
Back to the days of matchsticks?

RAGNHILD ØRSTAVIK

ragnhild.orstavik@tidsskriftet.no

Ragnhild Ørstavik, MD, PhD, assistant editor-in-chief of the Journal of the Norwegian Medical Association and senior researcher at the Norwegian Institute of Public Health.

Despite the low temperatures in Norway, we are not used to being cold. But the persistently high electricity prices may also trigger the fuel poverty phenomenon here too.



Photo: Einar Nilsen

In Hans Christian Andersen's fairy tale 'The Little Match Girl', New Year's Eve is being celebrated in the fine homes of Copenhagen. Outside stands a little girl with no shoes or hat, selling matches that no one buys. She is poor, cold and freezing to death. In Norway today, 175 years after the 900-word tale was first published, it seems banal and irrelevant. However, in the cold month of December that has just passed, the website Finn.no was full of announcements from mothers asking for help with their children's Christmas [\(1\)](#). Thus, poverty still exists, and many more could freeze.

Poverty is measured in a variety of ways [\(2\)](#). Absolute poverty, or what the UN describes as extreme poverty, is rare in Norway: while almost 10 % of the world's population live on less than the equivalent of USD 1.9 a day, the proportion in Norway is just 0.2 % [\(3\)](#). The EU defines relative poverty as an equivalised disposable income below 60 % of a country's median income [\(4\)](#). In Norway, this proportion rose in the period up to 2017, but has since levelled off and remains relatively stable at just over 10 % [\(4\)](#). Certain groups of the population, such as retired people receiving the minimum pension, older immigrants with no entitlement to welfare benefits and single parents, are strongly overrepresented [\(3\)](#). One group is growing: more than 11 % of children, a total of 115,000, are living in families with a persistently low income. This proportion has tripled since the turn of the millennium [\(4\)](#).

Being poor is a health risk. The life expectancy of men in the lowest income quartile in Norway is eight years lower than for those in the highest quartile (the difference for women is around six years). The richest percentage of men will live almost 14 years longer in Norway than their poorest counterparts [\(5\)](#). This inequality in life expectancy is increasing and is already on a par with the United States [\(5\)](#).

«In the cold month of December that has just passed, the website Finn.no was full of announcements from mothers asking for help with their children's Christmas»

However, so far there is little evidence to suggest that the health inequalities in life expectancy are related to freezing temperatures. In the latest Living Conditions Survey by Statistics Norway, only 1 % of all respondents reported not being able to afford to adequately heat their home [\(4\)](#). Even among the most vulnerable groups the figure was low, at 4–7 %. Other unmet basic needs, such as being able to afford a dentist or dinner every other day, were far more common [\(4\)](#). However, the survey was conducted while electricity prices in Norway were at an all-time low. Even with the government's electricity support scheme, prices are expected to impact on people's ability to keep warm [\(4\)](#).

Freezing temperatures are dangerous. Globally, over five million people die annually from causes related to extreme temperatures, and the number of deaths due to exposure to low temperatures is still 10–20 times higher than deaths related to high temperatures [\(6, 7\)](#). Most deaths related to low temperatures occur in Sub-Saharan Africa and West Asia. However, the incidence in the UK – a high-income country – is fairly high, and far higher than the Scandinavian countries [\(6, 7\)](#).

The UK has a warmer climate than Norway, but higher energy prices and more poorly insulated homes. Consequently, the focus on the repercussions of freezing temperatures is also greater. The term 'fuel poverty' has already become a phenomenon (8, 9). Before the pandemic, it was estimated that 13–25 % of the British population did not have enough fuel, and the proportion is probably higher now (7). Older people and children tend to be hit the hardest. The former have an increased risk of falls, heart disease, influenza and (of course) hypothermia. Children's risk of respiratory diseases can increase, and living in a cold, damp home has been linked to subsequent development of both physical and mental health problems (8). There are also indirect effects when other basic needs have to be sacrificed to stay warm (9). The Norwegian government has introduced an electricity support scheme. However, we need to know if the scheme works, and we need an assurance that children and older people in particular can stay sufficiently warm throughout the rest of the winter without having to choose between heating and eating – and without having to beg. If not, we are back to the days of matchsticks.

REFERENCES

1. Haugli M. Mange ber om hjelp til julen. NRK 11.12.2018. <https://www.nrk.no/osloogviken/mange-ber-om-hjelp-til-julen-1.14334276> Accessed 2.1.2023.
2. FN-sambandet. Fattigdom. <https://www.fn.no/tema/fattigdom/fattigdom> Accessed 2.1.2023.
3. United Nations. Norway. <https://unstats.un.org/sdgs/dataportal/countryprofiles/NOR> Accessed 2.1.2023.
4. Hammersland R, Barstad A. Humanitære behov i Norge. https://www.ssb.no/sosiale-forhold-og-kriminalitet/levekraer/artikler/humanitaere-behov-i-norge.status-2022/_/attachment/inline/e2dca5cb-3288-4353-945b-a71ca8d67450:1bf3083ec2b9751ce840d6117237e6954d9bocdb/RAPP2022-33.pdf Accessed 2.1.2023.
5. Kinge JM, Modalsli JH, Øverland S et al. Association of Household Income With Life Expectancy and Cause-Specific Mortality in Norway, 2005-2015. *JAMA* 2019; 321: 1916–25. [PubMed][CrossRef]
6. Zhao Q, Guo Y, Ye T et al. Global, regional, and national burden of mortality associated with non-optimal ambient temperatures from 2000 to 2019: a three-stage modelling study. *Lancet Planet Health* 2021; 5: e415–25. [PubMed][CrossRef]
7. Gasparrini A, Guo Y, Hashizume M et al. Mortality risk attributable to high and low ambient temperature: a multicountry observational study. *Lancet* 2015; 386: 369–75. [PubMed][CrossRef]

8. Whitehead M, Taylor-Robinson D, Barr B. Fuel poverty is intimately linked to poor health. *BMJ* 2022; 376: o606. [PubMed][CrossRef]

9. Marmot M, Sinha I, Lee A. Millions of children face a «humanitarian crisis» of fuel poverty. *BMJ* 2022; 378: o2129. [CrossRef]

Publisert: 16 January 2023. Tidsskr Nor Legeforen. DOI: 10.4045/tidsskr.23.0003

© Tidsskrift for Den norske legeforening 2026. Downloaded from tidsskriftet.no 2 July 2026.