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### Editorial comment

### The burden of headache, also for the adolecents?

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Headache is one of the most prevalent pain disorders, and the importance of the burden of headache is increasingly acknowledged, latest in the important WHO publication "The Headache Atlas" authored by professor Tim Steiner and professor Lars Jacob Stovner, University of Trondheim, Norway [1].

In order to reduce the significant burden of headache it is of utmost importance to identify the individuals at risk. The study published in the present issue of *Scandinavian Journal of Pain*: "The Nord-Trøndelag Health Study shows increased prevalence of primary recurrent headaches among adolescents over a four-year period" by Brit A. Jacobsen, Grete Dyb, Knut Hagen, Lars J. Stovner, Turid L. Holmen, and John-Anker Zwart is an important contribution [2]. It focuses on adolescents and exactly on the age group where most primary headaches have their onset.

The Nord-Trøndelag Health Study (Helse Undersøkelse i Nord-Tøndelag = HUNT) is one of the largest and most comprehensive population-based health surveys ever performed. HUNT is a databank of personal and family medical histories, clinical measurements, exposure variables and biological material collected in three consecutive studies from 1984 to 2008. In total, more than 100,000 persons from the County of Nord-Trøndelag in Norway have participated. In the HUNT2-study (1995–1997) the age group between 13 and 20 years was included for the first time.

# 1. High and increasing prevalence of primary headaches among adolescents

This very large scaled study aimed to document the prevalence of headache among adolescents aged 16–20 years in 2 separate cross sectional but otherwise identical studies from 1995 to 1997 and again 4 years later from 1999 to 2001. The applied methods are very sound and detailed and the chosen populations are well defined. This is among the largest studies ever conducted in this age group.

Nevertheless, I would like to emphasize the importance of subdivision in relation to frequency. In headache as well as in most other periodic pain disorders (e.g. temporo-mandibular disorders (TMD), low back pain) it is crucial to define and discuss the fre-

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quency of pain. The total burden of pain is closely connected to the frequency and in headache, which is known by almost everyone it is meaningless to discuss the general impact of headache without a definition of the frequency. A migraine or tension-type headache once or twice a year is a nuisance, not a disease, whereas a daily or weekly occurrence is a disorder with significant impact on quality of life, functionality and the society.

The results of the present study [2] are important, and should create increased awareness of the burden of headache in the society and especially in the health care and education system. The possible risk factors for frequent headaches are not explored or analyzed in the present study.

#### 2. How can headaches among young adults be prevented?

In Denmark and in USA, the general use of all types of medication has increased with up to 62% over a ten-year period and for non-opioid analgesics with up to 30% over a 6 years period [3,4]. As a part of the international survey on Health Behaviour in School-Aged Children in Denmark, data were collected on the usage of headache medication by 11-, 13- and 15-year-old children in 2006 [5]. As many as 58% of the 15-year-old girls and 39% of the boys had taken Over-The-Counter (OCT) analgesics for headache in the previous month [5].

As children are specifically prone to developing medication overuse headache and as medication use is a risk behaviour that tracks from adolescence to adulthood, an early and active prevention campaign for headache and for overuse of analgesics directed to the younger groups is urgently needed. Education of health care professionals to improve headache care is one very important step forward. However, education of the public about life style and restricted intake of pain killers are probably much more valuable.

In general health care, increased focus is directed to life style, lack of exercise and dietary habits and the present study implies that adolescents also should be targeted into restricted use of pain killers, and a healthy life style. As the title indicates [2] the total prevalence is increasing over this 4 years time span in line with prior longitudinal studies. However, in contrast to other studies in adults, the presented data also reveal that the overall frequency of headache is declining towards more monthly and less weekly headache. Headache is a major health problem for the society and for the individual and there is an urgent need for longitudinal studies and analysis of possible risk factors.

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