Enforcing Payment for Water Services – What's the Standard of Care?

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A recent NBER Working Paper (Coville et al. 2020) has sparked a discussion on the ethics of policy experiments in the Global South. Researchers working with the Nairobi City Water and Sewerage Company (NCWSC) conducted an RCT evaluating two interventions designed to increase payment rates for water services from households living in "slums." One of the interventions involved serving official disconnection notices to non-paying customers followed by disconnections in cases of non-payment (Coville et al. 2020). Critics argue, among other things, that this intervention is unethical since participants have a moral claim to water service, regardless of their ability or willingness to pay.

The Nairobi RCT raises the question of the level of care or benefits to which participants in policy experiments are entitled, and so to the moral constraints on the interventions to which they may be randomized. In this post, I consider how this issue has been handled in the clinical research ethics literature. I suggest that the concept of "standard of care," as well as the debate regarding its interpretation, has some useful lessons for thinking through the treatment of participants in the Nairobi RCT as well the ethical design of policy RCTs more generally.

Standard of Care in Clinical Research Ethics

In the mid-1990s, 15 placebo-controlled trials were carried out in a number of low-income countries, including Kenya, Thailand, and Malawi, to evaluate the effectiveness of an

AZT regimen in preventing maternal-fetal HIV transmission. This regimen was a simpler, shorter, and cheaper version of a proven AZT regimen available in high-income countries. Sponsors of these studies, including the CDC and NIH, envisioned the “short-course” AZT regimen as an affordable and feasible way to address the problem of maternal-fetal transmission in low-income countries (Hawkins and Emanuel 2008). These placebo-controlled trials proved to be highly controversial, however, with critics arguing that it was unethical to randomize participants to a placebo arm since an effective treatment existed (Angell 1997; Lurie and Wolfe 1997). The long-course AZT regimen was the “standard of care” treatment in high-income countries, and it was wrong, these critics argued, not to provide participants with it and instead conduct a placebo-controlled trial.

This case sparked what has come to be known as the “standard of care debate” in international clinical research ethics (London 2000). Parties to this debate largely agree that research participants should not be randomized to a treatment reasonably expected to be inferior to the standard of care treatment, but disagree on how to understand the concept of “standard of care.” Some argue that the standard of care treatment should be understood as the worldwide best treatment that is medically indicated for a condition (Lurie and Wolfe 1997). Others argue that it is the best-proven treatment a country’s health system, given its capacities and resources, has an obligation to provide to patients (Crouch and Arras 1998). On the former understanding, the short-course placebo controlled trials were unethical; on the latter, they were arguably permissible given the capacities of the health systems in the countries in which the studies took place.

Clinical research differs from policy research; concepts and principles developed to govern the former should not be uncritically applied to the latter. But the ongoing controversy regarding the Nairobi RCT suggests that it may be useful for social scientists and research ethicists to develop an analogue to the concept of "standard of care" to help guide the ethical design of policy RCTs. Although there is disagreement regarding how we should understand this concept, it functions to designate the floor of care that participants must receive and offers a focal point for debates regarding where this floor should be set.

From Standard of Care to Standard Policy

Perhaps the most controversial feature of the Nairobi RCT is the above-mentioned randomization of participants to the enforcement intervention. The debate regarding this feature of the study, I suggest, can be helpfully reconstructed as one concerning what the standard of care or "standard policy" is regarding access to water service for households living in Nairobi's slums. Some critics of the study argue that these households have a claim to reliable water service, regardless of their ability – or perhaps even willingness – to pay. People have a human right to water that the Kenyan government has an obligation to fulfill, these critics argue, and so the NCWSC acts wrongly by disconnecting households which do not pay for the service. On this view, to identify the standard policy for a particular context, we look to the moral entitlements of prospective participants. In the standard of care debate, this is understood as a *de jure* understanding of standard of care (London 2000).

In a follow-up discussion of the ethics of the study, three of the authors of the NBER paper – Aidan Corville, Sebastian Galiani, and Paul Gertler – seem to take a different position. They defend the study, in part, on the grounds that participants were not treated worse than they would have been treated had the study not taken place:

> The design of the study did not alter the service disconnection practices of Nairobi Water but rather affected which nonpaying households received the disconnection notices. Nairobi Water had always had a policy for service disconnection for nonpayment and was planning to scale this policy in the slums (Corville, Galiani, and Gertler 2020).

This view presupposes a *de facto* conception of the standard policy, according to which it is the policy to which participants would be subject outside of the study. On this understanding, researchers have an obligation only to ensure that participants are not randomized to an intervention that is reasonably expected to be inferior to the de facto policy.

The problem with a de facto conception of the standard policy, as scholars have shown in the case of de facto conceptions of the standard of care (London 2000), is that they are too permissive, allowing RCTs in which participants are treated unjustly. Such a conception only prohibits researchers from making participants ex ante worse off, no matter how bad their initial starting point. For RCTs carried out in unjust societies, it licenses researchers to randomize participants to interventions that are deeply unjust since the only requirement is that these interventions are not reasonably expected to be inferior to the unjust status quo policy.

I've taken a stab at developing a de jure conception of the "standard policy" in my own work on the ethics of policy RCTs (MacKay 2018; MacKay Forthcoming). I start from the idea that governments have duties of justice to realize morally important outcomes for their residents. I call these "target outcomes" and they may include outcomes related to literacy, numeracy, and health, or access to certain types of goods and services such as adequate nutrition, health insurance, or adequate water and sanitation services. To realize these outcomes, governments must implement what I call *best proven attainable* (BPA) policies. Such policies are those that are: (1) best proven for realizing the relevant target outcomes in the context in question; (2)

consistent with residents' rights and liberties; and (3) practically attainable and sustainable for the government in question, given a reasonably just system of resource procurement and allocation. In short, the BPA policy for a particular jurisdiction is the best proven policy for realizing the relevant target outcomes, and which the government has the resources and bureaucratic capacities to sustainably implement.

Governments' obligations to realize target outcomes for residents and implement BPA policies have implications for the design and conduct of RCTs. Since governments have an obligation to subject residents to BPA policies, they must not conduct, authorize, or fund RCTs in which participants are randomized to an intervention that is reasonably expected to be inferior to the BPA policy (MacKay Forthcoming). Researchers working for and with governments in the design and conduct of such RCTs inherit this obligation (MacKay 2018). The concept of the BPA policy thus functions in an analogous way to the concept of standard of care, placing constraints on the interventions to which participants may be randomized.

Does the Nairobi RCT violate this requirement? It's not clear. Although Corville, Galiani, and Gertler defend the study by appealing to a de facto conception of the standard policy, the facts they detail in their paper and subsequent comments provide reasons to think that providing water services to all residents absent the threat of disconnection is not a sustainable policy:

> Nairobi water needed landlords to pay for the water that they used in order to maintain service quality. The purpose of increasing payment rates was to generate revenue that would be used to provide better service quality, i.e. reduce water service interruptions and maintain a steady flow of water to households (Corville, Galiani, and Gertler 2020).

If a policy of universal provision without disconnection is not sustainable, it is not the BPA policy, and the NCWSC has no obligation to implement it. It would then be a mistake to object to the study on the grounds it threatens disconnection since there is no obligation to provide the service *absent* disconnection. This does not mean, of course, that the study complies with my requirement. To determine whether it does, we'd need to first identify the BPA policy and then ask whether the enforcement intervention is reasonably expected to lower people's access to the water service. Answering these questions requires more information about the fiscal and bureaucratic capacities of the NCWSC, the alternative policy options on the table, and the nature and severity of the funding crisis, among other things.

In any case, my aim in this post is not to criticize or defend the Nairobi RCT, but simply to suggest a framework for structuring an important aspect of the debate that has emerged, and perhaps also inform future discussions regarding the ethical design of policy RCTs. I also don't deny that the study raises additional complex ethical questions – e.g. regarding participant selection, informed consent, risks and benefits, appropriate independent review, and social value (Prottas 2020).[1] My own view is that the ethical dimensions of policy RCTs need far more sustained attention from research ethicists and social scientists and that the clinical research ethics literature offers resources that may be helpful in this endeavor.

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[1] For a discussion of when informed consent is necessary in policy RCTs, see MacKay and Chakrabarti (2019).

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