Monitoring health and social inequality in North Norway: The Tromsø Study

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Background

In the mid-1970s, one in five Norwegian men died of myocardial infarction before the age of 75, and the situation in North Norway was worse. The Tromsø Study was initiated in 1974 to study determinants of cardiovascular diseases (CVD) and to develop preventive measures.

Material and methods

The Tromsø Study is a population-based and prospective study of health and a resource for surveillance of disease risk factors. The study design ensures repeated measurements of the Tromsø residents. Seven surveys have been conducted 6-7 years apart (Tromsø 1-7); the latest survey ends in November 2016. The study has gradually expanded to include several risk factors, symptoms, chronic diseases and use of medication and health care services (1). All surveys comprise questionnaire data, measurements, biological material and clinical examinations. Information on outcomes is obtained by linkage to central and local disease registries. Fit Futures (FF) is the youth cohort of the Tromsø Study and is repeated twice.

	Examination	Age			
Survey	years	group	n	Gender	Participation %
Tromsø 1	1974	20-49	6 595	Men	74
Tromsø 2	1979-80	20-54	16 621	men/women	78
Tromsø 3	1986-87	12-67	21 826	men/women	75
Tromsø 4	1994-95	25-97	27 158	men/women	72
Tromsø 5	2001-02	30-89	8 130	men/women	79
Tromsø 6	2007-08	30-87	12 984	men/women	66
Fit Futures 1	2010-11	15-19	1 038	men/women	93
Fit Futures 2	2012-13	17-21	870	men/women	77
Tromsø 7	2015-16	40-79	21 084	men/women	65

Results

CVD mortality in Northern Norway has decreased substantially since 1974 and is now at the national average. Major CVD risk factors (blood pressure, blood cholesterol, smoking prevalence) have

declined in parallel, while BMI has been increasing (2). Previous analyses showed a persistent social gradient in CVD risk factors, except for elevated cholesterol levels. (3).

Conclusion

We have earlier found a persistent social gradient in CVD risk factors. We will present updated analyses including data from the Tromsø 7, which may guide future discussions and development of preventive strategies.

References

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Keywords

Cardiovascular disease Social inequality Population studies