

Geographic Differences in Suicide Attempts

Kathrine Aaroe Joergensen, Cand.Soc., Centre for Suicide Research, Denmark.

Introduction: In 2012, the Register for Suicide Attempts was expanded and now includes data from two regions of Denmark, which has revealed some geographic and demographic differences¹ in suicide attempts. In this project, the potential links between region of residence and protective / risk factors for suicide attempts are investigated. The Danish municipalities are divided into four types: urban, medium, rural and peripheral. The distribution of suicide attempts between these categories are here presented. This knowledge can be used in future work with suicide prevention.

Methods: Currently, the Register for Suicide Attempts contains data on suicide attempts resulting in contact with hospitals in the Northern and the Zealand Region of Denmark for the years 2012-2015. Findings are analyzed according to demographic characteristics, such as age, gender and the municipality of residence.

Results: Table 1 presents the development of suicide attempts in the two regions, the development for 15-19 year olds (the development is especially large in this age-group) and the distribution of municipality types in the two regions:

Table 1	Northern Region		Zealand Region	
Rate by year	2012: 42.0 2014: 80.5	2013: 36.9 2015: 91.6	2012: 30.1 2014: 28.1	2013: 33.9 2015: 22.7
Rate, 15-19 year-olds	2012: 64.5 2014: 207.5	2013: 68.0 2015: 178.8	2012: 101.4 2014: 84.7	2013: 94.8 2015: 52.0
Type of municipalities ²	Peripheral: 4 Rural: 6 Medium: 0 Urban: 1		Peripheral: 1 Rural: 4 Medium: 7 Urban: 5	

The distribution of suicide attempts between the four municipality types and the development from 2012-2015 is shown in figure 1 (Northern Region) and figure 2 (Zealand Region)³.

Figure 1: Northern Region of Denmark

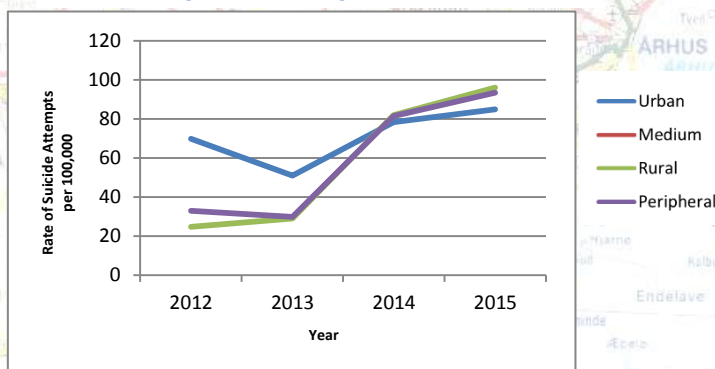
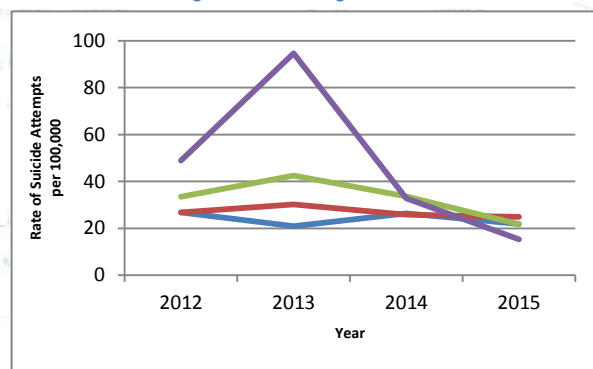


Figure 2: Zealand Region



Conclusion: Results show more internal variations in municipality characteristics in the Zealand Region than in the Northern Region. Whereas the Northern Region contains little urban space (1) and many rural (6) and peripheral (4) municipalities, the Zealand Region has mainly urban (5) and medium (7) municipalities, but also rural (4) and peripheral (1). While there has been an increase of suicide attempts in the Northern Region, there has been a decline in the Zealand Region. In both regions, the difference between the municipality types is flattening out in 2014 and 2015, and the fluctuations are smaller in urban municipalities. Rural and peripheral areas in the Northern Region are following the same tendency.

Discussion: As only four years are currently included in the Register for Suicide Attempts, the development over time is sensitive to coincidences. With the continuing expansion of the register, including the remaining three regions can potentially show whether the findings are general tendencies or regional specifics. The project is still under development, and statistical analysis is currently being made on characteristics such as income, age distributions, occupation, type of residence and social relations.

¹ See: Larsen, C. P. & Mikkelsen, A.K.T. *Register for Selvmordsforsøg 2012, 2013 & 2014*. Odense 2015, Center for Selvmordsforskning.

² As classified in: Ministeriet for Fødevarer, Landbrug og Fiskeri. *Det danske landdistriktsprogram 2007-2013*. Den Europæiske Landbrugsfond for Udvikling af Landdistrikterne, 2008.

³ As there is only one peripheral municipality in the Zealand Region with relatively few registered suicide attempts, conclusions must be taken with caution.