

The unreported “shadow cases” are not vaccinated

by Gerd Antes



There is a lack of reliable numbers on the risk of swine flu, not of fictitious ones.

23 October 2009 Are the dangers of swine flu exaggerated? Recently, one gets the impression that most of those commenting on the situation missed school the day the rule of proportion was being taught; even the simplest formation of quotients seems to be not everybody's thing. Articles in the journal *Nature* start with the statement that flu viruses have already killed millions of people. The German yellow press paper *Bild* devotes an entire article to one single seriously ill person and predicts 35,000 deaths for this winter. A press release of the Charité Hospital in Berlin calls for determined moves, without spending a single sentence on the quantitative assessment of the level of threat. Even serious newspapers report that now we have the first death of swine flu in Germany.

The quantitative examination is really simple though. All numbers are only the one half of the story – the numerator. But every numerator requires a denominator to make a real fraction. And only fractions are suitable for correctly evaluating the actual risks. This observation is banal. The more astonishing fact is how consistently it is being ignored.

Two out of twenty-two thousand.

Calling for the denominator is easy, but determining it often is not. The denominator is the number of people who can gain a certain benefit or who are exposed to a respective risk. The selection of the denominator is determined by the intended statement: the billions of people of the world population, of which millions died from seasonal influenza. Or the thousands that have so far been infected in Germany with the new influenza, of which so far two verifiably died: two out of 22,000 infected people.

Those criticising the alleged trivialisation of the danger like to refer to the supposedly enormous number of unreported cases. This is certainly true but it undermines their own argumentation, because the mortality would decrease in the same degree, enormously as well, if all infected cases were correctly recorded. There are no reliable estimations of these “shadow figures”. The mild course of the disease and the unreliability of the diagnostic methods give cause for the apprehension that the uncertainty stretches multiple times beyond the 22,000. And accordingly the use of a vaccination decreases, with regard to mortality, to a tenth. All this is based on the strong assumption that the vaccination is highly effective – which so far has not been demonstrated empirically.

Statements that this vaccine is “safe” are just as unprovable, even if they are made by the press department of the drug licensing agency, as the dissenting voices saying that the vaccine is too risky, even if they are the voices of doctors and professional associations. What is correct is that we are standing in front of a large knowledge gap.

When the yellow press starts calculating

In the United States in 1976, with regard to the Guillain-Barre-Syndrome, one death victim was recorded for eighty thousand vaccinations. To record this death with sufficient security, 240,000 systematically vaccinated people are needed. Or using the rule of proportion: Even if now there were ten thousand vaccinated people in studies with the new vaccine, we would still be by lengths far from being able to identify this risk. But deducing a lack of risk would be like switching off your torch at night in the woods and claiming there are no trees.

A systematic observation is indispensable to produce legitimate numbers. But who is interested in these numbers anyways? Wednesday night, none of the guests in the talkshow "Hart aber fair" revealed what kind of threat they actually assume. No word was said on numbers of deaths and infections of the finished flu season in the southern hemisphere. Instead, there were pithy recommendations to vaccinate or not to vaccinate. Only the representative of Transparency International repeatedly pointed to the necessary cost-benefit calculation, but at the same time called a vaccination completely useless – with full conviction of course. The show started with the thirty-five thousand deaths circulated and predicted by the yellow press. They are simply more interesting than $169 / 22,000,000 = 0.000768 \% =$ deaths / number of people living in Australia, for this would be a reliable number of the finished flu season in their local winter.

Damage for vaccinating

The extensive abandonment of factual substantiations and cost-benefit-assessments is the downside of the just as extensive incapability of dealing with a lack of knowledge competently and responsibly. Proclaiming what the chancellor is getting vaccinated with reduces this lack of knowledge not a bit. It would be fatal – and in contradiction to all rules of medical decision-making – if the possession of the vaccine should be the only justification for vaccinating. Today's state of knowledge suggests that everyone in possession of the vaccine is in a comfortable position. Depending on the further development it can happen that he has to dispose of this vaccine. However, this does not necessarily have to be in his own body.

Vaccination as one of the most effective medical preventive measures of the past one hundred years suffers these days an immense, lasting damage. How large the loss of trust in the population really is will only show afterwards. Even more dramatic is the notion of what impact this loss of reputation will have in a real, serious crisis.

Even this simple exercise has already led into an information chaos. If the strategy to control a make-belief maximal risk by means of a minimax strategy should turn into the guiding principle of this society, certainly all nuclear plants would have to be shut down today as well. For in the discussion of nuclear power just the opposite strategy is being pursued: There, everything is being played down that is being played up with regard to H1N1.

The author is director of the German Cochrane Centre at the University of Freiburg, Germany, which supports the improvement of scientific bases in decision-making in the healthcare system.