

Editorial

QALYs, lotteries and veils: the story so far

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I last made use of lottery theory six weeks ago. It was in a car park in Oxford. I had been searching for almost ten minutes when I saw an empty space. I reached it at precisely the same time as another car. We both stopped to avoid collision. I asked the other driver how long he had been in the car park. He too had been searching for a space for about ten minutes. We agreed to toss a coin in order to decide which of us should take the space. The principle behind our allocation of the scarce resource was that the person who had first entered the car park should have priority. Since we didn't know who this was, a random method, giving us each an equal chance, seemed best. It didn't cross our minds to seek further information, such as: what was each of us going to do once we parked our cars or, which of us desired the space more. These questions seemed irrelevant.

The issue of what, exactly, is relevant, in the just allocation of scarce health care resources, has been hotly debated for many years. The debate continues in this issue of the journal between Harris, on the one hand, and McKie and his colleagues, Kuhse, Richardson and Singer, on the other hand. Harris, like the two of us in the Oxford car park, believes that remarkably few factors are relevant, so that coin-tossing is often the only fair way of deciding who should get treatment. McKie and colleagues use a broadly utilitarian framework so that any information relevant to maximising welfare is potentially important.

The articles by Harris¹ and McKie and colleagues^{2,3} in this issue are a continuation of a debate which was carried in the journal last year.^{4,5} Readers who do not have the previous issues of the journal to hand may wish to know the story so far.

QALYs and double jeopardy

One of the major theories which is aimed at providing an answer to the question of how to allocate health resources is QALY theory. According to QALY theory: "The value we get from spending money on health care can be measured in terms of the number of years of life gained, as long as we provide an appropriate rate of discount for periods in

which, as a result of ill-health or disability, the quality of life is poor."⁴ If a person would give up two years of life bedridden, for one year of normal health then the appropriate rate of discount for being bedridden would be 0.5.

One, of several, objections to QALY theory was first proposed by Harris, in this journal, in 1987.⁶ Harris referred to the objection as "double jeopardy". This is what he wrote:

"QALYs dictate that because an individual is unfortunate, because she has once become a victim of disaster, we are required to visit upon her a second and perhaps graver misfortune. The first disaster leaves her with a poor quality of life and QALYs then require that in virtue of this she be ruled out as a candidate for life-saving treatment, or at best, that she be given little or no chance of benefiting from what little amelioration her condition admits of."

Singer, McKie and colleagues⁴ put forward several arguments against Harris's view. They considered some imaginary cases. One case concerned Michelle and Nina.

Michelle and Nina

Michelle is wheel-chair-bound with intermittent back pain. Her quality of life score is 0.5. Nina has a mild limp. Her quality of life score is 0.95. There is no treatment for either of these conditions. However, both women also have a heart condition which can only be successfully treated with a heart transplant. Without such treatment both women will soon die; with such treatment both women will live for, let us say, 40 years with their current quality of life. In this situation, according to QALY theory, Nina should have priority. This is because she has the higher quality of life, and the treatment will give both women the same quantity of life. The fact that Michelle already has a lower quality of life puts her at a lower priority for treatment of the heart condition. This is exactly the kind of apparent unfairness that Harris's double jeopardy argument is aimed at highlighting.

Singer and colleagues argue that it is perfectly fair for Nina to have priority for the heart transplant. Their central argument makes use of the “veil of ignorance”.

The veil of ignorance

The veil of ignorance was first proposed by John Rawls⁷ in the context of a general consideration of distributive justice. It is a technique – a thought experiment – to help ensure impartiality. Its application to the present concern would go something like this: imagine that we are choosing a basis for allocating health care resources and we have enough money to treat either Michelle or Nina but not both. The “veil of ignorance” device asks us to consider what a rational egoist would choose. The rational egoist has a 50% chance of being Michelle, and a 50% chance of being Nina, but she must decide who is to get the treatment from behind the veil – that is, before she knows which woman she will be.

Singer, McKie and colleagues⁴ argued that the rational egoist would choose to give treatment to Nina. They therefore conclude that Rawls’s method provides a reason for accepting “double jeopardy” as fair.

Their argument is as follows. I am equally likely to be either Nina or Michelle. If I choose to save Nina’s life then the possibilities are: 50% that I will be Michelle, and will die; 50% that I will be Nina and have 40 years of life of a quality rating of 0.95. If I choose to save Michelle’s life then the possibilities are: 50% that I will be Nina and will die; and 50% that I will be Michelle and live for 40 years at a quality rating of 0.5. It would therefore be rational for the egoist to choose to save Nina since in that way she has the same chance of dying, but, if she lives, she will have a better quality of life.

Harris’s response to this^{5, 1} is to claim that there is a certain question-begging in the argument of Singer, McKie and colleagues. A person wedded to QALYs and utilitarianism might choose to maximise their welfare when behind the veil of ignorance. But this is not the only rational choice.

Peter and Gloria

Before considering Harris’s argument, imagine the following case of Peter and Gloria. Peter has a quality of life score of 0.7 and is expected to live for 30 years. However, he then develops a “heart condition” similar to that of Nina and Michelle. Gloria has a quality of life score of 0.7 and is expected to live for 30 years. She also develops the heart condition. Only one operation can be carried out. Do we treat Gloria or Peter? Here, I imagine, Singer, McKie and colleagues (as well as Harris) would say

that there is no way of choosing fairly other than to choose randomly, giving each an equal opportunity – for example, we should toss a coin.

Returning, then, to Nina and Michelle and the choice to be made from behind the veil of ignorance. Harris argues that, as with Peter and Gloria, we should choose to toss a coin. He argues as follows: you have an equal chance of being either Nina or Michelle. If you are Michelle you will have a poorer quality of life than if you are Nina. But you will still want to live – just as much as if you are Nina. As a rational egoist you have no more reason, from behind the veil of ignorance, to choose treatment for one woman rather than the other.

Does the veil help?

Although the veil of ignorance provides an ingenious approach to the issue of double jeopardy, I’m not sure that it helps to solve the problems. The assumption that there is one rational answer to what the egoist should do is false. There can be more than one rational answer, because different values can give different answers, and different values are compatible with rationality. The egoist behind the veil of ignorance might choose to maximise welfare, but she might focus on the strength of her desire to have treatment.

I suspect that the veil of ignorance has been an interesting detour. The question: should Nina or Michelle be given the heart transplant; or should the choice be made by lottery – as in the case of Peter and Gloria, is difficult. But the essential choice which has to be made, between maximising welfare or giving the two people an equal chance, seems no clearer when posed in terms of the veil of ignorance than when posed as a straight question.

References

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- 5 Harris J. Double jeopardy and the veil of ignorance – a reply. *Journal of Medical Ethics* 1995; 21: 151–7.
- 6 Harris J. QALYfying the value of human life. *Journal of Medical Ethics* 1987; 13: 117–23.
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