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## **Don't forget : contributions to the assessment and management of suicide attempters in the general hospital**

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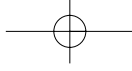
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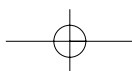
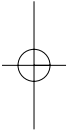
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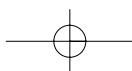
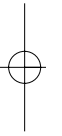
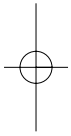
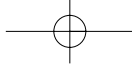
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## *Chapter I* – Introduction





Most people try to stay away from harmful situations. Therefore, persons who deliberately harm themselves, usually called suicide attempters, create a stir in the people around them. Frequently, such an act elicits compassion and support from others, but often also anger and disappointment. In an unknown proportion of cases, no professional help is sought. In many cases, however, the general practitioner is consulted or the patient is brought to hospital. Assessment and treatment of suicide attempters put high demands upon the professionals dealing with the psychological and somatic sequelae of the attempt. Patients themselves may also have ambivalent feelings about what happened and whether they will accept treatment. Although the situation offers an opportunity to try to understand and help these patients, the mixture of feelings in patients and professionals may complicate their assessment and treatment.

In this thesis, several aspects of hospital care for suicide attempters are discussed. Before reviewing those aspects in detail, some general remarks on suicide attempts will be made.

#### TERMS AND DEFINITION

In the preceding paragraph, the terms 'suicide attempt' and 'deliberate self-harm' were used. Other terms, like 'failed suicide' and 'parasuicide', can also be found in literature. Sometimes researchers and professionals define these terms differently, but they are mostly used as synonyms. As in most studies, the term 'suicide attempt' in this thesis is defined as 'an act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour that without intervention from others will cause self-harm, or ingests a substance in excess of the prescribed or generally recognized dosage, and which is aimed at realizing changes that the person desires via the actual or expected physical consequences' (Platt et al., 1992).

#### EPIDEMIOLOGY OF SUICIDE ATTEMPTS

In the Netherlands, the incidence of attempted suicides, including attempts that remain unnoticed by professionals, is unknown. In Europe, by the WHO/EURO Multicentre Study on Parasuicide epidemiologic data for the period 1989-1992 were registered in 16 catchment areas (Schmidtke et al., 1996). The average suicide attempt rate per 100,000 individuals of 15 years and older for all centres combined was 193 for females, and 140 for males. The most recent

international data, to our knowledge, come from the American Epidemiologic Catchment Area-study. In this study, the annual incidence estimate of suicide attempts in adults in the general population is 148.8 per 100,000 person-years (Kuo, Gallo, & Tien, 2001). The older National Comorbidity Survey study showed a life time prevalence of suicide attempts of 4.6% (Kessler, Borges, & Walters, 1999). In the Netherlands, only the incidence of suicide attempts in people who sought professional help is known. In the period 1999-2003, an annual average of 14,000 persons who deliberately harmed themselves were presented to an emergency department (Nationaal Kompas Volksgezondheid, data from RIVM, 16-03-2006), which is a rate of 87.5 per 100,000. In a study on the epidemiology of 793 known medically treated suicide attempters in a defined catchment area of the city of Leiden, The Netherlands, it was found that 85.7% of suicide attempters were treated in the general hospital and 14.3% by a general practitioner (Arensman, 1997).

#### COMORBIDITY

Suicide attempts are often accompanied by serious mental health and social problems. The standard mortality rate by suicide of persons with psychiatric disorders is high (Harris & Barraclough, 1997) and the presence of psychiatric disorders among completed suicides has been estimated up to 95%. Therefore, comorbid psychiatric disorders among suicide attempters can be expected to be high. However, exact data are sparse. In a case-control study, 302 subjects making medically serious suicide attempts were compared with 1028 randomly selected subjects (Beautrais et al., 1996). Ninety percent had a psychiatric disorder at the time of the attempt. However, this study was conducted in a selected population of suicide attempters; namely, those who made 'medically serious' attempts. Forty-four to fifty-six percent of suicide attempters were determined to have psychiatric disorders in studies with non-selected suicide attempters (Hawton, Houston, Haw, Townsend, & Harriss, 2003; Olfson, Gameroff, Marcus, Greenberg, & Shaffer, 2005). Another study found that among first-timers, the prevalence of psychiatric disorders was rather low, whereas among repeaters psychiatric comorbidity was common (Arensman & Kerkhof, 1996).

The social and demographic characteristics of suicide attempters were studied in the WHO/EURO Multicentre Study on Parasuicide. Single and divorced people, those with low education levels, and the unemployed or disabled were over-represented in suicide attempters compared with the general population (Schmidtke et al., 1996). Suicide attempts can also jeopardize somatic health,

although complications depend on the method used for the attempt (Muhlberg, Becher, Heppner, Wicklein, & Sieber, 2005).

In patients presenting to the hospital, suicide attempts are followed by new attempts in 23% of the cases and 3-5% will commit suicide within 5-10 years (Owens & House, 1994; Owens, Horrocks, & House, 2002; Zahl & Hawton, 2004; Harris et al., 1997; Hawton, Zahl, & Weatherall, 2003). Suicide risk among self-harm patients is higher than in the general population, although the rates differ in the literature (Owens et al., 2002).

#### ASSESSMENT OF SUICIDE ATTEMPTERS

It is generally accepted that proper assessment of suicide attempters in the general hospital should involve a somatic as well as a psychiatric evaluation, although this practice is not well founded by scientific evidence. Somatic evaluation is necessary because of the possible complications of the methods used to attempt suicide. According to the World Health Organization (2000), somatic care should always be followed by a psychiatric assessment, because this might create possibilities to intervene. Unfortunately, hardly any interventions have proven to be effective in preventing repetition (Hawton et al., 1998; van der Sande, Buskens, Allart, van der Graaf, & van Engeland, 1997). However, patients who were not psychiatrically assessed after a suicide attempt were at higher risk of repetition and completed suicide (Hickey, Hawton, Fagg, & Weitzel, 2001; Kapur et al., 2004).

Performing a psychiatric evaluation of patients admitted to the emergency department is easier said than done. The stress of general hospital admittance, the busy, noisy wards, and the (sometimes forced) somatic treatments interrupting psychiatric examination, as well as the great time pressure, may make the psychiatric consultation very difficult. Therefore, it is possible that many important aspects relevant to the assessment and further management of the patient are left unidentified which might not have been missed in a quieter environment.

Taking this into account, it is no wonder that Kerkhof in his thesis on mental health care for suicide attempters (Kerkhof, 1985) reported that many patients could not remember having had a psychiatric examination while in hospital. Although he considered this to be indicative of an imperfection in psychiatric care, other factors, such as those discussed above, may also play a role. In the heat of the situation, the patients may simply have forgotten that they had spoken to a psychiatric consultant. Indeed, a recent study on patients' evaluation of their psychiatric consultation after a suicide attempt found that

at least 30% of patients had an indifferent prior attitude towards psychiatric consultation and 58% said the timing of the consultation was inappropriate (Suominen, Isometsa, Henriksson, Ostamo, & Lonnqvist, 2004). Hence, many factors may explain why patients forget aspects of their care during their stay in hospital. However, data in this thesis will demonstrate that an additional factor has been forgotten.

#### GUIDELINES FOR THE ASSESSMENT OF SUICIDE ATTEMPTERS

Because of possible complications, suicide attempters deserve serious attention when presented to the hospital. The assessment of these patients should involve somatic as well as psychiatric and social investigations. Furthermore, they need proper treatment. Moreover, the mixed feelings experienced by the patient and the professionals should not interfere with the assessment process.

In 1991, guidelines were developed in the Netherlands in an attempt to bring order to the complicated and multidisciplinary assessment of suicide attempters (Medical Scientific Council of the National Organization for Quality Assurance in Hospitals). These guidelines focused on the proper management and assessment of these patients and described specific tasks for the professionals involved: psychiatrists, nurses and others (Centraal Begeleidingsinstituut voor de Intercollegiale Toetsing, 1991). More than ten years later, guidelines were also proposed in other countries (Barr, Leitner, & Thomas, 2005; Goldberg, 1987; Isacson & Rich, 2001; Packman, Marlitt, Bongar, & Pennuto, 2004; Simon, 2002). In 2003 and 2004, official guidelines were issued by the American Psychiatric Association and the Royal College of Psychiatrists, respectively (American Psychiatric Association, 2003; Royal College of Psychiatrists, 2004), providing summaries of the available knowledge in this field that led to recommendations for care.

#### BEYOND GUIDELINES

The existence of guidelines does not guarantee optimal care. Although guidelines can be a valuable tool to improve quality of care, their development does not ensure their use in practice (Feder, Eccles, Grol, Griffiths, & Grimshaw, 1999; Grol, 1997). In fact, beside developing and implementing guidelines, other approaches are also necessary to improve the quality of care in daily practice (Grol & Grimshaw, 2003). When guidelines are developed, they should be widely available and, if necessary, adapted to local situations to

make their implementation possible. Their content and quality should be sufficient. Moreover, gaps in our knowledge that hamper proper care should be filled; this is especially true for guidelines to assess and manage suicide attempters. It is the aim of the first part of this thesis to evaluate the existing guidelines. The second part aims to fill some of the gaps in our knowledge that hamper proper care.

## OUTLINE OF THE THESIS

### *Part I – Guidelines for the assessment of suicide attempters*

Chapter 2 includes a study on certain guidelines for suicide attempters in general hospitals in the Netherlands in 1991. The observance of the recommendations described in the guidelines was examined using data from the more extensive 'European Consultation Liaison Workgroup (ECLW) Collaborative Study'.

In Chapter 3 we report on a study on the availability, content, and quality of guidelines for the assessment of suicide attempters in university and general hospitals in the Netherlands. This study was extended to all mental health institutions in the Netherlands and these results are included in Chapter 4. A comparison was also made between the hospitals and mental health institutions with regard to the availability, content, and quality of their guidelines.

### *Part II – Studies on the appropriate assessment and management of suicide attempters*

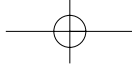
Chapter 5 reports on our investigation into whether suicide attempters admitted to the hospital demonstrated anterograde amnesia after taking a benzodiazepine overdose.

In Chapter 6 we report results aimed at investigating whether anterograde amnesia in suicide attempters was related to blood levels of benzodiazepines, which were taken in overdose, and their active metabolites.

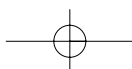
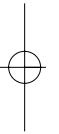
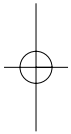
Because amnesia in suicide attempters could also be enhanced by stress due to hospitalization, we studied whether cognitive impairment occurred in another group of admitted patients. In Chapter 7 we report on a study of cardiac patients who had to undergo heart catheterization to gain more insight into admittance as a possible confounding factor in memory impairment in patients.

In Chapter 8 we report our study of patients assessed during their stay in a general hospital because of a suicide attempt, who were reassessed at home shortly after discharge. The major goal of this study was to compare both





assessments and to find out whether they would differ. At both times, the intention and motives of the suicide attempt, the symptoms of psychopathology, worrying, and the degree of self-esteem were assessed. Furthermore, patients were asked about their need for help, as well as their remembrance of the aftercare arrangements that had been made.



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