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Ethical dilemmas in traffic safety work

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Abstract

The paper presents some well-known ethical questions regarding priority setting of safety work. Some traffic examples are applied to illustrate the dilemmas. Basic ethical principles are considered, i.e. approaches based on utility, fairness and discourse. We also discuss the various "dimensions" of utility and risk that could be taken into account. Ethical challenges related to the use of "willingness to pay" are also considered. A small-scale survey has been carried out regarding people's priority setting of traffic safety measures. The main results of this survey are summarized to provide a background for a discussion of the ethical dilemmas.

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1. Introduction

Various dilemmas are encountered in the practical safety work of making priorities between safety measures. For instance, we could ask whether higher expenditure should be used to prevent major accidents (disasters), and whether public transport should be safer than private transport. Further, should we give priority to the protection of specific groups like children or people exposed to high risks? In Section 2 we introduce such a list of ethical questions that are relevant for traffic safety work. A main objective of the present paper is to investigate how general ethical principles can be utilized in clarifying the discussion of such dilemmas, and to assist in the actual priority setting of risk-reducing measures.

A strong tradition in safety work seems to put most weight on *utility* thinking; with a focus on economic cost effectiveness. In the present paper we contrast such a "narrow" utilitarian view, with a principle of *fairness/justice*. When a broader definition of utility is applied, a *discursive* process is needed to evaluate and rank the various aspects of utility. Basic questions regarding utility, fairness and discourse are reviewed in Section 3. Based on this discussion we have a critical look at the use of willingness to pay (WTP) for making priorities in

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Abbreviations: AgWTP, aggregated willingness to pay; RWTP, relative willingness to pay; V-0, Vision Zero; VOL, value of life; VPF, value of a prevented fatality; WTP, willingness to pay.

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safety work, and we also introduce an alternative concept denoted relative WTP. Further, the use of the so-called 'Vision Zero' (V-0) for traffic safety is briefly discussed.

Section 4 presents a small-scale survey that has been carried out to assess people's opinion on the priority setting of risk-reducing measures in transportation; thus giving *actual* WTP-values. Together with the basic ethical principles, this survey is used to give some further reflections on the above dilemmas.

2. Some dilemmas in traffic safety

Ethical theories often argue that all lives have the same intrinsic worth and should be treated equally as far as the prevention of death is concerned. However, in safety work there are various examples where the preferences can vary. We now present some examples to give a background for the further discussion, (cf. Ramsberg, 2002).

2.1. Traffic offenders

Should traffic safety work focus on protecting the law-abiding public? In most of the safety work of course we cannot distinguish between the "innocent" and the violator. But it could be an objective to primarily design the transport system so that serious accidents/deaths do not occur for people who take the responsibility to abide by the laws and regulations, cf. discussion on Vision Zero in Section 3.5. Then society does not take the same responsibility for reckless drivers, (e.g. drunk driving and speeding offenders), but law-abiding people are to be protected against the traffic offenders.

2.2. Major traffic accidents

In the Norwegian transport sector major accidents are defined as events with at least 5 fatalities, and so these are very relevant for transportation; cf. railway, buses, ships and air transport. If we prioritize measures to prevent major accidents this could for instance mean that we would use higher expenditure to improve railway safety, (preventing derailing and train collisions) rather than preventing car accidents at railway crossings. A main argument in favour of such a strategy is that major (catastrophic) accidents can have numerous consequences in addition to the number of fatalities. They can cause fear or trauma amongst the public, and major train/aircraft accidents can endanger the public's trust in the transportation system. Some major accidents may even affect the execution of important functions of society. Therefore major accidents can do more harm than is expressed by the number of fatalities alone. One common way to account for major accidents in safety work is to modify the VPF¹ of major accidents, e.g. by letting the value to prevent an accident with five fatalities to be higher than five times the VPF.

2.3. Public transport (control and voluntariness)

The authorities will have to pay particular attention to the safety of public transport, and there are for instance regulatory bodies to control public rail and air transport. This focus can be related to the question of having *control* and perhaps to *voluntariness*. When you drive your own car you have some control, and the safety will to some degree depend on your own behaviour. However, by entering public transport you give up this control, and it could be argued that the safe driver should not be less safe when he/she uses public transport. Further, public transport is typically part of everyday life as transportation to/from work, and so should perhaps have a lower risk than more voluntary activities.

2.4. Saving children

The authorities impose measures to increase safety for children, e.g. by forcing car owners to install special seats for children. We can also refer to school busing, and general efforts to give children a safe transport or

¹ VPF = value of a prevented fatality.

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