

Predictors of long-term opioid use among chronic nonmalignant pain patients



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INTRODUCTION

Denmark has a high amount of prescribed opioid consumption (Table 1) when compared to the other Nordic countries. Opioid use in overall in Denmark indicates some inequality in treatment on age groups and regions (Table 2). Epidemiological studies to date on opioid use in Denmark have been limited to studies including a limited number of opioid products, focusing primarily on cancer pain, or have been studies of smaller scale and with cross-sectional designs. It is therefore important to acquire new and greater knowledge in the area of opioid consumption of chronic non-malignant pain patients in order to improve and develop existing treatment, prevent long-term use, premature deaths and reduce healthcare costs.

AIMS

1. To determine the distribution and determinants of opioid use among chronic nonmalignant pain(CNP) patients
2. To identify the patient, treatment and socioeconomic characteristics as determinants for potential risk groups

We hypothesized that CNP patient who use opioids for more than 1 year would differ in demographics and comorbidity from other patients who use opioids for less than 6 months.

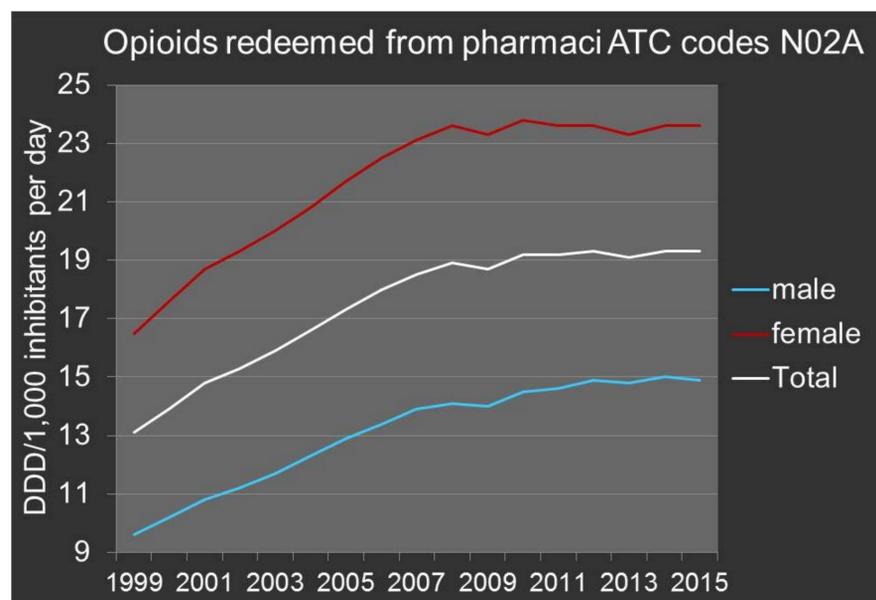


Table 1. Prescribed opioid use in the Danish population not specified per diagnosis www.medstat.dk

INEQUALITY IN TREATMENT

A GENERAL PICTURE

The extent of prescribed opioid treatment is varying clearly among different regions in Denmark and age groups (Table 2).

DDD PER 1,000 INHABITANTS PER DAY, FIVE AGE GROUPS OVERALL IN THE COUNTRY

15-19y redeemed opioids has been fairly stable on a low level in 1999: 0.3 – 2015: 0.4

20-39y opioid use has almost doubled in the period 1999: 3.4 – 2015: 6.6

40-64y prescribed use has been markedly increased 1999: 17.7 – 2015: 26.7

65-79y increased 1999: 37.8 – 2015: 41.3

80+y redeemed opioids increased significantly 1999: 55.9 – 2015: 65.7

www.medstat.dk

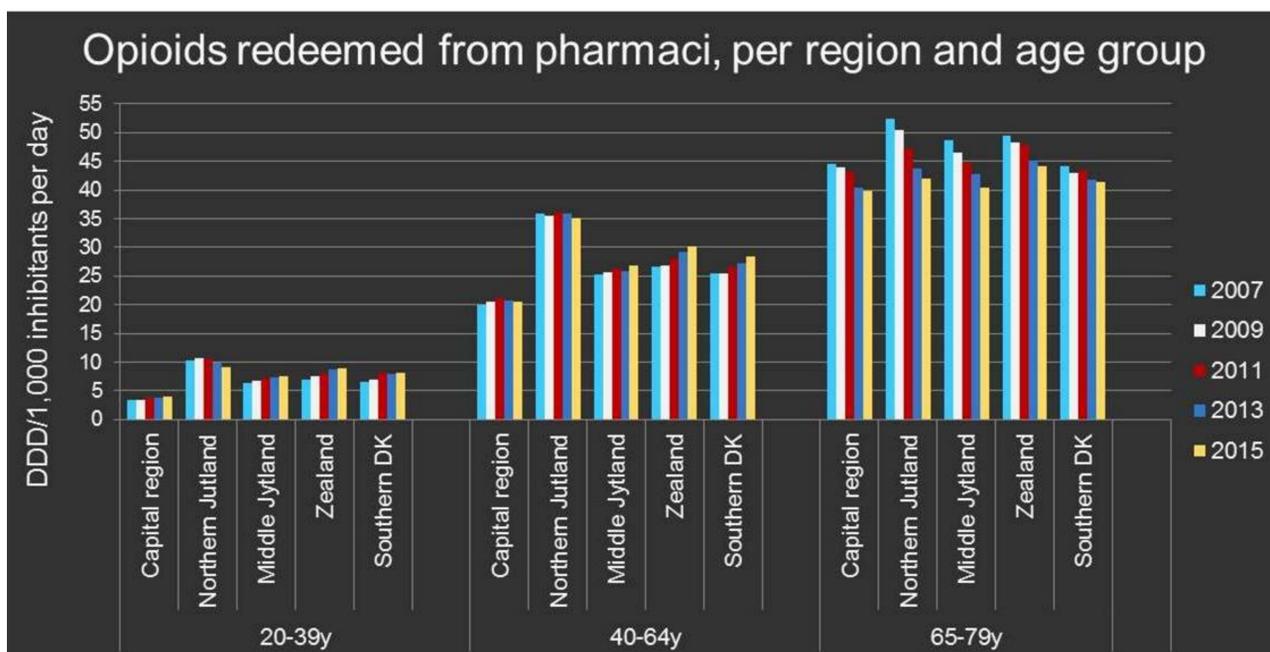


Table 2. Prescribed opioid use in the Danish population not specified per diagnosis. www.medstat.dk

METHODS

Data are accessed through Statistics Denmark using National registers: National prescription Database (drug prescription data); Danish National Hospital Discharge (data of diagnoses); and socio-demographic information (e.g., income, education, family, housing, emigration) from the Socio-Economic Database, as well as information on death from The Danish Death Register.

INCLUDING:

- new users, redeemed at least one prescription for an opioid product in the period 01/01/2000 to 31/12/2014 (incl.)
- all adults aged 16 years or older
- residing in Denmark
- survived for at least two years
- follow-up minimum one year after the last redeemed opioid prescription or to 31/12/2015

Participants are included at first redeemed prescription for an opioid product using the ATC codes starting with N02AA01 - N02AX06 (61 opioid products). Exclusion criterion: cancer-related opioid treatment.

Comparisons using logistic regression analysis between three predefined non-overlapping outcome groups: 1) Individuals with opioid use >1 year, 2) Individuals with opioid use >6 months but less than one year and, 3) Individuals with opioid use ≤6 months.

CONCLUDING EXPECTATIONS

It is expected that this study will serve as a significant supplement of existing knowledge in the area of opioid consumption among CNP patients in Denmark.

Thereby it is expected that the study will contribute knowledge regarding opioid therapy at regional level and on age groups and gender level. Thus reveal some explanations regarding the apparent inequality in treatment across regions in Denmark, based on socio-demographic data, comorbidities and pain diagnosis.

In a future perspective of prevention and health promotion initiatives of the growing public health problem CNP, it might be beneficial to include perspectives of risk assessment of long-term opioid use.