Chapter 9 – General discussion
The assessment and management of suicide attempters is an important part of daily life for psychiatrists working in a general hospital. Yet, much of what should be done to provide optimal care is unknown. The goal of this thesis was to contribute to better care for this group of patients by studying several aspects of their assessment and management. In the first part of this thesis, the role of guidelines was studied resulting in suggestions for improvement. The second part assesses the role of factors that, as experience in clinical practice suggests, might hamper proper assessment and management. Each part will be discussed separately, below.

PART 1  GUIDELINES FOR THE ASSESSMENT AND MANAGEMENT OF SUICIDE ATTEMPTERS

As discussed in the first chapter of this thesis, the multidisciplinary assessment and management of suicide attempters is a complicated and multidisciplinary task. As early as 1991, guidelines to bring order in this process were developed in the Netherlands by the Medical Scientific Council of the National Organization for Quality Assurance in Hospitals. Other countries followed suit more than 10 years later (Chapter 1). In other realms of psychiatry and other branches of medicine, it has become increasingly clear that the development of guidelines per se does not guarantee their application. Many guidelines are not or only partly implemented, and frequently implementation is hampered by inadequacies in the guidelines themselves (Burgers, Cluzeau, Hanna, Hunt, & Grol, 2003). With respect to guidelines for the assessment and management of suicide attempters, to our knowledge an evaluation of whether or not they are implemented and whether they are of sufficient quality to make implementation possible has not been conducted. Therefore, in the first part of this thesis we investigated whether the recommendations in the guidelines are observed and examined the quality of the guidelines used in hospitals.

As guidelines are textual documents, protocols are decision-support tools, derived from the recommendations formulated in the guidelines. Because we were going to investigate all kinds of available recommendations concerning the care for suicide attempters, for our first study we used a broad definition for guideline, including protocols.

In order to determine if guidelines are observed, we made use of data from the European CLW Collaborative Study (Huyse, Herzog, Malt, & Lobo, 1996). This study was originally developed to compare very different Consultation-Liaison psychiatric services in hospitals. Fortunately, the data also allowed an evaluation of aspects for implementation. The results, described in Chapter 2,
essentially demonstrate that the findings in the assessment and management of suicide attempters do not differ very much from those in other realms of medicine. Although guidelines were available in all seven Dutch hospitals involved in the study, the execution of recommendations in practice was not in concordance with the guidelines, especially concerning the coordination of care. For example, most guidelines recommend obtaining information about the patient from the general practitioner, mental health care provider, and family in every case, but in practice this was never done.

The European CLW Collaborative Study was performed between 1991-1993. Do changes in the care for suicide attempters not preclude generalisation to present-day practice? Although the data were collected before publication of the 1991 guidelines, all seven participating Dutch hospitals had guidelines that largely resembled the official guidelines. Thus, comparable guidelines were in force at the time of the study described in Chapter 2 and in the present-day situation. The fact that the participating hospitals were not randomly selected from Dutch general hospitals, but participated because of their special interest in the topic, diminishes the generalisability of the results. Their interest implies that the participating hospitals made more use of the guidelines compared with other institutions, and suggests that the implementation of the guidelines in general was worse at that time, and perhaps presently as well. Furthermore, two of the seven hospitals used verbally agreed upon guidelines and we assume this reflects also that in those years implementation was modest. It can be concluded that the available data hint at a deficient use of guidelines for the assessment and management of suicide attempters. The reasons for not following guidelines can be manifold, but it is essential that the guidelines are available to the potential users and that the content and the quality are sufficient. In a second study we addressed these questions (Chapters 3 and 4). All hospitals and mental health institutions in the Netherlands were asked to provide their local guidelines to investigate the content and quality. The primary result was that guidelines were available in only 38.6% of the hospitals and 34.2% of the mental health institutions. The guidelines varied widely in their primary objectives, narrative length, and readability. Remarkably, not all local guidelines recommended psychiatric consultation for every suicide attempter. Moreover, instructions for determining the degree of suicidality, performing the psychiatric examination, detecting risk factors and psychosocial stressors were only provided in 45% or less.

Application of the quality AGREE-instrument indicated that only a minority (37%) of guidelines used in the university and general hospitals could be recommended. As measured with the AGREE, the quality of guidelines in mental health institutions was low, but higher than the guidelines in the hospitals,
although 83.4% could be recommended (with provisos and alterations). The results of the guidelines in hospitals are alarming, but again comparable to other branches of medicine. For example, reviewing 51 guidelines for diagnosis and treatment of lung cancer resulted in the recommendation of 37% (Harpole et al., 2003).

In the AGREE-domain ‘Rigor of Development’ the quality of guidelines was very low and this influenced the overall assessment of recommendation of the guidelines. While some guidelines were no more than a checklist or protocol, mainly incomplete, this might have negatively influenced the score. However, the documents presented rather as guidelines did not score better on the seven items of this domain. It can be argued that in this study it was also not defined what was considered to be a guideline. The hospitals and mental health institutions were asked to send in their guidelines. Because the documents differed a lot, it can be concluded that in practice there are divergent opinions on what is considered to be a guideline.

Appraisal of the quality of the guidelines was done by three raters using the AGREE-instrument. While one of them was an expert in quality research, the others were psychiatrists. The intraclass correlation coefficients between raters varied greatly for the domains, which might be the result of the different interpretations of instructions of the items. It is also possible that this was the result of the fact that the psychiatrists were less trained in using the instrument. However, the raters agreed substantially on which guidelines could be recommended (κ = 0.72).

Some hospitals and mental health institutions stated that they followed the Dutch guideline from 1991 (Centraal Begeleidingsinstituut voor de Intercollegiale Toetsing, 1991) or that they had used this document in developing their own local one. An overview of the results of our studies raises the question of why not all hospitals and mental health institutions used the national guideline or at least why they did not use it as a basis for a local protocol.

From the studies in part 1 it can be concluded that the available evidence suggests that guidelines for the assessment and management of suicide attempters differ to a large extent with respect to their content, that only a minority can be recommended based on an evaluation of their quality according to the AGREE instrument, and that they are probably not implemented properly. While the necessity of a systematic assessment and treatment of suicide attempters has been advocated in the literature, our studies show that in practice it is very difficult to achieve this goal. Guidelines are a helpful tool for this and the guidelines from the American Psychiatric Association (APA, 2003), The Royal College of Psychiatrists (RCP, 2004), and The National Institute of Clinical Excellence (NICE, 2004) that have been developed recently, can
be strongly recommended. The APA guideline is based on an extensive literature search on the subject and gives levels for evidence. The RCP report identifies consensus standards for assessment following self-harm. The NICE guideline gives a grading scheme for evidence of the recommendations, sets standards, adds criteria and audit methods, and provides clinical practice algorithms. The APA and NICE guidelines have quick reference guides that can be used in practice and for implementation at different settings.

The Dutch guideline from 1991 is a consensus document of experts and does not contain literature references, does not describe assessment and treatment in different settings and lacks a quick reference guide. This guideline should be updated based on the APA and RCP guidelines. Besides, the development of guidelines and their implementation, other approaches, such as training of professionals, planning of personnel, and involvement of stakeholders, are necessary to improve the quality of care for suicide attempters. These approaches might be discussed in the national guideline. A national guideline should be a starting point for developing local guidelines, and recommendations for both are given in the Appendix.

**PART 2  STUDIES ON THE APPROPRIATE ASSESSMENT AND MANAGEMENT OF SUICIDE ATTEMPTERS**

Proper assessment and management of suicide attempters is not only hampered by inadequate and insufficiently applied guidelines, but also by a lack of knowledge about factors that influence both assessment and management. In the second part of this thesis, we studied two factors in more detail because experience in clinical practice suggested that these might play a role; they are the amnesic effects of benzodiazepines, and the changes in patients’ psychopathology and attitude between admission and discharge.

*Amnesic effects of benzodiazepines.* Suicide attempters often take benzodiazepines in an overdose. In clinical practice suicide attempters also often forget what they discussed in the hospital. Because benzodiazepines cause anterograde amnesia, a study was carried out to investigate whether in practice a relationship could be established between the amnesia in suicide attempters and the benzodiazepines that were taken in overdose. In the study described in Chapter 5, we found that patients who took an overdose of benzodiazepines indeed have memory impairment, even if they did not seem to be sedated. However, the study had a within-group design in which the subjects were compared shortly after admission to the hospital and 24 hours later with respect to memory impairment and sedation. Therefore the study could not discrimi-
nate between specific benzodiazepine effects and effects of the stressful situation which the patients were in. To overcome this shortcoming, in the original study design, a control group of subjects who attempted suicide by other means was included; more specifically, by an overdose of analgesics. However, during the two years the study was running, only seven subjects could be included. Therefore circumstantial evidence was sought from two additional studies: 1) a study on the strength of the relationship between amnesia and the blood levels of benzodiazepines and its active metabolites (Chapter 6), and 2) a study on the effects of the stress of admittance on memory in benzodiazepine-free cardiac patients undergoing heart catheterization (Chapter 7).

In the first study a significant inverse relationship between diazepam equivalents in blood and verbal recall was found. In a comparison between the assessments immediately after admittance and the next day assessments, a more than 30% increase in verbal recall was explained by decreases in diazepam equivalents.

In the second study a within-group design was also used. Significantly higher scores on a verbal recall test were found before heart catheterization than 24 hours afterwards, although on both occasions scores were within normal limits. It was concluded that the stress of admission to the hospital for catheterization is not accompanied by memory impairment. Of course, admission for heart catheterization cannot be put on the same par as an admission due to a suicide attempt, but the results show at the least that, admission stress does not always induce memory impairment.

*Changes in psychopathology and attitude*. Chapter 8 includes a study describing suicide attempts assessed with questionnaires during their stay in the hospital and a few days later at home. The aim was to investigate how reliable a systematic assessment of suicide attempts in the hospital was compared with a later reassessment at home. Secondary aims were to explore to what extent patients remembered the arrangements for aftercare made in the hospital, and whether their need for help or support changed with time.

With respect to the patients’ opinions about their intention and motives to attempt suicide, no statistically significant differences were found. However, at home patients stated that the motive for the suicide attempt had been less impulsive than when assessed in the hospital. Also, scores on a questionnaire measuring psychopathology did not differ significantly. The higher scores on worrying and the lower scores on self-esteem at home might suggest that these patients were in a worse condition than they were in the hospital some days before. Moreover, a high proportion of the patients forgot their arrangements for aftercare, although they had received a written form in hospital. Suicide attempters often show poor compliance with treatment, which may be partly
explained by many patients forgetting their arrangements for help. We found that most patients participating in the study and rejecting help in hospital, changed their minds about accepting aftercare a few days later, which is hopeful. The results suggest that it is beneficial to approach them at home after discharge. However, it is questionable from an ethical point of view whether or not to contact people who refused further help.

It should be kept in mind that the generalisability of the study is limited. Because only 59 of the 195 suicide attempters met the inclusion criteria for this study, the results are only applicable to a subset of suicide attempters. As patients admitted immediately to the psychiatric ward were excluded, subjects with more severe psychopathology probably were excluded from the study. Additionally, many patients who were eligible for the study refused to participate. They too may be characterized by a more severe psychopathology. They also may have rejected aftercare more often than the patients included in the study, and may be less inclined to change their mind on this subject after discharge. This possibility should be kept in mind in the discussion regarding the contact of patients who rejected aftercare while still in the hospital. On the other hand, the results are relevant for patients who are cooperative, are discharged from the hospital, and do not have a treatment plan in accordance with their mental health care provider.

The effectiveness of strategies to enhance attendance to aftercare were explored in some studies. A telephone contact (Cedereke, Monti, & Ojehagen, 2002), intensive follow-up including one home visit (Allard, Marshall, & Plante, 1992), and an active outreaching strategy in which a nurse visited suicide attempters at home during the first year after the attempt (Heeringen et al., 1995) increased attendance to aftercare, but the repetition of suicide attempts did not significantly decrease.

DON’T FORGET

A substantial number of suicide attempts occur annually with a major risk of repetition or suicide (Cooper et al., 2005). The number of suicide attempts does not decrease, notwithstanding the increasing attention to psychiatric disorders and their treatment. In the Netherlands, an average of 14,000 suicide attempters present to general hospitals (Nationaal Kompas Volksgezondheid, data from RIVM, 16-03-2006). The assessment, management, and treatment of the widely divergent problems these patients have, place high demands on professionals of various disciplines. However, there is a paucity of evidence regarding the proper care for these patients. Factors associated with an in-
creased risk of repetition or suicide are known, but not the interventions or treatments that can prevent them. Psychiatrists do treat patients who express suicidal ideation, who attempt suicide, and who commit suicide. Our community, and especially our hospitals and mental health institutions, are confronted with a major health problem. However, psychiatrists, researchers, and policy makers seem to forget to give high priority to the development of evidence-based methods for the prevention of suicide.

Attempting suicide is sometimes seen as an expression of community problems that cannot be solved by psychiatrists. Is it not true that common sociodemographic characteristics of suicide attempters, such as living alone and being unemployed, are significant and generally difficult to influence? Such opinions make it more likely to forget suicide attempters. However, too many suicide attempters also suffer from treatable psychiatric disorders, and therefore psychiatric assessment should be a conditio sine qua non.

The tendency to forget suicide attempters may have something to do with the emotional reactions that suicide attempters may provoke. Some suicide attempters ask for help, others express sadness, hopelessness, anger, or the wish to die. Sometimes rational motives are lacking; for example, as a result of thought deterioration in psychosis. While some suicide attempters cause concern for the professional or induce sympathy, others provoke reactions of rejection or neglect. Patient factors (acting out, projective identification) as well as professional factors (fantasies to save the patient, frustration, feelings of impotence) can play a role. We tend to forget that skilled psychiatrists and other professionals trained in assessment and management of this group of patients are needed. In many hospitals, suicide attempters are assessed by psychiatric residents or other mental health caregivers. The few studies that investigated the quality of assessment by these professionals indicate that training is urgently needed (Crawford, Turnbull, & Wessely, 1998).

Furthermore, our studies have shown that not only psychiatrists and other professionals tend to forget, patients do so as well, although in another way: many suicide attempters have memory impairment, in which taking an overdose of benzodiazepines plays an important role. They even forget the arrangements made for treatment after their discharge from hospital. The tendency to forget is therefore a central theme in this thesis, and may also be central to the care of suicide attempters.
REFERENCES


