What is the Standard of Care in Experimental Development Economics?

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Abstract: A central feature of experimental development economics is the use of randomized controlled trials (RCTs) to evaluate the effectiveness of prospective socioeconomic interventions. The use of RCTs in development economics raises a host of ethical issues which are just beginning to be explored. In this article, I address one ethical issue in particular: the routine use of the status quo as a control when designing and conducting a development RCT. Drawing on the literature on the principle of standard care in medical research ethics, as well as considerations of distributive justice in non-ideal circumstances, I argue that the practice of using the status quo as a control is ethically justifiable. However, I add an important qualification based on the natural duty of rescue to address the concern my account is overly permissive.

1. Introduction

In 2019, Abhijit Banerjee, Esther Duflo, and Michael Kremer were awarded the Nobel Prize in Economic Sciences for their work on development economics—the branch of economics which studies the development process in low-income countries. In the scientific background for the award, the Nobel Prize committee credits the laureates for turning development economics into a "blossoming, experimental field" (The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel, 2019: 2).[1] At the heart of this new approach to development economics is the use of field experimentation involving random assignment of research participants to either treatment or control groups. In medical research, this experimental method is known as a randomized controlled trial (RCT). Despite the routine ethical scrutiny that RCTs are subject to in medical research, philosophers and economists have had relatively little to say about ethical issues with the use of RCTs in development economics (henceforth, development RCTs).[2] In this article, I identify and address one ethical problem in particular: the routine practice of using the status quo as a control when designing and conducting a development RCT.

[1] For accessible introductions to experimental development economics see Banerjee and Duflo (2011) and Karlan and Appel (2011). Also see Cohen and Easterly (2009) and Ogden (2017).

[2] See Baele (2013) for an early discussion of the topic and a survey of some of ethical problems development RCTs raise. Contributions from economists include Abramowicz and Szafarz (2020), Alderman et al. (2016), Glennerster and Powers (2016), and Ziliak and Teather-Posadas (2016). Also see Asiedu et al.'s (2021) discussion of an ethics appendix for social science articles involving field experimentation.

Examples of this practice are easy to come by. In one of the earliest and most well-known development RCTs, Miguel and Kremer (2004) evaluated the effects of a primary school deworming program carried out by a non-governmental organization (NGO) operating in Kenya. In developing countries, worm-like parasites cause infected persons to become malnourished and susceptible to chronic illness. Effective treatments for intestinal parasites do exist. In Miguel and Kremer's study, seventy-five schools were randomly assigned into three groups of twenty-five schools each. The first group of schools were given free deworming drugs while the second and third groups were used as a control. A year later, the second group of schools were given free deworming drugs while the third group remained a control. Eventually, all three groups of schools were provided with free deworming drugs.

In another important study, Banerjee et al. (2015) evaluated the effects of multifaceted poverty relief program. This study was comprised of six RCTs in Ethiopia, Ghana, Honduras, Indian, Pakistan, and Peru. The intervention contained six different components: (1) a one-time productive asset transfer; (2) regular food or cash transfers; (3) technical skills training on managing the productive assets; (4) high-frequency home visits; (5) access to savings account; and (6) some health education, basic health services, and/or life-skills training. The study required cooperation and coordination from various local and international NGOs, as well as for-profit microfinance institutions (MFIs) in each country. 10,495 participants were recruited into the study, and about half of the eligible participants were assigned to a control group. No members of the control group received the socioeconomic resources and opportunities associated with the intervention.

Using the status quo as a control, such as in the experiments above, unsurprisingly causes ethical uneasiness in outside observers. Many of the residents of low-income countries in which development economists conduct RCTs live in extreme poverty (see Banerjee and Duflo, 2007). Of course, the motivation behind conducting development RCTs is often to identify effective poverty-alleviating interventions, but matters are complicated by the fact that the status quo in these low-income countries is categorically unjust. This raises the possibility that development economists are flouting some important ethical requirement by conducting experimental research in such settings—an ethical complaint worth taking seriously.

The uneasiness many may feel about this aspect of experimental development economics raises an important ethical question: What level of socioeconomic resources and opportunities are

owed to research participants by development economists? At its core, this is a question about distributive justice, and in particular, distributive justice in *non-ideal circumstances.* To assist with the inquiry at hand, I draw on helpful concepts and principles from the well-established literature on the ethics of medical research. Specifically, I focus on the concept of a *standard of care* and the associated *principle of standard care*.[3] As will become clear, the debate surrounding the correct interpretation of the principle of standard care in international medical research has yielded concepts and distinctions that are relevant to the question of what is owed to research participants in development RCTs. The key objective of this article is to determine what exactly the "standard of care" is in experimental development economics. In brief, I will argue that (barring certain circumstances) the "standard of care" in experimental development economics is the status quo level of socioeconomic resources and opportunities that research participants have access to.

The rest of this article is structured as follows. Section 2 introduces some background concepts and distinctions from general ethical theory. Section 3 introduces the principle of standard care and provides an overview of one associated controversy with its application in medical research. Section 4 advances an argument by elimination to establish that the "standard of care" in experimental development economics is the status quo. Specifically, this section rules out professional obligations, natural duties, and institutional obligations as providing the normative basis for a "standard of care" in experimental development economics. Section 5 introduces an important qualification based on the natural duty of rescue that is meant to address the concern that my account is overly permissive. Section 6 concludes.

2. Background Concepts and Distinctions

Before proceeding, a word of caution: while I will be arguing that development economists are permitted to use the status quo as a control when designing and conducting a development RCT, this should not be taken to suggest that no other ethical considerations bear on the permissibility of conducting development RCTs. The focus of this article is a specific kind of ethical concern, namely, a concern about distributive justice. Like many, I take justice to designate an ethical concern with what is owed to persons and by whom. What is owed to someone is fundamentally linked to their entitlements, and more specifically, their claim-rights (or claims) (Wenar, 2021).

[3] The term "principle of standard care" may sound odd to readers who typically think of the notion of a standard of care as an ethical concept rather than as an ethical principle. My choice of terminology follows Hawkins (2008).

Questions of distributive justice, as I understand them here, are a subclass of questions about justice which specifically deal with the level of socioeconomic resources and opportunities persons are entitled to. For present purposes then, non-ideal circumstances are those in which persons are not fully granted what they are entitled to, and further, may not be granted what they are fully entitled to in the foreseeable future.[4] It is worth noting that throughout, I remain agnostic on what the *exactly* correct theory of distributive justice requires but maintain that the global poor's share of socioeconomic resources and opportunities is well-below what any plausible theory would specify.[5]

In what follows, I assume that the ethical requirements of individuals fall into two general categories. First, there are *natural duties*; these are requirements that "apply to us without regard to our voluntary acts" and "have no necessary connection with institutions or social practices" (Rawls, 1971: 114). More simply, these are duties everyone has in virtue of being persons; they would apply to us in a (hypothetical) state of nature in which institutional arrangements do not exist. Natural duties should be contrasted with *obligations*, which do arise out of our voluntary acts. These voluntary acts include "the giving of express or tacit undertakings, such as promises and agreements" (Rawls, 1971: 113). Both natural duties and obligations are often, but not always, correlative with the claim-rights of persons. Natural duties (or obligations) of rectification are always correlative with someone's claim to compensation for a past wrong. If I have a natural duty (or obligation) to rectify some past wrong, then this implies some person has a correlative claim to my rectification. The natural duty of beneficence is a noteworthy example of an ethical requirement that is not correlative with any specific person's claims. While we may be required promote the good of others in virtue of being persons, this does not mean any specific person has a claim to our beneficence.

[4] A more elaborate definition of non-ideal circumstances can be made by reference to the distinction between ideal vs. non-ideal theory found in the work of Rawls (1971: 245-246; 1999: 4-6). For Rawls, ideal theory operates under two assumptions: "(i) all relevant agents comply with the demands of justice applying to them; and (ii) natural and historical conditions are favourable – i.e., society is sufficiently economically and socially developed to realize justice" (Valentini, 2012: 655). Non-ideal circumstances are those in which (i) and/or (ii) do not obtain. Another important approach to non-ideal theory has been advocated for by Mills (2005, 2009). On the account of non-ideal theorizing Mills envisions, the relevant normative project is "the adjudication of competing policies for redressing social injustice" (Mills, 2009: 182). I discuss corrective justice in section 4.4 on global institutional obligations.

[5] This is in line with engaging with another approach to non-ideal theory known as *anticipatory* theory. On this approach, "non-ideal theory has to make assumptions about the minimum requirements that any *plausible* and *complete* ideal theory of justice will include. In this vein, it can define targets for practical action *before* a complete ideal has been worked out, even in outline" (Sreenivasan, 2007: 221). Also see Sen (2009).

An important ethical requirement that I will set aside going forward is the natural duty of non-maleficence. I take it for granted that all persons are required to not (deliberately) harm or injure others, and all persons have a correlative claim to not be (deliberately) harmed or injured without adequate justification. This does not imply that development economists should be unconcerned with potential harms to research participants. Development economists are clearly bound by the natural duty of non-maleficence and RCT design should reflect this. I set aside concerns about potential harms to research participants to focus on the main issue at hand, namely, concerns about distributive justice. It is worth stressing, however, that questions about what is owed to research participants do have considerable bearing on whether they are harmed or not. Hawkins (2006) notably argues that certain cases of *positive obligation flouting* count as harms. For example, if a physician fails to recommend a known effective treatment for a serious medical condition, her patient has a plausible ethical (and legal) basis for claiming they were harmed. If development economists are routinely failing to comply with positive ethical requirements, then they may also be harming research participants.

3. The Principle of Standard Care

3.1 Therapeutic Obligations

The ethical requirements of physicians have traditionally been regarded as obligations since these ethical requirements stem from the voluntary act of choosing a particular profession. As a result, the ethical requirements of physicians can be further regarded as *professional obligations*. One well-recognized professional obligation physicians have to their patients is the *therapeutic obligation*: a physician should recommend a treatment *T* for some condition *C* if and only if *T* is accepted by the medical community as effective in treating *C*. The physician's therapeutic obligation provides the basis for the concept of a standard of care and in turn the principle of standard care in medical research ethics.[6] A succinct and influential statement of the principle first appeared in the World Medical Association's (WMA) 1975 Declaration of Helsinki. Paragraph II.3 reads: "In any medical study, every patient—including those in the control group, if any—should be assured of the best proven diagnostic and therapeutic method" (WMA, 1975). Despite the flaws

[6] This is not to say that all commentators agree that physicians are bound by their therapeutic obligations in research contexts. See Hawkins (2006), Kukla (2007), and MacKay (2014) on this issue. For the purposes of this article, I avoid taking a stance on issues surrounding the philosophical foundations of medical research ethics.

with this formulation of the principle of standard care (see Levine, 1999), the motivation for the principle is intuitively appealing: researchers should not withhold effective medical care from research participants, and thereby knowingly make them worse-off than they would have otherwise been had they not partaken in a study, for the sake of obtaining valuable medical knowledge.[7] In other words, the principle of standard care specifies that researchers conducting a study *owe* research participants some pre-specified level of medical resources and attention. Further, the principle of standard care specifies that research participants are *entitled* to this pre-specified level of medical care. Providing research participants with anything deemed *ex ante* inferior to the standard of care for some medical condition is therefore wrong.

3.2 The Standard of Care Debate

Despite the intuitive appeal of the principle of standard care, its interpretation and application have been controversial. These controversies stem from the use of placebo-controlled trials (PCTs) instead of active-controlled trials (ACTs) in medical research.[8] As the name suggests, in a PCT the control arm receives a placebo, i.e., some type of medically inert substance. In an ACT, the control arm receives a therapeutic intervention of some sort. If the study is designed in line with the principle of standard care, then the control arm in an ACT receives the "best proven diagnostic and therapeutic method." There is no denying that being assigned to the control arm of a development RCT is methodologically different than receiving a placebo in a medical study.[9] However, both development RCTs and (medical) PCTs raise similar ethical questions about what researchers owe research participants, and so it is worth reviewing one of these controversies here.

The most well-known controversy involving the use of PCTs is the short-course AZT trials of the 1990s.[10] This controversy arose in the context of international rather than domestic medical research and is in many ways analogous to the kind of research done by development economists. The goal of discussing the AZT trials is not to render an ethical verdict on the case, which many

[7] The most recent version of The Declaration of Helsinki (WMA, 2013) still uses the language of "best proven intervention(s)" but now allows for exemptions to the principle of standard care.

[8] The controversy over the use of PCTs in high-income countries was sparked by Rothman and Michels (1994). See Temple and Ellenberg (2000) and Emmanuel and Miller (2001) for commentary.

[9] One obvious difference is that development RCTs are conducted in the field. Another important methodological difference is that medical trials are often double-blind, meaning that neither researcher nor research subject knows which arm of the trial they belong to until the study is over. Abramowicz and Szafarz (2020) discuss some of the ethical implications of this methodological difference in the context of experimental development economics.

[10] See Hawkins and Emmanuel (2008) for a more thorough overview of the controversy surrounding the short-course AZT trials.

have attempted.[11] Rather, it is important to review the details of the case because, as we will see, a host of additional helpful concepts and distinctions emerged from the debate over whether the AZT trials were ethically justifiable or not.

The details of the controversy are as follows. In the 1990s, sixteen RCTs were designed and conducted in eleven countries: Burkina Faso, the Dominican Republic, Ethiopia, Ivory Coast, Kenya, Malawi, South Africa, Tanzania, Thailand, Uganda, and Zimbabwe. The motivation behind these trials was to address the problem of maternal-fetal HIV transmission in developing countries. However, as early as 1994, a standard of care treatment for maternal-fetal HIV transmission had been established in high-income countries such as the U.S. This treatment plan, known as the 076 regimen, was expensive, lengthy, and difficult to administer. At the time, the 076 regimen cost $1,000 per woman and involved large quantities of AZT (the trade name of the drug zidovudine) to be administered in an elaborate schedule over a minimum of 12 weeks starting in the second trimester of pregnancy. Additionally, the average annual health budgets of the countries in question were $10 per person. The goal of the short-course AZT trials was to determine whether a simpler, less expensive version of the 076 regimen would be effective in reducing maternal-fetal HIV transmission.

The controversy surrounding the AZT trials stemmed from the fact that fifteen of the trials used a placebo-control when a proven treatment already existed, i.e., the 076 regimen. The most well-known critics of the AZT trials were Angell (1997) and Lurie and Wolfe (1997), who argued that the use of a placebo-control in the AZT trials invoked an ethically unacceptable double standard. According to these critics, the placebo-controlled AZT trials would have clearly been unethical if they had been conducted in a high-income country where the 076 regimen had been established as the standard of care, and therefore the same trial should be deemed unethical in the developing world.

An initial way to understand the basis for the ensuing "standard of care debate" was an ambiguity in the "relevant reference point" (London, 2000) for the principle of standard care: "When Helsinki calls for the 'best proven therapeutic method' does it mean the best therapy available in the world? Or does it mean the standard that prevails in the country in which the trial is conducted?" (Levine, 1998: 6). Critics of the AZT trials could be seen as advocating for the

[11] There are simply too many articles discussing the short-course AZT trials to list here. The most influential literature is discussed throughout the rest of this section.

former, *global* interpretation of the principle of standard care whereas defenders of the AZT trials could be seen as advocating for the latter, *local* interpretation. Further, we can connect these two positions to more general debates about distributive justice by following Emmanuel (2012) in characterizing the global interpretation as reflecting a broad commitment to cosmopolitanism (e.g., Beitz, 1979) and the local interpretation as reflecting a broad commitment to statism (e.g., Rawls, 1999).

One important consideration in favor of the local interpretation is that medical research should address the unique health needs of communities in the developing world and that, due to conditions of fiscal scarcity, applying a global standard of care would hamper this ethically important objective (Varmus and Satcher, 1997).[12] Development economists will likely be sympathetic to this consideration and the local interpretation of the principle of standard care. After all, the RCTs designed by development economists are typically meant to address problems that are unique to the developing world, most notably extreme poverty. There would be little point to conducting a development RCT on a prospective socioeconomic intervention if the governments of low-income countries could, given present circumstances, provide research participants with the global "standard of care" for education, healthcare, and finance found in high-income countries.

Yet when it comes to the correct interpretation of the principle of standard care, London (2000) introduces a further, more fundamental distinction between the *de facto* standard of care and the *de jure* standard of care. According to a *de facto* interpretation of the principle of standard care, the "best proven treatment" is determined by *actual* medical practice. The *de facto* interpretation can then be combined with a local or global reference point. Applied to the AZT trials, critics could be seen as arguing that the use of placebo-controls was wrong because actual medical practice for preventing maternal-infant HIV transmissions in high-income countries was the 076 regimen; this would be a global *de facto* interpretation of the principle of standard care. On a local *de facto* interpretation, the use of placebo-controls was permissible because there was effectively no established medical practice for dealing with maternal-infant HIV transmission in

[12] Crouch and Arras (1998) advanced this consideration in favor of a local interpretation despite ultimately concluding that the AZT trials were impermissible. At the time, they incorrectly believed that the short-course regimen was not going to be made available to the populations in question.

the countries in which the AZT trials took place. Hence, administering a placebo did not place the control group below the standard of care.

Instead of focusing on actual medical practice, a *de jure* interpretation of the principle of the standard of care looks to what established medical practice *should* be. Like before, the *de jure* interpretation can be combined with a local or global reference point, though as we see below, this is less important when the *de jure* interpretation is grounded in the therapeutic obligations of physicians. According to London (2000), critics of the AZT trials such as Angell (1997) could more charitably be interpreted as advancing a *de jure* interpretation of the principle of standard of care. Even if the local *de facto* standard of care for some medical condition is virtually non-existent in the developing world, research participants in low-income countries may still be entitled to more than the local *de facto* standard of care by researchers in virtue of their therapeutic obligation. As London notes, "the *de jure* standard is founded upon the researcher's obligation to ensure that subjects of medical trials are not knowingly exposed to foreseeable and preventable harms" (London, 2000: 399) Since the researchers involved in the AZT trials *knew* that the best proven treatment for reducing maternal-fetal HIV transmission was the 076 regimen, they violated the principle of standard care *because* they violated their therapeutic obligation. These researchers therefore acted wrongly regardless of whether they were members of the relevant host communities or the larger global medical community.

Not all commentators (including London, 2000) agree with the characterization of the *de jure* interpretation presented above. For some commentators, whether an intervention should be made accessible to a population "depends on a complex combination of factors including economic factors, narrowly medical facts, social support systems, local preferences and values, and much more" (Kukla, 2007: 178). But for the principle of standard of care to incorporate these broader, practical considerations one then needs to give up the traditional basis for the principle, i.e., the physician's therapeutic obligation, and find a new basis.[13] On this broader interpretation of the principle of standard care, physicians conducting medical research will perhaps routinely violate their therapeutic obligation by conducting a PCT in the developing world, but they would not necessarily be violating the local *de jure* interpretation of the principle of standard care—and it is the latter which is ultimately supposed to be the more important ethical consideration.

[13] MacKay (2015) offers one compelling basis by appealing to the institutional obligations of researchers. I discuss institutional obligations further below.

3.3 Taking Stock

Settling the debate over the correct interpretation of the principle of standard care in international medical research is not my main concern here. The goal of reviewing the standard of care debate is only to introduce a framework for thinking about what research participants are owed in development RCTs. It is possible to quickly rule out any straightforward global interpretation of principle of standard care as a viable ethical principle in the context of experimental development economics. For one, it is not clear what the global *de facto* "standard of care" is, given inequities in access to healthcare, education, and finance in high-income countries (Kukla, 2007). Further, while a global *de jure* interpretation may reflect commitment to a theory of distributive justice worth aspiring towards, insisting on such an interpretation would be a paradigm example of letting an ideal become the enemy of the good—or more specifically in this case, potentially obtaining socially valuable evidence relevant to economic development.

This leaves the local *de facto* and local *de jure* interpretations as the two viable candidates, though I will circle back to discussion of a global *de jure* position further on. In the next section, I turn to the question of whether the local *de jure* standard of care—understood in the context of experimental development economics as an unspecified level of socioeconomic resources and opportunities owed to research participants by development economists—is anything over and above the status quo, i.e., the local *de facto* standard of care. The key challenge to establishing a local *de jure* interpretation is identifying an ethical requirement that can serve as the basis for a principle of standard of care in experimental development economics. Below, I cast doubt on the possibility of meeting this challenge. Ultimately, I will conclude that in experimental development economics, the standard of care is the status quo, i.e., the local *de facto* standard of care.

4. Grounding the Principle of Standard Care

4.1 Professional Obligations

In what follows, I proceed by making an argument by elimination to determine whether development economists owe their research participants more than the status quo, i.e., the local *de facto* standard of care. Above, we saw how the professional obligations of physicians can be invoked as the basis for a *de jure* interpretation of the principle of standard care. While development economists may have some professional obligations in virtue of being members of the class of professionally trained economists (e.g., obligations not to engage in fraudulent research

practices), there is no currently recognized analogue to the physician's therapeutic obligation for economists.

Some may also be quick to point out that there is also no historically significant undertaking equivalent to the Hippocratic oath on which to base a professional code of ethics for economists. But this suggests that an ancient undertaking is an adequate justification for the professional obligations of physicians. More plausibly, one could maintain that the professional obligations of physicians are a type of contractual *role obligation,* i.e., the kind of obligation one incurs in virtue of voluntarily occupying an institutionally specified social role (Hardimon, 1994). In the case of physicians, professional obligations such as the therapeutic obligation can perhaps be justified by reference to the important role healers play in a society (Hawkins, 2006). However, it is not clear what substantive professional obligations would follow from the role economists play in society. Given the heterogeneity of the economics profession, the prospects of creating a substantive professional code of ethics based on role obligations seems dim.[14] It is hard to imagine what substantive professional obligations a microeconomist constructing and exploring theoretical models could come to be bound by. And it would be puzzling to insist that the microeconomic theorist, working in the confines of her office, could have a *professional* obligation to provide anyone with access to socioeconomic resources and opportunities.

4.2 Natural Duties

None of the remarks above should be taken to suggest that non-physician researchers conducting RCTs (which includes development economists) are not bound by any principles of ethical research design. As Kukla (2007) has pointed out, an ethically problematic medical trial is not automatically rendered permissible by substituting physician-researchers with non-physicians. Using this insight, Kukla has attempted to ground principles of ethical research design in general ethical requirements of justice and respect for persons, or natural duties more simply. Kukla introduces a "Minimum Standard" Principle (MSP) which is meant to extend the principle of standard care beyond the medical context. On MSP, "researchers should not run studies unless, *to the best of their knowledge*, every trial arm receives care that is at least as good as the local *de jure* standard of care" (Kukla, 2007: 178). Kukla is extending the notion of care to include more than just medical treatment, and by invoking the concept of a *de jure* standard of care, Kukla is suggesting that there is a level of socioeconomic resources and opportunities that research

[14] But see DeMartino (2011) for one such attempt.

participants are entitled to *given* the cultural and material context in which the research takes place. Going forward, the concept of "standard of care" will take on this broader meaning.

Kukla is right that research participants are owed at least some minimum level of socioeconomic resources or opportunities; such a claim is consistent with most (if not all) plausible theories of distributive justice. But while Kukla's proposal is promising in that it bypasses the traditional grounding of research ethics on professional obligations, it rests on a controversial premise. MSP implies that researchers *qua* persons have duties to provide research participants with what they are owed; it would thereby forbid the routine use of the status quo as a control in experimental development economics. But as MacKay (2015) notes in response to Kukla, "most political philosophers claim that it is the responsibility of *institutions*—not individuals—to provide citizens with what they are owed, whether access to healthcare, income, opportunities etc." (MacKay, 2015: 8).[15] Of course, as both Kukla and MacKay acknowledge, researchers are ethically required to not interfere with the entitlements research participants presently have access to (if any), but this is uncontroversial and ultimately consistent with using the status quo as a control.

In Kukla's defense, however, it is worth pointing out that MSP is meant to apply in circumstances in which people are not receiving what they are owed precisely because institutions do not comply with the demands of justice or simply do not exist. What MSP can perhaps be taken to suggest is that in these circumstances, researchers have an ethical requirement to provide research participants with care that is at least as good as the local *de jure* standard of care—whatever it may be. This is still a controversial position to maintain as there is no settled account of what positive ethical requirements persons have in non-ideal circumstances. One possible way to ground MSP's demands on researchers would be by appeal to the second component of Rawls's natural duty of justice, which requires one to further just arrangements when they do not yet exist (Rawls, 1971: 115).[16] Political philosophers often appeal to this duty in non-ideal circumstances since it can be "invoked as a 'normative bridge' translating the demands of justice applying to complex institutional agents—such as the state—into responsibilities falling on individuals" (Valentini, 2021: 46). Such a strategy seems especially fitting in the case of experimental development economics since Rawls holds, quite plausibly, that a certain level of economic

[15] Two notable exceptions are Cohen (1997) and Murphy (1998). Both defend the view that individuals have positive requirements of distributive justice.
[16] The first component of the natural duty of justice requires us to comply with the demands of just institutions.

development is a necessary precondition for the emergence of just institutions (Rawls, 1999: 106-111).[17] However, the exact demands of this duty are unclear given societal variations in historical circumstances and, more importantly, lack of full compliance with the natural duty of justice on behalf of others.

Addressing the concern above is the chief task of non-ideal theory understood as *partial compliance theory*. Three types of answers are typically offered in response to the question of what positive requirements persons have under conditions of partial compliance: do your fair share and nothing more; do more than your fair share by picking up the slack of others; and do less than your fair share so long as you reasonably expect non-compliance from others (Miller, 2011). While I do not mean to suggest that development economists are moral saints, it does not seem like a stretch to maintain that, even by running RCTs in which the status quo is used as a control, development economists are doing more than their fair share of the natural duty to bring about just arrangements. Not only are they directing socioeconomic resources and opportunities to low-income countries, but they are also devoting their talents and abilities—which could be put to other uses—towards figuring out how to effectively reduce global poverty, and in turn, bring about more just arrangements. Consequently, it is hard to maintain that development economists would owe the control arm more than the status quo even granting that there is a natural duty to promote just arrangements when they do not yet exist.

Another possible basis for MSP is the natural duty of beneficence. Valentini (2021) has recently argued that it is often more appropriate to appeal to this duty instead of the natural duty of justice in conditions of widespread non-compliance. Recall, however, that the natural duty of beneficence is not correlative with any specific person's claim-rights. Consequently, appealing to the natural duty of beneficence would not settle the question of what development economists owe their research participants. Still, one may ask whether the natural duty of beneficence could establish that development economists are required to provide more than the status quo level of resources and opportunities to research participants. However, there is also a strong case to be

[17] It is worth highlighting that the natural duty of justice may require development economists *abstain* from interfering with the status quo all together. This is because, if Deaton (2013) is correct, interventions from outsiders crowd out the incentives of governments to tax their citizens and become responsive to their needs, which thereby hampers the development of local institutions. But as Ravallion (2014) argues in response to Deaton, there are also circumstances where outside interference will help local institutions develop. See Temkin (2022) for recent philosophical commentary on Deaton's Worry and Picchio (2023) for discussion of Temkin's commentary on Deaton's Worry.

made that the demands imposed by the natural duty of beneficence are also subject to considerations of partial compliance (Murphy, 2000). Consequently, the same points regarding the natural duty of justice apply *mutatis mutandis*: development economists are quite plausibly already doing more than their fair share of the natural duty of beneficence by conducting an RCT in which the status quo is used as a control.[18]

Despite these remarks, there is no denying that MSP is motivated by a legitimate ethical concern. There are perhaps some circumstances so unjust, or so dire, that it would be wrong to be complicit with even if there is something potentially valuable to learn. Further on, I revisit the idea of a minimal standard of care and provide some basis for the concern motivating it by appealing to the natural duty of rescue.

4.3 Domestic Institutional Obligations

MacKay (2018, 2020) offers a much less contentious foundation for a principle of standard care in his work on *policy* RCTs, i.e., RCTs on prospective socioeconomic interventions authorized or conducted by local, state, and federal governments or their respective agencies. While some development RCTs are also policy RCTs, not all development RCTs are—a point I return to below. MacKay's approach rests on a key premise: governments are the kind of institutions that have obligations to pursue justice-related outcomes for their citizens. Consequently, governments are required to provide citizens with access to healthcare, education, and finance so that they may achieve these target outcomes. An analogue of the principle of standard care can as a result be grounded in the obligations that governments have to residents within their territory. MacKay argues that for any justice-related outcome a government has a duty to realize, governments possess an obligation to implement the policy that is "(1) evidence-based, (2) consistent with people's rights, and (3) consistent with the realization of other target outcomes" (MacKay, 2020: 323). MacKay calls this the Best proven, Morally and Practically attainable and sustainable (BPA) policy. A policy counts as a BPA policy if and only if "(1) it is consistent with residents' rights and

[18] One may question whether development economists conducting experiments really are doing more than their fair share once we factor in the personal material benefits accrued through conducting their research. The development economists mentioned at the outset did, after all, win a Nobel prize, which comes attached with considerable material benefits. The first thing to point out is that not all development economists conducting experiments enjoy the material benefits of the three Nobel prize winners. Still, publishing articles based on experimental results leads to material gains via promotion and advancement in the economics discipline. Should the material gains from each experiment enter our assessment of what a researcher's fair share is? Absolutely, but even if the exact calculations could reliably be made, it is not clear if this consideration will pose a significant challenge to the argument above.

(2) it can be implemented for an appropriate period of time given a just system of resource procurement and allocation" (MacKay, 2020: 324).

The BPA policy can be seen as an analogue of the local *de jure* standard of care for policy RCTs (MacKay, 2018: 62). This raises the question: Do development economists have an obligation to ensure that the control arm receives the level of resources and opportunities specified by the BPA policy? One possible way of establishing this result is by appealing to the institutional obligations development economists incur in virtue of their status as *government-authorized investigators* (GAIs) (MacKay, 2018: 64). The rationale behind this approach is that GAIs have an institutional obligation to act only in ways that a government *may* permissibly authorize. This is crucially different from saying that GAIs have institutional obligations to act only in ways that a government *actually* authorizes. The latter has clear counterexamples (e.g., Nazi medical experiments). Yet the former offers an institutional answer to the question of what development economists owe their research participants. Since a government may not permissibly deny its residents what is owed to them for the sake of potentially learning something valuable, it follows that GAIs are not allowed to do so either. It would further follow that GAIs are required to provide research participants with the level of socioeconomic resources and opportunities specified by the BPA policy.

This proposal has serious difficulties in the context of experimental research in development economics. Most obviously, not all development RCTs are conducted or sponsored by the government of a host country. Many development RCTs are conducted or sponsored by NGOs and for-profit businesses (e.g., MFIs). This raises a host of separate ethical and political issues which are beyond the scope of this article. But the main point is that because NGOs and for-profit businesses are private entities, it is not clear what distributive justice-based institutional obligations their affiliates may come to be bound by.[19] NGOs and private businesses may, of course, have duties of justice and beneficence. But the same points about individuals discussed above should apply here as well. Regardless, it is still worth considering whether development economists working as GAIs have institutional obligations to provide the control arm with more than the status quo.

[19] In the context of international medical research, MacKay (2015) has argued that unlike government research agencies, private businesses do not have institutional obligations.

The notion of a BPA policy will undoubtedly strike development economists as extravagant due to the non-ideal circumstances in which their research takes place. This complaint is not entirely misguided; MacKay's framework is perhaps best suited for policy RCTs run or sponsored by the governments of high-income countries. While it would be inappropriate to characterize the circumstances of present high-income countries as *ideal*, the circumstances are certainly *less* non-ideal in that historical circumstances are favorable. As a result, some institutions and policies meant to promote justice-related outcomes are in place. Further, there is a case to be made that the policies in high-income countries *can* meet MacKay's criteria for BPA policies. However, when institutions and policies are in place in low-income countries, it is hard to maintain that they fully allot residents what they are entitled to even by local standards. One could argue that since the notion of BPA policy includes feasibility constraints, it factors in the non-ideal circumstances of the developing world (resource limitations, state capacity, etc.) into the definition of best proven and *attainable* policy. Granting this point would simply show that the routine use of the status quo as a control is permissible on MacKay's framework. But this is not a position I wish to defend to establish my main conclusion, as it would imply that an unjust status quo is somehow consistent with the rights of persons.

The principal problem with adopting the BPA policy as the standard of care in development economics is that it would effectively render all past and future policy RCTs conducted by development economists as unethical. It is worth emphasizing that part of what makes the developing world non-ideal, and what motivates the need for the kind of research done by development economists, is that governments (and perhaps other global institutions—see below) are not providing their residents with the level of socioeconomic resources and opportunities they are fully entitled to. Again, one does not need to identify BPA policies to know this. Consider, for example, the routine mismanagement of public resources in low-income countries due to corruption.[20] Clearly, such widespread public corruption is not consistent with residents receiving what they are fully owed as a matter of distributive justice. For this reason, it is not tenable to suggest that the BPA policy can be the standard of care in experimental development economics. Doing so would impose institutional obligations to provide BPA policy-levels of socioeconomic resources and opportunities, which, as a result, would mean that development economists would

[20] See Svensson (2005) for discussion of the strong relationship between country income and corruption as well as a general overview of the economic literature on corruption.

be too overburdened with picking up the slack of institutional non-compliers to ever conduct an RCT permissibly.

MacKay acknowledges the point above and offers one way of reconciling his account of institutional obligations with non-ideal circumstances. When conducting a policy RCT in which participants are exposed to policies inferior to the BPA policy (which I am suggesting is routine practice in the case of experimental development economics), MacKay suggests that "GAIs commit a *pro tanto* wrong against participants, but this wrong is outweighed by competing considerations, namely, the value of the research" (MacKay, 2018: 65). While I am sympathetic to MacKay's proposal for non-ideal circumstances, it is worth noting that a similar strategy is also potentially available to "pragmatic cosmopolitans" (Emmanuel, 2012) who would reject a local *de jure* interpretation of the standard of care in experimental development economics. These cosmopolitans could insist on a global interpretation of the BPA policy and could similarly introduce a defeasibility condition to their prospective view. In other words, they too could maintain that in non-ideal circumstances a development RCT can go forward if it is sufficiently valuable despite research participants being denied what they are owed as a matter of distributive justice.

The proposal suggested above offers cosmopolitans a way of reconciling their philosophical commitments with pragmatic considerations. In the next section, I cast doubt on whether—currently—one could establish that there are institutional obligations to provide research participants with the level of socioeconomic resources and opportunities specified by a *global* BPA policy—whatever it may be.

4.4 Global Institutional Obligations

Could appealing to global rather than domestic institutional obligations establish that the control arm be provided more than the status quo? Here, the thought would be that intergovernmental organizations (IGOs) such as the United Nations (U.N.) or the World Bank and International Monetary Fund (IMF) have duties of distributive justice, and affiliation with such institutions would confer positive obligations on development economists. The most direct way a development economist could come to be affiliated with an IGO is through the IGO funding their research, but I grant that there are a variety of indirect ways that one could come to have an institutional affiliation with an IGO and very little hinges on this point.

As discussed above, one can maintain that development economists associated with, for example, the World Bank commit a *pro tanto* wrong against research participants by exposing them to the status quo when the development RCT in question is sufficiently valuable. But there is a more fundamental problem with this proposal. Even if we could identify the correct principles of global distributive justice and the BPA policies they imply, there are currently no global institutions capable of acting on them. This is because, unlike states, no currently existing global institutions have the requisite coercive capacities that give rise to demands of distributive justice (Blake, 2001; Nagel, 2005). Consequently, it is difficult to make the case that development economists—at this moment in time—could incur global institutional obligations of distributive justice. Unlike with MacKay's proposal, one could not thereby maintain that IGO-authorized development economists commit a *pro tanto* wrong against research participants—at least on distributive justice grounds (another basis for a *pro tanto* wrong is discussed below). None of this is to deny that IGOs have some coercive capacities.[21] However, to borrow a phrase from Stiglitz (2003) the situation is currently one of "global governance without global government" (Stiglitz, 2003: 22).

While IGOs may be unlike states in their coercive capacities, and in turn their obligations of distributive justice, there may be considerations of corrective justice that can provide the basis for the global institutional obligations of researchers. There is a case to be made that the IGOs that (partially) comprise the global political and economic order cause global poverty and thereby harm the residents of developing countries.[22] One could thereby argue that development economists affiliated with IGOs have obligations of rectification which make use of the status quo as a control impermissible.

Perhaps the most salient episode on which to base claims of corrective justice on is the era of structural adjustment loans (SALs) from roughly 1980 to 1999. During this period, the IMF provided loans to developing countries facing economic turmoil on the condition that they make crucial "structural" changes to their economic policies. Among the most deplored structural changes the IMF demanded were fiscal austerity measures. Cuts to social spending on health and education due to these measures could very well have harmed residents of low-income countries,

[21] See, for example, Stiglitz (2003) for discussion of how IGOs such as the International Monetary Fund (IMF) and World Trade Organization (WTO) constrain the sovereignty of developing countries.
[22] See Pogge (2002) for extensive discussion of this consideration and its implications for debates about global justice.

as numerous scholars, advocates, and activists have claimed. Since these global institutions are (at least partly) responsible for the current unjust status quo, one can introduce the claim that development economists affiliated with IGOs like the World Bank and IMF are doing something wrong in using the status quo as a control. This is because the members of the control group are in fact owed something from these institutions, namely, rectification for the harms due to the structural adjustment era in their country. The problem, however, is establishing the appropriate counterfactual baseline for these harm-claims. In the case of SALs, the task is plagued by concerns about selection bias since the countries taking out these loans were already on a negative economic trajectory. As Easterly (2009) notes, complaints about structural adjustment era are "based on correlations between SALs and outcomes that are the equivalent of the negative correlation between admission to an emergency room and a person's health, with the implication that the emergency room is bad for your health" (Easterly, 2009: 423).

Setting causal identification problems aside, it's not implausible that global institutions have unjustly harmed the global poor and thus have obligations of rectification. However, there remains the possibility that using the status quo as a control in a development RCT will generate knowledge that will allow global institutions to discharge their obligations of rectification more efficiently and effectively. This consideration should not be overlooked since efficiency and effectiveness are at least among the most important factors institutions should consider when discharging their duties of corrective justice. And moreover, this consideration is also consistent with the possibility that IGO-authorized researchers commit a *pro tanto* wrong when they use the status quo as a control.

4.5 Taking Stock

I have taken steps to establish the difficulties in maintaining that the standard of care in experimental development economics is anything above the local *de facto* level of socioeconomic resources and opportunities. My argument has been negative; I have ruled out natural duties, professional obligations, and institutional obligations as providing the basis for a *de jure* conception of the standard of care in experimental development economics. I believe this argument justifies the use of the status quo as a control in many of the research contexts development economists have, to date, been interested in. However, in the next section I address the concern that my account is overly permissive in that it would allow experiments that are highly objectionable to go forward.

5. The Natural Duty of Rescue

In this penultimate section, I sketch a proposal for a minimum standard of care by appealing to the natural duty of rescue.[23] Following Miller (2020), I take the natural duty of rescue to be correlative with a would-be victim's claim to be rescued. The natural duty of rescue may require the distribution of live-saving resources in some scenarios; however, it is not strictly speaking a duty of distributive justice as I understand it here. My goal in introducing the natural duty of rescue is only to offer a (relatively) uncontroversial basis for complaints about development RCTs.[24] As such, I distance myself from some commentators, most notably Singer (1972), who give the natural duty of rescue a wider, more demanding scope, and who arguably conflate the natural duty of rescue with duties of beneficence (see Temkin, 2022).

On what I am calling an "uncontroversial" understanding of the natural duty of rescue, physical proximity to an emergency and direct confrontation with those in need of rescue are (contra Singer) necessary for the duty to be triggered.[25] The demands imposed by the natural duty of rescue cannot also be so burdensome that they require innumerable personal sacrifices on behalf of persons. To use a well-worn example, if while walking to work I notice a child drowning in a shallow pond that I can save without significant risk to myself, the natural duty of rescue requires that I provide this stranger with my assistance, and the stranger in question is presumably entitled to my assistance as well. Someone on the other side of town, or in another country all together, does not have a duty to rescue this stranger because they lack both physical proximity to the emergency and direct confrontation with the person in need.

The idea here is that by conducting their research in low-income countries, development economists (or their research staff) place themselves in a unique position to act on the natural duty

[23] This approach is similar in some ways to Hawkins' (2006) reliance on Good Samaritan obligations in her analysis of the use of PCTs in international medical research. Besides a difference in terminology, I am using the duty of rescue to establish a minimum, whereas Hawkins combines the duty of rescue with the duties of distress avoidance and gratitude to argue that the use of placebo-controls is unethical in some circumstances. For a criticism of Hawkins' approach, see MacKay and Rulli (2017).

[24] Rulli and Millum (2016) are correct to point out that appeals to the natural duty of rescue in the research ethics literature are underdeveloped, and my proposal is no exception. These commentators distinguish between the *duty of easy rescue* and *the rule of rescue* and proceed to criticize appeals to both. The former requires that one rescue others when it involves minimal cost to oneself. The latter requires that the would-be victim be identifiable. The uncontroversial natural duty of rescue I am proposing can be seen as a synthesis of the two, which Rulli and Millum do not consider.

[25] Miller (2020) and Temkin (2022) have most recently defended this position. Also see Kamm (2000).

of rescue. Their non-experimental colleagues working in the confines of their offices are not in this special position, at least not frequently. What this suggests is that by designing and conducting an RCT in which the control group is left in an emergency scenario, development economists would be failing to act on their natural duty of rescue, and the experiment would therefore be ethically wrong to carry out if there are life-saving resources to go around. One can imagine, for example, a development RCT designed to take place during a famine or some other type of emergency. In such a case, it would be wrong for development economists to not do everything in their power to address the severity of the situation because, as persons, they are duty-bound to provide aid in such emergency situations.[26] Similar considerations apply to situations where an emergency develops over the course of an experiment. In such a case, development economists would be duty-bound to halt the experiment and direct all their resources and attention to not only helping participants in all trial arms, but also members of the community from which research participants are drawn.

A noteworthy objection to what I am proposing is that the developing world can be characterized as a "constant emergency situation" (Hawkins, 2006). In response, I should reemphasize that my goal in introducing the natural duty of rescue as giving rise to a minimum standard of care is only to provide a (relatively) uncontroversial philosophical basis for ethical complaints about development RCTs. Adopting a broad understanding of an emergency would prevent us from ever articulating such complaints since all development RCTs would effectively be considered unethical. While I cannot provide a satisfactory account of what constitutes an emergency here, I suggest instead that whether some prospective development RCT falls below this minimum standard, or whether development economists have failed in some instances to act on their natural duty of rescue, are matters that should be settled on a case-by-case basis. To reiterate, the natural duty of rescue can (perhaps) provide a sound philosophical basis for such case-by-case assessments.

[26] Like Hawkins (2006), I do not deny that the natural duty of rescue is defeasible. One can conceive of an emergency scenario where the importance of evaluating a life-saving intervention is necessary because it could help persons in similar emergency situations in the future. In such a case, perhaps the natural duty of rescue is outweighed by other ethical considerations. However, it is unclear what socially valuable knowledge could ever possibly be gained by conducting a development RCT in a famine. This is especially true if Sen (1982) is correct that famines are not caused by food availability decline but rather distributional issues. Perhaps a development RCT that somehow tests Sen's (1982) entitlement approach to famines would be an example of an experiment where the natural duty of rescue is defeated. But the details of such an experiment would need to be *very* carefully worked out.

6. Conclusion

To close, I should emphasize that I have not set out to provide a wholesale ethical defense of experimental development economics. I have only argued that the routine practice of using the status quo as a control is ethically justifiable. If there *is* something deeply unethical about the routine use of the status quo as a control in development RCTs, the wrong-making feature does not stem from considerations of distributive justice.

Note that there are still other ethical requirements that need to be met (and formulated) for development RCTs to go forward. In addition to (but not limited to) securing genuine informed consent, avoiding exploitation, demonstrating social value, and selecting research participants fairly, development economists may also be required to meet an analogue of the *principle of clinical equipoise* (Freedman, 1987), which requires the medical community be in a collective state of uncertainty with respect to the relative therapeutic benefits of each arm of a prospective medical trial. Like with the principle of standard care, the principle of clinical equipoise has traditionally been grounded in the therapeutic obligations of physicians. Further, there is virtually no uncertainty with respect to the therapeutic value of some of interventions development economists evaluate (e.g., deworming drugs). This suggests that an extension of this well-known ethical requirement in medical research will not be so straightforwardly carried over to development economics but could possibly come to play an important role in the ethics of development RCTs as some commentators have suggested.[27]

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[27] See Abramowicz and Szafarz (2020) for preliminary discussion. Baele (2013) is one of the first to suggest that development economists should have to establish equipoise of some sort. Some of the articles discussed have attempted to extend the concept of equipoise beyond the medical context. Kukla (2007) is an early first attempt and MacKay's (2018, 2020) recent work has focused on extending equipoise to the realm of policy RCTs.

REFERENCES

Abramowicz M, Szafarz A (2020) Ethics of RCTs: Should Economists Care about Equipoise? In Bédécarrats F, Guérin I, Roubaud F (eds.) *Randomized Control Trials in the Field of Development: A Critical Perspective.* New York: Oxford University Press, pp. 280-292.

Alderman H, Das J, Rao V (2016) Conducting Ethical Economic Research: Complications from the Field. In DeMartino G, McCloskey D (eds.) *Oxford Handbook on Professional Economic Ethics.* New York: Oxford University Press, pp. 402-422.

Angell M (1997) The Ethics of Clinical Research in the Third World. *The New England Journal of Medicine* 337(12): 847-849.

Asiedu E, Karlan D, Lambon-Quayefio MP, Udry CR (2021) A Call for Structured Ethics Appendices in Social Science Papers. *Proceedings of the National Academy of Sciences of the United States of America* 118(29).

Baele S (2013) The Ethics of New Development Economics: Is the Experimental Approach to Development Economics Morally Wrong? *The Journal of Philosophical Economics* 7(1): 2-42.

Banerjee A, Duflo, E. (2007). The Economic Lives of the Poor. *Journal of Economic Perspectives* 21(1): 141-168.

Banerjee A, Duflo E (2011) *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs.

Banerjee A, Duflo E, Goldberg N, Karlan D, Osei R, Parienté W, Shapiro J, Thuysbaert B, Udry C (2015) A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries. *Science*, 348(6236): 1-16.

Beitz C (1979) *Political Theory and International Relations.* Princeton: Princeton University Press.

Blake M (2001) Distributive Justice, State Coercion, Autonomy. *Philosophy & Public Affairs* 30(3): 257-296.

Cohen GA (1997) Where the Action Is: On the Site of Distributive Justice. *Philosophy & Public Affairs* 26(1): 3-30.

Cohen J, Easterly W (eds.) (2009) *What Works in Development: Thinking Big and Thinking Small*. Washington, DC: Brookings Institution Press.

Crouch R, Arras D (1998) AZT Trials and Tribulations. *The Hastings Center Report* 28(6): 26-34.

Deaton A (2013) *The Great Escape: Health, Wealth, and the Origins of Inequality*. Princeton: Princeton University Press.

DeMartino G (2011) *The Economist's Oath: On the Need for and Content of Professional Economic Ethics.* New York: Oxford University Press.

Easterly W (2009) Can the West Save Africa? *Journal of Economic Literature* 47(2): 373-447.

Emmanuel E (2012) Global Justice and the 'Standard of Care' Debates. In Millium J, Emmanuel E (eds.) *Global Justice and Bioethics.* Oxford: Oxford University Press, pp. 181-212.

Emmanuel E, Miller F (2001) The Ethics of Placebo-Controlled Trials – A Middle Ground. *The New England Journal of Medicine* 345(12): 915-919.

Freedman B (1987) Equipoise and the Ethics of Clinical Research. *The New England Journal of Medicine* 317(3): 141-145.

Glennerster R, Powers S (2016) Balancing Risk and Benefit: Ethical Tradeoffs in Running Randomized Evaluations. In DeMartino G, McCloskey D (eds.) *Oxford Handbook on Professional Economic Ethics.* New York: Oxford University Press, pp. 367-401.

Hardimon MO (1994) Role Obligations. *Journal of Philosophy* 91(7): 333-363.

Hawkins J (2006) Justice and Placebo Controls. *Social Theory and Practice* 32(3): 467-496.

Hawkins J (2008) Research Ethics, Developing Countries, and Exploitation: A Primer. In Emmanuel E, Hawkins J (eds.) *Exploitation and Developing Countries.* Princeton: Princeton University Pres, pp. 21-62.

Hawkins J, Emmanuel E (2008). Introduction: Why Exploitation? In Emmanuel E, Hawkins J (eds.) *Exploitation and Developing Countries.* Princeton: Princeton University Press, pp. 1-20.

Kamm FM (2000) Does Distance Matter Morally to the Duty to Rescue? *Law and Philosophy* 19(6): 655-681.

Karlan D, Appel J (2011) *More than Good Intentions: Improving the Ways the World's Poor Borrow, Save, Farm, Learn, and Stay Healthy*. New York: Penguin.

Kukla R (2007) Resituating the Principle of Equipoise: Justice and Access to Care in Non-ideal Conditions. *Kennedy Institute of Ethics Journal* 17(3): 171-202.

Levine RJ (1998) The 'Best Proven Therapeutic Method' Standard in Clinical Trials in Technologically Developed Countries. *The Hasting Center Report* 20(1): 5-9.

Levine RJ (1999) The Need to Revise the Declaration of Helsinki. *The New England Journal of Medicine 341*(7): 531-534.

London AJ (2000) The Ambiguity and the Exigency: Clarifying 'Standard of Care' Arguments in International Research. *Journal of Medicine and Philosophy* 25(4): 379-397.

Lurie P, Wolfe S (1997) Unethical Trials of Interventions to Reduce Perinatal Transmission of the Human Immunodeficiency Virus in Developing Countries. *The New England Journal of Medicine* 337(12): 853-855.

MacKay D (2014) Standard of Care, Professional Obligations, and Distributive Justice. *Bioethics* 28(7): 352-359.

MacKay D (2015) Standard of Care, Institutional Obligations, and Distributive Justice. *Bioethics* 29(4): 262-273.

MacKay D (2018) The Ethics of Public Policy RCTs: The Principle of Policy Equipoise. *Bioethics* 32(1): 59-67.

MacKay D (2020) Government Policy Experiments and the Ethics of Randomization. *Philosophy & Public Affairs* 48(4): 319-352.

MacKay D, Rulli T (2017) The Duty to Rescue and Investigators' Obligations. *Kennedy Institute of Ethics Journal* 27(1), 71-105.

Miguel E, Kremer M (2004) Worms: identifying impacts on education and health in the presence of treatment externalities. *Econometrica* 72(1): 159–217.

Miller D (2011) Taking Up the Slack? Responsibility and Justice in Situations of Partial Compliance. In Stemplowska Z, Knight C (eds.) *Responsibility and Distributive Justice.* Oxford: Oxford University Press, pp. 230-245.

Miller D (2020) The Nature and Limits of the Duty of Rescue. *Journal of Moral Philosophy* 17(3): 320-341.

Mills, CW (2005) "Ideal Theory" as Ideology. *Hypatia 20*(3): 165-183.

Mills, CW (2009) Rawls on Race/Race in Rawls. *The Southern Journal of Philosophy* 47(Supplement): 161-184.

Murphy L (1998) Institutions and the Demands of Justice. *Philosophy & Public Affairs* 27(4): 251-291.

Murphy L (2000) *Moral Demands in Nonideal Theory*. Oxford: Oxford University Press.

Nagel T (2005) The Problem of Global Justice. *Philosophy & Public Affairs* 33(2): 113-147.

Ogden T (ed.) (2017). *Experimental Conversations: Perspectives on Randomized Trials in Development Economics*. Cambridge, MA: MIT Press.

Picchio M (2023) Being Good in a World of Need, Larry S. Temkin. Oxford University Press, 2022, 432 pages. *Economics & Philosophy*: 1-6.

Pogge T (2002) *World Poverty and Human Rights: Cosmopolitan Responsibilities and Reforms.* London: Polity Press.

Ravallion M (2014) On the Role of Aid in *The Great Escape*. *Review of Income and Wealth* 60(4): 967-984.

Rawls J (1971) *A Theory of Justice*. Cambridge, MA: Harvard University Press.

Rawls J (1999) *The Law of Peoples with "The Idea of Public Reason Revisited"*. Cambridge, MA: Harvard University Press.

Rothman K, Michels, K (1994). The Continuing Unethical Use of Placebo Controls. *The New England Journal of Medicine* 331(6): 394-398.

Rulli T, Millum J (2016) Rescuing the Duty to Rescue. *Journal of Medical Ethics* 42: 260-264.

Sen AK (1982) *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Oxford University Press.

Sen AK (2009) *The Idea of Justice.* Cambridge, MA: Harvard University Press.

Singer P (1972) Famine, Affluence, and Morality. *Philosophy & Public Affairs* 1(3): 229-243.

Sreenivasan S (2007) Health and Justice in Our Non-Ideal World. *Politics, Philosophy & Economics* 6(2): 218-236.

Stiglitz J (2003) Globalization and its Discontents. New York: W.W. Norton & Company.

Svensson J (2005) Eight Questions about Corruption. *Journal of Economic Perspectives* 19(3): 19-42.

Temkin L (2022) *Being Good in a World of Need*. Oxford: Oxford University Press.

Temple R, Ellenberg S (2000) Placebo-Controlled Trials and Active-Control Trials in the Evaluation of New Treatments. *Annals of Internal Medicine* 133(6): 455-463.

The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel (2019) Understanding Development and Poverty Alleviation. Available at:

https://www.nobelprize.org/uploads/2019/10/advanced-economicsciencesprize2019.pdf [Accessed March 15, 2021].

Valentini L (2012) Ideal vs. Non-Ideal Theory: A Conceptual Map. *Philosophy Compass* 7(9): 654-664.

Valentini L (2021) The Natural Duty of Justice in Non-Ideal Circumstances: On the Moral Demands of Institution Building and Reform. *European Journal of Political Theory* 20(1): 45-66.

Varmus H, Satcher, D (1997) Ethical Complexities of Conducting Research in Developing Countries. *The New England Journal of Medicine* 337(14): 1003-1005.

Wenar L (2021) Rights. In Zalta E (ed.) *The Stanford Encyclopedia of Philosophy* (Spring 2021 Edition). <https://plato.stanford.edu/archives/spr2021/entries/rights/>.

World Medical Association (1975) *WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects.* Ferney-Voltaire, France: World Medical Association.

World Medical Association (2013) *WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects*. Ferney-Voltaire, France: World Medical Association.

Ziliak S, Teather-Posadas E (2016) The Unprincipled Randomization Principle in Economics and Medicine. In DeMartino G, McCloskey D (eds.) *Oxford Handbook on Professional Economic Ethics.* New York: Oxford University Press, pp. 423-452.