit poor problem solving skills (Linehan et al, 1987; McLeavey et al, 1987; Pollock & Williams, 2001). Typically, they tend to be less active in their problem solving efforts, for example, many rely on the actions of others or the passage of time to solve the problem rather than taking an active part in solving the problem (Pollock & Williams, 2001). Suicidal people also tend to have difficulty in generating alternative solutions to their problems. In one study over a third of people interviewed following a suicide attempt reported that they had at least one problem that they believed to be insoluble (Milnes, Owens & Blenkiron, 2002).

This research is supported by D’Zurilla and colleagues (1998), who noted that individuals who are “suicide prone” have a characteristic set of negative thoughts and feelings about problems and about their ability to solve problems. Typically, such people perceive problems as some sort of a threat to their well-being. They tend to blame themselves for problems when they occur, and doubt their own ability to solve problems effectively. They are more likely to view problems as unsolvable, and to feel distressed and upset when faced with a problem. D’Zurilla and colleagues (1998) go on to suggest that these beliefs and feelings impact on how people actually respond to problems. Instead of facing problems as they arise, and being persistent in their problem solving efforts, the suicide prone individual is likely to either avoid problems or respond impulsively. When avoiding problems, they tend to either put off solving problems for as long as possible, wait for problems to resolve themselves, or try to shift the responsibility for solving problems on to others. When responding impulsively, the person does attempt to solve problems, but these attempts are not well thought out. Rather, they tend to be impulsive, careless and incomplete, and the solutions are often based on the first idea that comes to mind. Avoidant and impulsive responses are not likely to result in effective problem solving and thus risk reinforcing the negative beliefs and feelings.

## Evidence for the Effectiveness of PST Following Self-harm

Problem solving therapy (PST) is a brief focussed psychological intervention. Initially developed by D’Zurilla and Godfried in 1971, it has since been extended and used in many research trials. At present there is a lack of conclusive evidence about the effectiveness of PST because of a lack of large-scale, well controlled studies. However, literature reviews have found that PST shows promise as an effective brief psychological intervention for adults following a suicide attempt (Hawton et al, 2004; Townsend et al, 2001). In particular, PST has been shown to have a beneficial effect on outcome measures that are predictors of repeated deliberate self-harm, such as hopelessness, depression and suicidal ideation (Townsend et al, 2001).

## Other applications of PST

Many studies have investigated whether PST is effective in treating a range of psychological disorders including depression in primary and secondary care, depression in older adults, and the use of PST with people who have physical illnesses such as cancer. We present here a few of these studies. Please note that this is a sample of the literature rather than a full review.

### **PST for depression**

In 1986, Arthur Nezu conducted a trial of PST for people living with depression. The study involved 26 people who were randomly assigned to receive either PST; problem-focused therapy; or to be part of the waiting list control group. The group who received PST had lower depression scores after treatment than either of the other two groups, and the difference was maintained at six months. In 1995 Lawrence Mynors-Wallis and colleagues also conducted a study investigating the effectiveness of PST for depression. This study was larger, involving 91 people living with depression. Again there were three groups, which were randomly assigned to receive either PST; an antidepressant (Amitriptyline) combined with standard clinical management; or a drug placebo combined with standard clinical management. The study found that PST was as effective as antidepressant therapy, and both were significantly more effective than placebo at six weeks and at twelve weeks follow up.

Following this 1995 study, Mynors-Wallis conducted another treatment trial in 2000. This time 151 people with major depression were involved in the study. In this trial, there were four different treatment options. Participants received either an antidepressant (Paroxetine); PST provided by research GPs; PST provided by research community nurses; or, finally, a combination of PST given by research community nurses in conjunction with Paroxetine given by research GP’s. Interestingly, all of the groups

experienced improvements in their depression levels and there were no significant differences found between the four groups on any of the outcome measures that were used. This study showed that PST is as effective as antidepressant therapy, and that it can be provided with equal effectiveness by nurses or doctors in primary care.

### **Depression in Older Adults**

A study in 2002 conducted an extensive trial of PST with older adults living with major depression (Untzer et al, 2002). This study is known as the “IMPACT” trial and you can find out more at their website <http://impact-uw.org/> if you are interested. The IMPACT clinical trial involved 1,801 participants with major depression or dysthymia who agreed to take part in this study of depression treatment in primary care. The study participants were recruited from 18 primary care clinics. These primary care clinics were affiliated with eight broader health care organisations, spanning five states.

The participants were randomly assigned to either a collaborative care programme for late life depression (IMPACT) for 12 months, or to usual care. All participants were followed by independent assessments over a 24 month period. The IMPACT programme was more than twice as effective as usual care for depression in a wide range of primary care settings. At 12 months, 45% of participants assigned to the IMPACT treatment had a 50% or greater reduction in symptoms of depression. This is compared to 19% of patients in the usual care group experiencing a similar reduction.

### **PST and cancer**

A study conducted by Nezu et al (2003) looked at the effectiveness of PST for adult cancer patients who were experiencing significant psychological distress. Participants were divided into three groups. One group received individual PST; a second group received PST for themselves and a significant other; the third group was the waiting list control group. Perhaps unsurprisingly, all participants who received PST did better than those on the control waiting list. Additionally, those who received PST along with a significant other reported lower levels of distress at six months follow up than those who received PST alone, and these lower levels of distress were maintained at one year. For both groups receiving PST, improvements in problem solving were found to have a significant correlation with improvements in psychological distress and overall quality of life.

### **The PST for self harm study: preliminary results**

This training programme developed out of a study we have been conducting over the past three years at the University of Auckland. We recruited nearly 600 patients in four District Health Boards in New Zealand. The aim of this study was to determine whether the

addition of PST to the usual care that people receive after presenting to a hospital emergency department following an episode of self harm would result in better outcomes for these people than usual care alone. People randomized to receive PST were offered a course of six to eight one hour face to face sessions of PST with one of the research therapists employed by our study.

Our primary outcome measure was the Beck Hopelessness Scale which has been shown to be a valid and reliable predictor of the likelihood of future self harm episodes. We found that people who agreed to be included in the PST group reported significant greater reductions in their reported levels of hopelessness than those in the control group at three month follow-up. We also found that the PST group reported significantly greater reductions in depression, anxiety and suicidal thinking than the control group, and significantly greater improvements in their approach to problem-solving and their problem-solving skills. At three month follow-up we did not find a significant difference between the two groups in the number of people who re-presented to hospital following an episode of self harm. Full twelve month results will be reported later in 2008.

The study gave us an opportunity to develop our knowledge and expertise of the use of PST with people at risk of suicide and self harm. After working with many people from a range of backgrounds we have developed a large base of experience which, in addition to the evidence base that currently exists, we have drawn on to create this manual. We hope that you will find the information presented here a useful addition to your current knowledge and that you will enjoy using the strategies outlined here in your clinical practice.

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“The trial (PST) not only saved my life but it has totally changed my life for the better. It has helped me to cope with stressful situations and it has given me tools that I will implement for the rest of my life”. (Feedback provided by a client.)