The Saving/Creating Distinction and the Axiology of the Cost–Benefit Approach to Neonatal Medicine

Tomasz Żuradzki, Jagiellonian University

The aim of this commentary is to discuss the axiology of the cost–benefit approach assumed by Travis Rieder (2017) to analyze medical decision making in the case of extremely preterm infants. In this ingenious article, Rieder accepts that the cost–benefit analysis is an appropriate decision method for a fully developed human, “who has fallen from some standard of health to which we are trying to return it” (10). However, he claims that it is a mistake to reason about extremely preterm infants as if they were fully formed humans and to think of “the cost–benefit analysis in the same way as we would with older children or even adults” (6). Thus, Rieder openly accepts the cost–benefit analysis (CBA), which is a well-established method for evaluating decisions or policies that influence the well-being of populations or individuals. CBA aims at determining the best choice in a given situation and providing a complete ranking of choices, based on the assumption that “goodness supervenes on (human) well-being” (Adler 2015). Wilkinson (2009) also used this kind of approach, and both authors highlight that prognoses in the case of extremely preterm infants are very often radically uncertain. Rieder suggests changing one particular variable in the Wilkinson’s approach: Instead of conceptualizing a medical procedure on an extremely preterm infant as a rescuing act, we should conceptualize it as a creation. Together with The Asymmetry, discussed (although not approved) by McMahan (2009), and adopted by Rieder, his view is that “the likely harms” suffered by the neonate should count against resuscitation, while “any likely benefits” should not count in favor of resuscitation (8). Thus, he suggests the possibility of developing “a ‘discount’ rate for the likely benefits that corresponds to the degree of an infant’s development, yielding a kind of decision theory” (10).

Unfortunately, Rieder’s argumentation stops in this most challenging, at least from the philosophical point of view, moment, and he does not explain how he understands this discount rate, straightforwardly claiming that he does “not pursue such a project here” (10). It is a pity, since the devil is in the details. Therefore, in this commentary, I want to explain the axiology of Rieder’s intuitively appealing conclusion about neonatal medicine and highlight the main problem with his view. In particular, I want to concentrate on the issues that are characteristically related to the cost–benefit approach adopted in the article.

Normally, when we use CBA, we act under uncertainty, but we have a clearly established perspective of evaluation (an agent with a particular set of preferences) and a scale by which we can measure the values attached to different potential results (this is a reason why we often refer to money). But it is hard to make any comparison of (dis)values in the name of an agent (e.g., a preterm infant) who does not exist in at least one of the possible worlds, and it is also difficult to take into account a proposed discount rate related to the moral significance of saving/creating distinction. In these types of cases (as in many cases of moral uncertainty; e.g., Żuradzki 2014a) the very sense of using CBA may seem to be undermined, not only because the perspective must shift from existing to non-existing persons, which results in difficulty in providing a complete ranking of choices, but also because different kinds of (dis)values are attached to “likely harms” and...
“likely benefits” (e.g., comparative/noncomparative individual-affecting, impersonal).

To understand the problem, let me present a hypothetical case of a guardian of an unconscious, fully developed human (cf. Żuradzki 2014b). In such a case Rieder would probably claim that the “possibility of benefit,” that is, a chance that some percentage of similar cases ends successfully, “is a reason to resuscitate and treat such a patient” (5). The case of a guardian is a good starting point, because Rieder assumes that “parents are guardians” (7) and they should have a right to decide whether not to rescue a newborn, even if it is born at or after 25 weeks (now such an infant will be resuscitated, regardless of parental wishes). Moreover, I also assume, although this is not entirely clear in Rieder’s article, that parents’ decisions are guided only by the best interests of their child.

So let me assume that a guardian has two possible pro- noses of a fully developed human: If the resuscitation works (a world A) the patient will be at the level 1 (the scale goes from 1 to −1), and if not (a world B) the patient will end at the level −1 (with life not worth living; for a definition see, e.g., Wilkinson 2011, 21–22). Rieder’s approach based on CBA suggests that since we are “morally required to ‘play the odds’” (6), in this case the best decision would depend on the probabilities, that is, how likely the worlds A and B are. Thus, if the world A is very probable, it would be better to resuscitate; if B is very probable, it would be better not to resuscitate (the probabilities do not have to be sharp, so there is a gray area where the probabilities are more equally distributed). But what does it mean that we would be “morally required to ‘play the odds’” and that it would be better (not) to resuscitate? If we resuscitate there will be an adult either at the level 1 (A) or at the level −1 (B), but if we do not resuscitate, an adult will be left out of existence (a world X).

How should we aggregate values in this situation? It is obvious that A is better than B—both regarding impersonal values (there is more good in the world) and regarding comparative person-affecting values (the patient would be better off in A than in B). But what about X? Rieder wants to give parents more freedom of choice in case of extremely preterm infants (cf. Szewczyk 2014), so his assumption would be that X is (through the guardian’s eyes) somewhere between A and B. Of course, one could argue that X is between A and B because of some impersonal values. It is true, but such an impersonal view is surely not appropriate in the case of our guardian, who should track what’s good for a patient, not what is impersonally good.

So, maybe A is better than X, and X is better than B, in terms of person-affecting values? The problem is that in the standard understating, if an outcome A is better (worse) than X, then A is better than X for at least one individual existing both in A and in X. But in my case, there is no individual for whom the result is better in A, because the patient (or a newborn) does not exist in X (cf. McMahan 2009). How may A be better than X for the patient, if he does not exist in X? A popular answer is that existence and nonexistence are incomparable in value for a person: Nonexistence is “no condition at all, and so it is not better or worse than any other condition” (Arhhenius and Rabinowicz 2015, 426).

However, there is another answer: One can argue that from the guardian’s perspective sometimes (when life is worth living) it is better for a person to exist than not to exist, and sometimes (when life not worth living) it is worse for a person to exist than not to exist. But this evaluation could be made only from the perspective of the world in which a patient exists, so we could say that if a patient exists in A but not in X, then A is better for him than X, although X would not be worse for him than A, if X obtained (because a patient does not exist in X) (Arhhenius and Rabinowicz 2015, 429). Similarly, if a patient exists in X but not in A, then X is worse for him than A, although X would not be better for him than B, if X obtained.

The acceptance of the moral significance of the distinction between saving and creating in the case of newborns would complicate this picture because a guardian should add a discount rate for the likely benefits, which would correspond to the degree of a newborn’s development. On the one hand, it means that in the cases of equiprobability between A and B, as well as in many other situations in which A would be much more probable than B, a guardian should strongly prefer X, because any chance of possible harms suffered by the newborn in B would provide a strong reason not to continue (or take over) creation; on the other hand, any possible goods in A would not provide significant reasons to resuscitate. However, the most problematic aspect of Rieder’s view is visible if we extend his approach to early embryos created in vitro (cf. Żuradzki 2014b): In this case even slight risk of B (life not worth living) would weigh strongly against the implantation, and Rieder’s position may lead to an antinatalist view (Benatar 2006).

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**ORCID**
Tomasz Żuradzki http://orcid.org/0000-0001-6749-2124

**REFERENCES**

Humans have a basic desire to procreate and use a complex social structure to encourage protection and nurturing of their offspring to be fruitful and successful, creating an incentive to repeat the cycle. Human newborns are particularly vulnerable and need this protection, as their mortality rate is as high in their first year of life as it will be again until approximately age 55 years, primarily from prematurity and birth-defect-related deaths (Social Security Administration 2013). This desire to protect babies was evident in action when the first cesarean section was performed in Ancient Rome to remove a baby from the womb of a mother who died during childbirth (Sewell 2013), thereby rescuing it. When Dr. Virginia Apgar first described in 1953 a means to assess and treat babies adversely affected by anesthetics used in childbirth, she developed a benchmark practice still used more than 60 years later to protect newborns (Apgar 1953). The death of Patrick Kennedy, son of President John F. and Jacqueline Kennedy, in 1963 from prematurity-related respiratory distress syndrome (Altman 2013) prompted interest and rapid growth in the field of neonatology. The standard of care in the field now expects the routine presence of highly trained personnel at all of the more than 4 million hospital deliveries in the United States, as well as the use of other highly advanced means to treat and rescue them. Resuscitating extremely preterm infants at 25 weeks gestation is now standard, even offered as early as 21 weeks gestation in some neonatal intensive care units (NICUs) around the world (Bates 2011). A recent report describes an animal model that creates an artificial extrauterine environment or “plastic bag womb” that could lead to even younger extremely preterm infants surviving. (Partridge et al. 2017) Worldwide, there is a powerful desire, along with means and resources, to attempt to save very immature babies from certain death. While on the one hand we celebrate these efforts, on the other, we allow babies, parents, and their families to suffer severe consequences when the outcome is poor (Atkinson 2002). Worse yet, we often use less than optimal methods of shared decision making (Elwyn 2012) when counseling and attempting to obtain at least some semblance of informed consent prior to treating extremely small babies.

Address correspondence to Michael R. Gomez, Department of Pediatrics, University of New Mexico Health Science Center, 1 University of New Mexico, MC, Albuquerque, NM 87131, USA. E-mail: micgomez@salud.unm.edu