

Supplementary table 1 Calculation of occupational noise index for obstetrics personnel based on questionnaire data, where scoring for each item and each response alternative is shown.

Questionnaire item in full text	Response alternatives	Scoring for index
How many years have you worked in an obstetrics ward?	Free field answer	1 point per year ^a
Have you worked with the so called ABC-method (Alternative Birth Care), if so for how many years?	Free field answer	1 point per year ^b
How many working hours do you normally spend in postpartum care and in delivery care, respectively?	Free field answer	0 points 1 point 2 points ^c
Is the sound level at your workplace sometimes so loud that you have difficulty hearing what other people are saying?	Never/almost never	0 points
	25% of time	1 point
	50% of time	2 points
	75% of time	3 points
	Always/almost always	4 points
How often are you at your workplace exposed to such high sound levels that you have to raise your voice to be able to talk to other people?	Never/almost never	0 points
	25% of time	1 point
	50% of time	2 points
	75% of time	3 points
	Always/almost always	4 points
Do you use hearing protective devices (such as ear-plugs) at your current workplace?	Never/almost never	3 points
	Seldom	2 points
	Often	1 point
	Always/almost always	0 points

^a Missing data was replaced by number of years since graduating, n=6. One additional participant did not fill in number of years worked, nor years since graduating and therefore got 14.6 points which was the group median at that specific age (46 years old).

^b Missing data was replaced by group median (3 years), n=3.

^c Participants reporting 0 hours in delivery care received 0 points, those reporting any number of hours in postpartum care and delivery care received 1 point and those reporting 1 hour or more in delivery care only received 3 points.

Supplementary table 2 Questionnaire items and response alternatives used in survey among obstetrics care personnel. Derived variables used in the analysis are also shown based on the questionnaire items (translation from Swedish for article, not validated). Original wording in Swedish provided for hearing-related items.

Hearing-related outcome variables	Response alternatives	Derived variables
<p>Hearing loss Do you have a hearing loss? /hearing disorder? (Swe. "hörselnedsättning/hörselskada")</p>	<p>Yes No Don't know</p>	<p>Hearing loss was defined as reporting yes.</p>
<p>Tinnitus, Sound sensitivity and Sound fatigue^a Do you during or after work experience any of the following symptoms: - Tinnitus? - Sound sensitivity? (discomfort, pain from normal sounds)? (Swe. "ljudkänslighet, obehag eller smärta av normala ljud") - Sound fatigue? (Swe. "ljudtrötthet")</p>	<p>Never/rarely A few times each month Once or twice a week Several times each week Every day</p>	<p>Having either symptom was defined as reporting once a week or more often.</p>
<p>Poor hearing How do you think your hearing is? (Swe. "Hur tycker du att din hörsel är?")</p>	<p>Very good Good Normal Bad Very bad</p>	<p>Poor hearing was defined as reporting bad or very bad hearing.</p>
<p>Difficulty perceiving speech Do you have trouble hearing what is said in an environment where several people are talking at the same time (Swe. "Har du besvär att höra vad som sägs i en miljö där flera talar samtidigt?") - At work? - In leisure time?</p>	<p>Yes No</p>	<p>Difficulty perceiving speech was defined as reporting yes to both work and leisure time.</p>
Explanatory variables	Response alternatives	Derived variables
<p>Work-related stress How is your work typically? - I experience high degree of stress. - I feel unwell due to stress at work.</p>	<p>Never/seldom Sometimes Often Always/almost always</p>	<p>Work-related stress was defined as reporting often or always/almost always for one or both of the stress items.</p>
<p>Noise annoyance Are you annoyed by sounds/noise at your work place?</p>	<p>Not at all Some Pretty much Very Extremely</p>	<p>Noise annoyance was defined as reporting if pretty much, very or extreme annoyance.</p>
<p>Smoking Do you smoke?</p>	<p>Yes Yes, but only occasionally No, but I have smoked previously for ___ years No</p>	<p>Ever smokers were defined as those reporting yes, yes occasionally or previously smoked.</p>
<p>Leisure time noise exposure Are you exposed to high sound levels during leisure time (e.g. shooting/hunting, playing in a band, concert/disco, driving motorcycle, working with noisy tools/machines)?</p>	<p>No Yes, every day Yes, a few times each week Yes, once or twice each week Yes, a few times each month Yes, once or twice a month Yes, a few times each year or less often/never</p>	<p>Leisure time exposure was defined as those reporting exposure once a month or more often.</p>

^a The items regarding the symptoms tinnitus, sound sensitivity and sound fatigue were included in a matrix with other symptoms such as headache and tiredness.