

RESEARCH ARTICLE

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Chain of care for patients who have attempted suicide: a follow-up study from Bærum, Norway

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Abstract

Background: Individuals who have attempted suicide are at increased risk of subsequent suicidal behavior. Since 1983, a community-based suicide prevention team has been operating in the municipality of Bærum, Norway. This study aimed to test the effectiveness of the team's interventions in preventing repeated suicide attempts and suicide deaths, as part of a chain of care model for all general hospital treated suicide attempters.

Methods: Data has been collected consecutively since 1984 and a follow-up was conducted on all individuals admitted to the general hospital after a suicide attempt. The risk of repeated suicide attempt and suicide were comparatively examined in subjects who received assistance from the suicide prevention team in addition to treatment as usual versus those who received treatment as usual only. Logistic regression and Cox regression were used to analyze the data.

Results: Between January 1984 and December 2007, 1,616 subjects were registered as having attempted suicide; 197 of them (12%) made another attempt within 12 months. Compared to subjects who did not receive assistance from the suicide prevention team, individuals involved in the prevention program did not have a significantly different risk of repeated attempt within 6 months (adjusted $OR = 1.08$; 95% $CI = 0.66-1.74$), 12 months (adjusted $OR = 0.86$; 95% $CI = 0.57-1.30$), or 5 years (adjusted $RR = 0.90$; 95% $CI = 0.67-1.22$) after their first recorded attempt. There was also no difference in risk of suicide (adjusted $RR = 0.85$; 95% $CI = 0.46-1.57$). Previous suicide attempts, marital status, and employment status were significantly associated with a repeated suicide attempt within 6 and 12 months ($p < 0.05$). Alcohol misuse, employment status, and previous suicide attempts were significantly associated with a repeated attempt within 5 years ($p < 0.05$) while marital status became non-significant ($p > 0.05$). With each year of age, the risk of suicide increased by 3% ($p < 0.05$).

Conclusions: The present study did not find any differences in the risk of fatal and non-fatal suicidal behavior between subjects who received treatment as usual combined with community assistance versus subjects who received only treatment as usual. However, assistance from the community team was mainly offered to attempters who were not receiving sufficient support from treatment as usual and was accepted by 50-60% of those deemed eligible. Thus, obtaining similar outcomes for individuals, all of whom were clinically judged to have different needs, could in itself be considered a desirable result.

All patients that are not immediately admitted to psychiatric inpatient treatment are evaluated for referrals to the community suicide prevention team. A minority of the patients admitted to inpatient mental health treatment receives community suicide prevention team services ($n = 28$ in the present study). The community team and the hospital team collaborate to ensure a joint evaluation of the situation, to make appropriate referrals, and to ensure that all follow-up steps are in effect as soon as possible. Main patient groups eligible for referrals to the suicide prevention team are as follows:

- Patients in need of outpatient health and social services that are not established by the hospital team
- Patients in ongoing outpatient treatment who are in need of extra support
- Patients and family or other who are in relational conflicts and in need of extra support
- Patients who have previously dropped out of mental health treatment and need to be motivated to reappoint

The community suicide prevention team includes public health nurses and a psychologist. The nurses organize the work in relation to patients, in consultation with the psychologist. Particular emphasis is placed on the suicidal person's need for a supportive helper. On average, 50 - 60% of the attempters deemed eligible for the community team are referred to this follow-up every year.

If patients agree to be assisted by this team, a public health nurse contacts them shortly after discharge. A telephone call is made, preferably the day of discharge or the day after. An agreement is made on when and where to meet; in most cases the agreement involves nurse making a home visit within a few days. These nurses act as "ombudsmen" [18]: the main aim is to ensure that the patients are given sufficient follow-up care by specialist mental health services or community health/social services within an acceptable period of time following hospital discharge. Further, the nurse motivates the patient to accept treatment and better adhere to treatment appointments. If patients drop out of treatment, the nurse tries to recuperate them back into treatment or establishes a more suitable therapeutic plan in collaboration with the patient and the health services.

In addition, the nurse fulfills the role of looking after the patient between hospital discharge and established aftercare. The nurse gives the patient "psychological first aid", problem-solving counseling, and activates the patient's social network. Although the main aim is reached when a treatment program is established, the patient is followed-up by the nurse for approximately one year to secure continuity, treatment compliance, and social support. Most of the contact will be phone calls, ranging from several times a week in the beginning, to a monthly call at the end of the follow-up period.

The intervention offered by this team is not regarded as stand-alone treatment, but rather as a service offered in addition to established health and social services; it is not a substitute for any other health interventions. If the standard follow-up treatment is deemed to be sufficient, the community team is not activated. Patients are in any case free to reject assistance from the community team.

Methods

The Bærum Model

A rapid-response intervention is created through collaboration between the general hospital of Asker and Bærum, the municipal suicide prevention team, and community health and social services located in the municipality of Bærum. On presentation at the hospital or emergency unit, patients receive acute life-saving treatment and medical monitoring. Consequently, a hospital-based suicide prevention team, including social workers and a liaison psychiatrist, is notified. This team helps the patients through crisis intervention and evaluates the patients' psychosocial functioning and risk for suicide. Appropriate measures are then taken with the patients' cooperation. These measures can include referrals to psychiatric inpatient and various outpatient services, including mental health treatment, substance abuse treatment, family counseling, and various social services.