Register for Suicide Attempts

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ABSTRACT
Background: The Register for Suicide Attempts (RSA) is a product of the WHO research project "WHO/Euro Multicentre Study on Parasuicide", which, among other things, had the purpose of collecting data on suicide attempts from 13 European countries. Data is collected in order to calculate trends and identify high-risk groups. Data collection for the RSA started in 1989.

Methods: The RSA is a longitudinal, person-based register. It contains information about people who have been in contact with the health care system in the County of Funen as a result of a suicide. The RSA contains 11 variables, which describe the incident in detail, and a number of variables describing the person. The data contains data covering the period April 1989 to December 2003 and is updated annually. Data is collected from somatic and psychiatric hospitals in an administrative district (County of Funen). The data collection is done manually by going through all the records in which a contact to the health care system, i.e. a potential suicide attempt, is described. Only incidents matching the WHO definition of an attempted suicide are registered.

Conclusion: Data from the RSA has been used in national and international statistical or scientific studies. The RSA is the most suitable register in Denmark for analyses of suicide attempts.


ORIGINAL ARTICLE

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BACKGROUND
There has never been a systematic registration of suicide attempts in Denmark, although suicides have been registered systematically since the middle of the 19th century (1). After World War II, WHO introduced the international illness and causes of death classification system, and a registration of suicide attempts based on the Danish Psychiatric Central Register diagnosis system was expected. For some years this registration also included suicide attempts. However, lack of a clear definition of suicide attempts resulted in different interpretations of the incidents referred to in the diagnoses (2). In the late 1970s, WHO introduced the main target area of "Health for all by the year 2000", in which target number 12 was to stop the current growing trend in suicide and suicide attempts in Europe. A working party of suicidologists was established, which was to prepare a common European research programme, part of which was a research project aiming, among other things, at monitoring suicide attempts. Data collection for the RSA started in 1989.

METHODS

Data from the RSA has been used in national and international statistical or scientific studies. The RSA is the most suitable register in Denmark for analyses of suicide attempts.

Conclusions

The data is registered electronically and contains information about the incident and the socio-demographic conditions of the attempt. Information about the incident consists of the following 11 variables (Figure 1). Information about the person is collected in 16 variables which contain information about socio-demographic conditions, such as nationality, residence, marital status, education, occupation and income, and previous suicide attempts. This information is derived from the case records, for which reason a small amount of errors in the registration of the socio-demographic data is to be expected. The register contains approximately 11,000 suicide attempts committed by approximately 6000 different persons recorded from April 1st 1989 to December 31st 2001. Age ranges from 15 years and upwards, but there is a majority of younger people in the register. The register is updated every year.

DATA ACCESS

The Act on Processing of Personal Data, Act no. 429 from May 31st 2000, subsequently amended as Act no. 280 from April 25th 2001, applies to the RSA. The act allows the use of data for research projects contributing knowledge about prevention within the area of health care. Processing of data may be conducted to perform statistical or scientific studies of major importance to the society.

Researchers who desire access to data from the RSA must apply to...
the Centre for Suicide Research to be granted access. The application must include a description of the project, including objective, methods, and description of the specific data needed for the study. Processing of data must be approved by the Danish Data Protection Agency.

The Centre for Suicide Research willingly participates in any project aiming to advance knowledge about prevention of suicidal behaviour or contribution of knowledge within the social area or health care.

**DISCUSSION**

**DATA VALIDATION**

We expect the data describing the incident to reflect the real incident, but that is not documented. The information derives from the case records, which are filled out by a competent staff, and subsequently controlled for errors by the staff at the Centre for Suicide Research. The material is controlled for errors such as multiple registrations of a single incident, as well as validity of CPR-no. and data. On the other hand, the data concerning the attempters is assumed to be less valid. This information is derived from the case registrations of a single incident, as well as validity of CPR-no. and to what extent the information is derived from the CPR-no.

Method. Detailed information about the method used in the suicide attempt classified according to the ICD-10 diagnoses X60-X84. As much as twenty-four methods are coded, distinguishing between ten classes of self-poisoning, including drugs, alcohol, other liquids, gases, or poison. Also 14 violent methods of self-harm by hanging, drowning, firearms, burning, sharp or blunt objects, jumping from high places, jumping in front of a car or train, besides unspecified methods are included.

Alcohol. Information about consumption of alcohol and estimation of alcohol intake. Alcohol is included so that it is possible to analyse the complex and important relationship between suicidal behaviour and alcohol.

Figure 1. Variables in RSA describing the incident.
countries and in (19, 20-23) for European countries. Funen was among the regions with the highest male and female age-standardized rates, and the comparison of rates shows striking differences between the areas.

Seasonality in suicide attempts, i.e. variation of suicide attempts in regard to time of the day, day of the week, day of the month and distribution around holidays were studied in a European project (24, 25). Some differences among temporal fluctuations and seasonality in suicide and suicide attempt were found.

Comparative studies of methods for attempted suicides (26) and recommendation for treatment of adolescents have been performed (27).

The RSA contributed with statistics of attempted suicide for preparing the national programme for prevention of suicide and suicide attempts. The errors in the NPR have been recognized by the committee preparing the programme (28).

NEED FOR FURTHER RESEARCH
During the last decade, much attention has been paid to register research in Denmark. Within the last five years, co-workers at the National Centre for Register-based Research at the University of Aarhus have published several register-based studies on risk factors for suicide (29). These excellent studies have contributed to a better understanding of the risk factors for suicide. The studies follow the recommendations in the national programme for prevention of suicide and suicide attempts (28) of enhanced register-based research on suicidal behaviour. However, there is a lack of research on attempted suicides. In Denmark, an increase in rates of attempted suicides has been observed during the last five years, especially among young females. The reasons for this have not been found. The risk factors for the first suicide attempt have not been analysed to the same extent as suicides. Furthermore, the effect of treatment of attempts has not been documented. Knowledge of risk factors for repeated suicide attempts is scarce.

REFERENCES