



Scandinavian Journal of Primary Health Care

ISSN: 0281-3432 (Print) 1502-7724 (Online) Journal homepage: <http://www.tandfonline.com/loi/ipri20>

The concept of risk: a comment to Reventlow and co-workers

Ivar Sønbo Kristiansen, Dorte Gyrd - Hansen, Jørgen Nexøe & Jesper Bo Nielsen

To cite this article: Ivar Sønbo Kristiansen, Dorte Gyrd - Hansen, Jørgen Nexøe & Jesper Bo Nielsen (2002) The concept of risk: a comment to Reventlow and co-workers, Scandinavian Journal of Primary Health Care, 20:4, 252-252

To link to this article: <http://dx.doi.org/10.1080/028134302321004935>



© 2002 Informa UK Ltd All rights reserved: reproduction in whole or part not permitted



Published online: 12 Jul 2009.



Submit your article to this journal [↗](#)



Article views: 12



View related articles [↗](#)

Full Terms & Conditions of access and use can be found at
<http://www.tandfonline.com/action/journalInformation?journalCode=ipri20>

The concept of risk: a comment to Reventlow and co-workers

Scand J Prim Health Care 2002;20:252. ISSN 0281-3432

Dear Sir,

In a recent issue of the Journal, Reventlow et al. discussed the concept of risk in relation to the patient "Linda" with osteoporosis (1). While they raised important issues, we focus here mainly on areas of disagreement. As we interpret the article, the authors have three major messages. One is that GPs' communication of risk to their patients is biased by their subjective evaluations of these risks, as well as by the pharmaceutical industry's presentation of risk information. Secondly, the authors stress that patients' risk perception is highly subjective, since it is based on personal experience. Finally, the authors stress the importance of not presenting risk so crudely that it is interpreted as a diagnosis. We tend to agree with the authors on all three accounts. We disagree, however, on the conclusions they draw from these observations. While they claim that risk information should be presented without the use of numbers, we, by contrast, suggest that since risk is a quantitative concept it cannot be communicated without numbers. The issue is not whether to use numbers, but which numbers (i.e. risk measures) to use. Also, it is important to present risk reduction information such that individuals understand how the benefit is spread across potential beneficiaries. A small absolute risk reduction can reflect smaller gains for a large proportion of the patient population, or, alternatively, great gains for a few (2).

We disagree with Reventlow et al. when they assert that "probabilities do not refer to the individual occurrence, but to epidemiological knowledge". Probabilities are quantitative expressions of possible, future events. If we knew that the patient would sustain a fracture, we would simply not need the concept of risk. Probabilities are useful for decision-makers even though they cannot provide certain information about the future. We therefore see no distinction between the individual and the epidemiological perspective of probability. In a clinical context, the issue is not that probabilities cannot forecast the future with certainty, rather it is how probabilities can be estimated precisely for the individual patient.

Reventlow et al. are right in stating that the scientific concept of risk can be very different from the

interpretation and valuation of such information by lay people. We do assert, however, that personal valuations of risk reductions are matters of personal preference and the individual's degree of risk aversion. Such personal preferences must be respected and should influence clinical decision-making. However, only the individual is aware of his/her preferences with regard to risk. Therefore, it must be the GP's task to communicate information regarding risk such that the individual, in collaboration with the GP, can make an *informed* decision that will optimize welfare. It is the GPs role to correct any misperceptions that the patient may have. Consequently, we stress that the solution is not to withhold precise, and thus numerically formulated, risk information, but rather to present this information as precisely and cogently as possible. Presentation of risk information – with and without treatment – should also help us avoid the misconception that risk is a diagnosis, by emphasizing that risk is always present to a lesser or greater extent.

We conclude that risk is an important concept in medical practice. A guiding principle ought to be patient autonomy with decision-making based on patient preferences. In our opinion, it is the patient and not the GP who should decide whether to search for risk factors, and whether to implement interventions, but in order to do this patients must have access to detailed risk information.

Ivar Sonbo Kristiansen, Dorte Gyrd-Hansen,
Jorgen Nexøe and Jesper Bo Nielsen
Institute of Public Health
University of Southern Denmark
19 Winslow Park
DK-5000 Odense C, Denmark
E-mail: isk@sam.sdu.dk

REFERENCES

1. Reventlow S, Hvas AC, Tulinius C. "In really great danger..." The concept of risk in general practice. Scand J Prim Health Care 2001;19:71–5.
2. Kristiansen IS. Er 113 et stort tall (Is 113 a large number?). In: Swensen E, editor. Diagnose: Risiko (The diagnosis risk). Oslo: Universitetsforlaget, 2000:73–85.