



## **Unreliable estimation of prevalence of fetal alcohol syndrome**

Strandberg-Larsen, Katrine; Nybo Andersen, Anne-Marie; Kesmodel, Ulrik S.

*Published in:*  
The Lancet Global Health

*DOI:*  
[10.1016/S2214-109X\(17\)30172-9](https://doi.org/10.1016/S2214-109X(17)30172-9)

*Publication date:*  
2017

*Document version*  
Publisher's PDF, also known as Version of record

*Document license:*  
[CC BY-NC-ND](#)

*Citation for published version (APA):*  
Strandberg-Larsen, K., Nybo Andersen, A-M., & Kesmodel, U. S. (2017). Unreliable estimation of prevalence of fetal alcohol syndrome. *The Lancet Global Health*, 5(6), E573-E573. [https://doi.org/10.1016/S2214-109X\(17\)30172-9](https://doi.org/10.1016/S2214-109X(17)30172-9)



## Unreliable estimation of prevalence of fetal alcohol syndrome

Svetlana Popova and colleagues (March, 2017)<sup>1</sup> estimated that about one quarter of pregnant women in Europe drink alcohol. The authors state that this estimate is 2.6 times higher than the global prevalence and estimate that Europe has the world's highest fetal alcohol syndrome (FAS) prevalence of 37.4 per 10 000 people. If true, these numbers are alarming and require urgent action; however, we are not convinced that they are valid for contemporary Europe.

The estimated drinking prevalence of 45.8% for Denmark is based on six Danish studies, five of which describe pregnant women in the 1980s and 1990s. This prevalence is much higher than reported in surveillance data,<sup>2,3</sup> which showed that, in Denmark's two most urbanised areas, 3% and 15% of pregnant women consumed alcohol in 2012. Drinking during pregnancy has reduced markedly in Denmark—eg, from 70% in 1998 to 15% in 2013 in the Aarhus area.<sup>3</sup> We therefore consider the estimation of alcohol use in pregnancy and consequently prevalence of FAS to be seriously overestimated. We are concerned that a similar overestimation could apply to other countries. According to the National Danish Patient Registry<sup>4</sup>, which covers all inpatient and outpatient contacts in Denmark, approximately 12 children are diagnosed with FAS every year, corresponding to two per 10 000 children; although record-based ascertainment is known to be underestimated,<sup>5</sup> this is still considerably lower than the estimated 68 per 10 000 children reported by Popova and colleagues.

FAS is one of few preventable congenital diseases, and we highly appreciate the efforts of the authors. Still, we believe that more critical reflections on the validity of the

estimations would have benefitted their work.

We declare no competing interests.

Copyright © The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

\**Katrine Strandberg-Larsen, Anne-Marie Nybo Andersen, Ulrik S Kesmodel*  
ksla@sund.ku.dk

Section of Social Medicine, Department of Public Health, University of Copenhagen, Copenhagen 2099, Denmark (KS-L, A-MNA); and Department of Obstetrics and Gynaecology, Herlev and Gentofte University Hospital, Copenhagen, Denmark (USK)

- 1 Popova S, Lange S, Probst C, Gmel G, Rehm J. Estimation of national, regional, and global prevalence of alcohol use during pregnancy and fetal alcohol syndrome: a systematic review and meta-analysis. *Lancet Glob Health* 2017; **5**: e290–99.
- 2 Iversen ML, Sorensen NO, Broberg L, et al. Alcohol consumption and binge drinking in early pregnancy. A cross-sectional study with data from the Copenhagen pregnancy cohort. *BMC Pregnancy Childbirth* 2015; **15**: 327.
- 3 Kesmodel US, Petersen GL, Henriksen TB, Strandberg-Larsen K. Time trends in alcohol intake in early pregnancy and official recommendations in Denmark, 1998–2013. *Acta Obstet Gynecol Scand* 2016; **95**: 803–10.
- 4 Petersen GL, Kesmodel US, Strandberg-Larsen K. Alcohol consumption among pregnant women and women of childbearing age in Denmark—assignment for the Danish Health Authority. Copenhagen: University of Copenhagen, 2015 (in Danish).
- 5 Fox DJ, Pettygrove S, Cuniff C, O'Leary LA, et al. Fetal alcohol syndrome among children aged 7–9 years—Arizona, Colorado, and New York, 2010. *Morb Mort Wkly Rep* 2015; **64**: 54–57.