

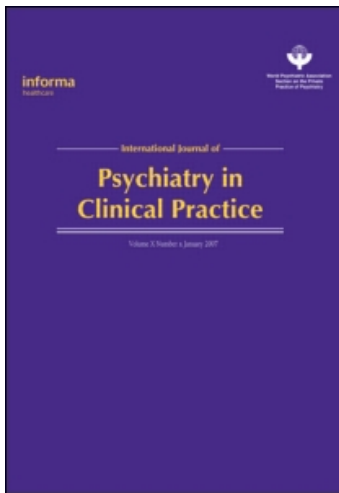
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### Assessing and managing suicidal behaviour in the primary care setting: A model for an integrated regional suicide prevention strategy

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**ORIGINAL ARTICLE**

## **Assessing and managing suicidal behaviour in the primary care setting: A model for an integrated regional suicide prevention strategy**

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### **Abstract**

Although suicide rates are decreasing in most countries, suicide is still a major health concern. Our aim was to introduce a complex, integrative, regional suicide prevention strategy. Based on reviewing the literature and on our previous studies we developed a suicide prevention model, which includes recognition, risk assessment and intervention. The main steps of the model are the recognition of warning signs (communicative or behavioural), exploration of crisis situation and/or psychopathologic symptoms, assessment of protective and risk factors, estimation of suicide risk and a plan for management of suicidal patients through different levels of interventions. In the management of suicidal behaviour, the complex stress-diathesis model has to be adjusted by considering biological markers and psycho-social factors. Only after the assessment of these factors can primary care professionals, as gatekeepers, manage suicidal patients effectively by using adequate psychopharmacotherapeutic and psychotherapeutic interventions in the recognition, treatment and prevention of suicidal behaviour.

**Key Words:** *Suicide, suicide attempt, suicide prevention, primary care, guideline*

### **Introduction**

Although suicide rates are decreasing in most countries, suicide is still a major health concern [1,2]. A substantial recent systematic review [3] examining the evidence for the effectiveness of specific suicide-preventive interventions concluded that the education of physicians and restricting access to lethal means were found reduce suicide rates. Four major classical studies, the Gotland study [4,5], the Nuremberg Alliance Against Depression [6,7], the Jamtland study [8] and the Hungarian Kiskunhalas Suicide Prevention Project [9] proved that the education of doctors, especially general practitioners (GPs) resulted in a marked decline in suicide mortality of those regions which were served by the trained doctors. Other methods of intervention, including public and media education or screening programs need more testing [3]. The US Preventive Services Task Force [10] concluded that the evidence is insufficient to recommend for or against routine screening by primary care clinicians to detect suicide risk in the general population; they

found no evidence that screening for suicide risk or treatment of those at high risk reduces suicide attempts or mortality. Other recommendations suggested that physicians should remain alert to the possibility of suicide, especially in high-risk patients [10].

The majority of people with suicidal behaviour make contact with the health care system before the suicide attempt [11]. According to Appleby et al., more than a quarter of people committing suicide had contacted mental health services in the year before their death [12]. The comprehensive review of the literature shows that 80–90% of suicide victims contact health-care services (GPs, psychiatrists and other professionals) during the year before the suicidal act [13]. In addition, 34–66% of suicide victims contact their GPs in the last 4 weeks before the suicide [11,14]. A significant proportion of suicide attempters have also contacted a physician before the act, and more than one-third of these patients were found to have visited a medical specialist within 1 week before the attempt [15,16].

Regarding primary care, 2–9% of patients visiting GPs have suicidal thoughts the month before, and about 80% of suicide completers had permanent contact with the GP and/or other medical specialist within a few months preceding their death [17]. It is not clearly known whether the intent to commit suicide was communicated or discussed during the visit before the lethal attempt. Eighteen percent of those who had contacted a physician had done so on the day of committing suicide, yet even the issue of suicide was discussed in only 22% [18].

Consequently, the recognition and the treatment of depression and suicidal crisis are extremely important during any medical contact. However, patients may find it difficult to talk to their physician about emotional problems due to shame or due to fear of stigmatization, and may therefore present physical problems only. When questioned after the fact about the reason for the last visit before attempting suicide, half of the patients indicated physical reasons only [15].

Despite the fact that the majority of suicide attempters visit their GPs before their suicidal act, the doctor–patient meeting is a necessary, although not always sufficient enough way to prevent suicide [15,19]. Most patients who commit or attempt suicide are not regarded as being at high immediate risk at their final contact with mental health services.

Based on contradictory findings in the literature we introduce a brief, practical, clinical guideline, which may aid primary care professionals to assess suicide risk and warning signs in primary care and also help them to manage these patients.

## Methods

Based on reviewing the relevant literature and based on our previous studies [20] and clinical experience, we developed a model for an integrated, regional suicide prevention strategy, which includes recognition, risk assessment and intervention (Figure 1). The main steps of the model are: (1) recognition of warning signs (communicative or behavioural); (2) exploration of crisis situation and/or psychopathologic symptoms; (3) assessment of protective and risk factors; (4) estimation of suicide risk; (5) planning of the intervention strategies; and (6) management of suicidal patients through different levels of interventions.

## Results

*Step 1.* If the behaviour or the communication of the patient implies that suicide is a possibility (“warning signs”), the most important task is to ask directly about self-destructive or suicidal thoughts, ideations,

plans or current suicide attempt. To assess the severity of suicidal risk we propose to use the algorithmic questions of Mini International Neuropsychiatric Interview Plus (MINI-Plus) structured diagnostic interview [21].

*Step 2.* Some other important warning signs, related to the actual mental state of the patient, could also influence recent suicide risk. Therefore, one should explore psychopathological symptoms, particularly depressive and anxiety symptoms, Beck’s cognitive triad (negative view of the self, negative interpretation of experience, and negative expectation of the future) [22], hopelessness, impulsivity and psychotic symptoms. The most important is to diagnose and treat major depressive disorders as early as possible prior to the patient making the first suicidal act [23]. The treatment of major depression is always needed, even in non-suicidal cases.

During the evaluation of psycho-social stress and crisis situations, traumas or negative life events, one should consider Erikson’s psycho-social [24] and Caplan’s accidental [25] crisis theories and should look for the symptoms of Ringel’s presuicidal syndrome [26]. The “Ringel’s triad” consists of three major elements: constriction, inhibited aggression turned against the victim’s self, and suicide fantasies [27]. There are specific communicational features in crisis situations, such as the “cry for help” or the “cry of pain” phenomena [28], the “negative code” concept [29], direct or indirect help-seeking, or even denial [30]. These psychopathologic and communicational features provide better understanding of suicidal behaviour, better diagnosing, detecting and assessing potential suicidal tendencies, and making available specific “anti-suicide therapies” [27].

*Step 3.* After assessing the communication, the behaviour, the mental state and the thoughts and plans of the patient, one should also consider the presented risk and protective factors. The major risk factors for completed suicide are previous suicide attempts and mental disorders [31,32]. A number of studies demonstrated that approximately 90% of suicide attempters and completers have an Axis I mental disorder – especially depressive disorders – at the time of the suicide attempt [31]. As it was demonstrated by the Gotland study, in the case of major depression, male gender is also an important suicide risk factor in primary care [4,5,33]. According to recent authors, probably the most powerful cross-sectional clinical predictor for suicidal behaviour is bipolar mixed state or agitated depression [34–36]. Many other relevant demographic and clinical risk factors (male gender, older age, adolescents, hopelessness, insomnia, divorce, living alone, chronic medical illness, recent adverse event, family history of suicide) and lack of protective factors

# A brief, practical, clinical guideline for the assessment and management of patients with acute suicide risk and suicidal behaviour

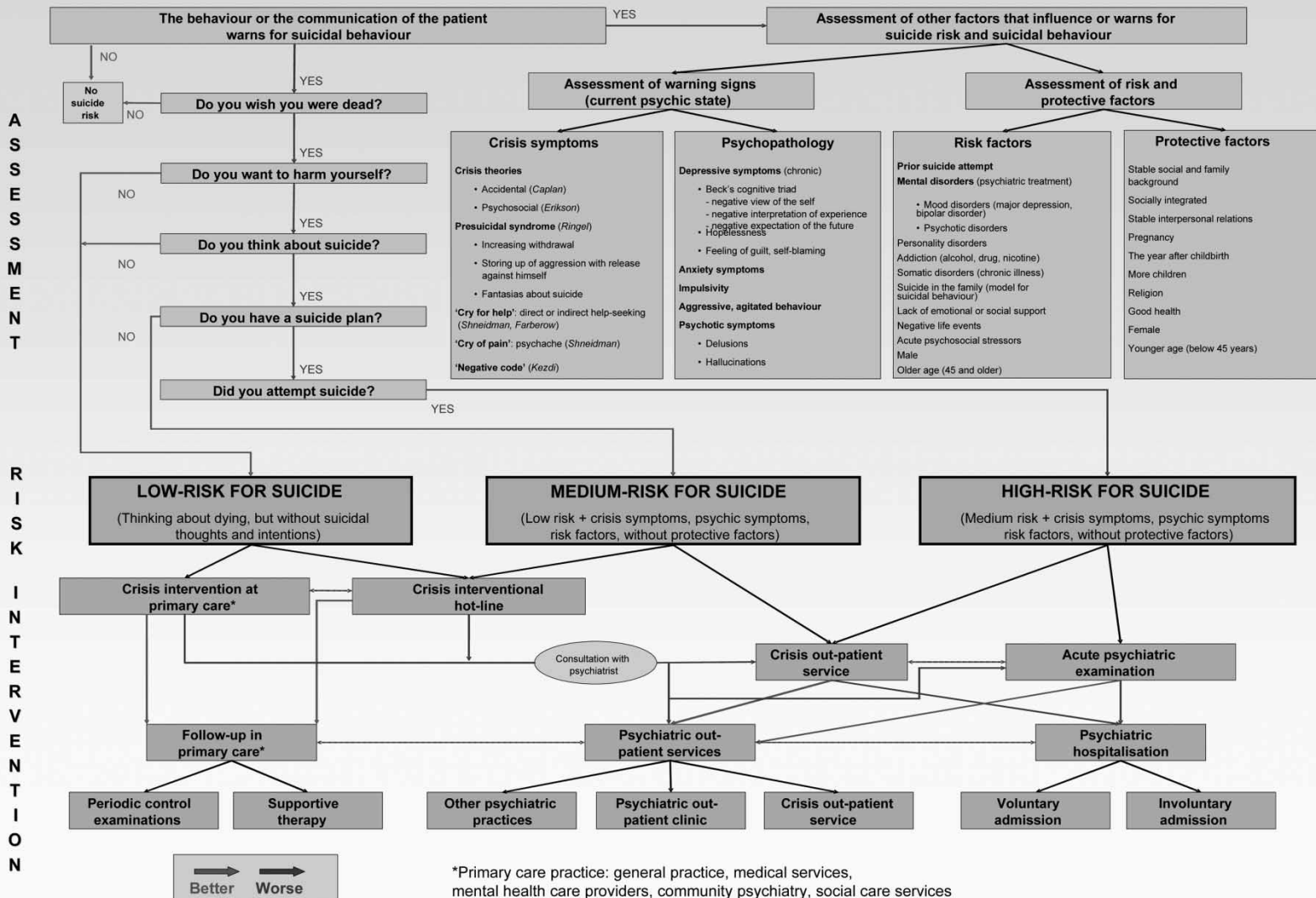


Figure 1. A brief, practical, clinical guideline for the assessment and management of patients with acute suicide risk and suicidal behaviour.

(stable social, interpersonal and family background, peripartum, religion, and good health) have been clearly identified concerning suicidal behaviour. Insomnia is an important, easy-to-detect and immediate indicator of suicide risk [37].

*Step 4.* After assessing all of these symptoms and factors one can estimate the risk of suicide, which could be low, medium, or high risk.

*Step 5.* After the first meeting with the patient with potential suicidal behaviour, the minimal aim in primary care setting is to recognize the warning signs, to assess suicide risk (from the communication and behaviour of the patient, from the psychopathological symptoms and from other risk and protective factors mentioned above), and make a plan for intervention strategies. The severity of suicide risk should determine the level of intervention.

*Step 6.* The major task for low risk for suicide is to continue crisis intervention at the primary care provider level or propose crisis-intervention hotline. Close follow-up is needed. For low or medium risk patients, a consultation is recommended with a specialist (a psychiatrist, or psychologist), who could be involved in further decisions and therapeutic processes, including admission to a crisis intervention centre, or a psychiatric out-patient service. If there are direct suicide gestures with suicide plans and obvious warning signs, especially when the crisis does not resolve, it is a life-threatening state, the patient has high risk for suicide and thus urgent psychiatric examination or acute admission to a psychiatric department is necessary.

## Discussion

Although a significant amount of the patients visit a primary care professional before the suicidal act, in most cases neither the suicide risk, nor the mental disorder is revealed, thus adequate intervention is not provided.

Only the recognition of suicide risk with the assessment of the warning signs, the risk and protective factors, and the actual mental and psychopathological state can provide primary care professionals the opportunity to manage suicidal patients adequately either by themselves or with the help of other mental health care specialists.

It has to be highlighted that mental disorders and previous suicide attempts are the most replicated risk factors for completed suicide. But, as about one-third of suicide victims have at least one prior suicide attempt, it also means that two-thirds of them die by the first attempt [23]. Therefore, we should look for predictors, other than current suicidal crisis as well, and one can be major

depression. That is why it is important to diagnose and to treat major depressive disorders as early as possible, prior to the patient making the first suicide attempt [23]. Since there are some contradictory data in the literature concerning suicides and antidepressants (ADs), and since these drugs are commonly used in general practice, it has to be emphasized that the overall evidence suggests that the widespread use of ADs, especially selective serotonin reuptake inhibitors (SSRIs) appear to have a significant role in decreasing suicide rates in most European countries with traditionally high baseline suicide rates. Recent clinical data on large samples in the United States also revealed a protective effect of ADs against suicide [38].

In the management of suicidal behaviour, the complex stress-diathesis model has to be adjusted by considering biological markers (mental disorders, personality trait factors, psychopathological symptoms) and psycho-social (crisis, negative life events, loss, isolation, interpersonal conflicts) factors. Only after the assessment of all these factors can primary care professionals, as gatekeepers, manage suicidal patients effectively by using adequate psychopharmacotherapeutic and psychotherapeutic interventions in the recognition, treatment and prevention of suicidal behaviour.

## Key points

- A regional suicide prevention model is introduced, which includes recognition, risk assessment and intervention
- The main steps of the model are the recognition of warning signs (communicative or behavioural), exploration of crisis situation and/or psychopathological symptoms, assessment of protective and risk factors, estimation of suicide risk and a plan for management of suicidal patients through different levels of interventions
- In the management of suicidal behaviour, the complex stress-diathesis model has to be adjusted by considering biological markers and psycho-social factors
- Only after the assessment of these factors can primary care professionals, as gatekeepers, manage suicidal patients effectively by using adequate psychopharmacotherapeutic and psychotherapeutic interventions in the recognition, treatment and prevention of suicidal behaviour

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None.

## Statement of Interest

The authors have no conflict of interest with any commercial or other associations in connection with the submitted article.

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