Primum Nocere: Medical Brain Drain and the Duty to Stay

Luara Ferracioli and Pablo de Lora

(A revised version of this article has been accepted for publication in the Journal of Medicine and Philosophy, Published by Oxford University Press)

Sir, craving your indulgence, I want to train in a decent, ten-story hospital where the lifts are actually working. I want to pass board-certification exams by my own merit and not through pull of bribes. I want to become doctor, practice real medicine, pay taxes make a good living, drive a big car on decent roads, and eventually live in the Ansel Adams section of New Mexico and never come back to this wretched town


Abraham Verghese, the acclaimed writer and physician, was born in Ethiopia to parents with Indian origins. He was raised as an orthodox Syrian Christian and trained as a doctor in Ethiopia, the United States, and India. After completing his medical education he sought residency in the United States and found himself treating African Americans affected by HIV-AIDS in rural Tennessee. Verghese’s own life and struggles not only represents the promises, possibilities and

1 The seminal study by Fitzhugh Mullan published in 2005 revealed that between 23 and 28% of physicians in the US, UK, Canada and Australia are international medical students, and that between 40% and 75% of them come from lower-income countries and practice in the less developed areas of those affluent countries. India is by far the primary provider; see “The Metrics of the Physician Brain Drain,” The New England Journal of Medicine 353
virtues of cosmopolitanism and ethnic mixture, but also the unfair conditions of a world in which many individuals must leave their countries in order to flourish. A poignant example of this reality comes from Verghese’s friend Vadivel, who received his medical training in India but subsequently left for the United States. The morning in which Vadivel attempted to get his visa, the U.S. Consulate office had already turned down six consecutive doctors. His words to the Consulate officer quoted above speak for themselves. Unsurprisingly, they triggered the officer’s admittance.

In light of these aspirations, it is understandable to feel sympathy for professionals such as Verghese and his classmate Vadivel. Taking a closer look at their lives awakens our inclination towards a more permeable world. A world in which one’s birthplace does not determine to such a significant degree the shape of one’s life opportunities. And yet, in the case of doctors, the fulfillment of what we take to be legitimate dreams comes at a huge social cost: the neglect of entire populations who, from one day to the other, are left medically orphaned. The lack of personnel capable of managing health care needs in the developing world has been labeled an “urgent crisis” by Dr. Lee Jong-wook, the Director-General of the World Health Organization, some years ago. The following selection of data will suffice to depict what still calls for an urgent solution.²

---
As of 2005, for a global population of 682 million people in sub-Saharan Africa, there were 600,000 health care workers, not even 1 per 1000 population. In one of the poorest countries of the world, Malawi, the situation has been even more acute: for a population of almost 13 million in 2005 there were 15 surgeons in the public health care system. Data from 2004 shows that almost 30% of the potential workforce of Ghana is now practicing in the USA. The most recent WHO data available (2008) indicates that the ratio of physicians per 1000 population in Mozambique is 0.03; whilst in Spain or Sweden it is above 3.

As a result of these numbers, there has been a significant debate over how to face the challenge of the so-called medical brain drain, and whether, under certain conditions, its effects might even be beneficial. But while a few scholars are adamant that skilled-based migration is morally unproblematic, many in the literature accept that the departure of doctors from countries in which human resources for health are scarce is troublesome, and that some compensation—either by the migrant or by the recipient country—is required. The reason seems

7 Richard Record and Abdou Mohiddin, for one, have insisted on the positive consequences, in terms of remittances, of such “exportation” of human capital; “An economic perspective on Malawi’s medical "brain drain,”” Globalization and Health (2006) 2:12. The phenomenon has been wittily referred to as “brain gain”. A summary of references pointing out the benefits of brain drain can be found in Kieran Oberman, “Can Brain Drain Justify Immigration Restrictions,” Ethics (2013) 123(3):427-455.
8 See, for example, article 5 of the WHO Global Code of Practice on the International Recruitment of Health Personnel, supra note 8. There have been other proposals to alleviate the effects of medical brain drain: task-shifting (see Mike Callaghan, Nathan Ford and Helen Schneider, “A systematic review of task-shifting for HIV treatment and care in Africa,” Human Resources for Health 8 (2010) pp. 1-9); the introduction of significant changes in the curriculum of medical students to make them more suited to tackle the health problems that are predominant in their communities and also less employable in the more developed countries (see Nir Eyal and Samia Hurst, “Scaling up changes in doctors’ education for rural retention: a comment on World Health Organization recommendations”, Bulletin of the World Health Organization (2011); and Nir Eyal and Samia Hurst, “Coercion in the Fight Against Medical Brain Drain”, The International Migration of Health Workers. Ethics, Rights and Justice, Rebecca S. Shah (ed), New York, Palgrave, 2010, pp. 137-158); taxing of migrant workers (Jagdish N. Baghwati and Martin
straightforward: medical education and training has an enormous social cost not fully internalized by the physician to be, which gives rise to a reasonable expectation on the part of members of society that graduates will reciprocate their assistance.\(^9\) One popular proposal in policy circles and academia expects health care professionals to reimburse the cost of their education before migrating.\(^10\) Fair enough, although more frequently than not, money or the transfer of technology by the destination country, as well as other ways of financially compensating the loss, misses the target of relieving suffer: it is the actual medical skills that are so badly needed. In light of this fact, we will argue that medical students, irrespective of whether they have received publicly or privately funded medical training, should be contractually obliged to temporarily stay in their country of residence if there is indeed a need for their services.

Before we go into more detail, let us briefly explain which sort of theoretical enterprise we are engaging in. While much discussion on the ethics of migration operates at a highly abstract and idealized level, we are here interested in prescribing action to agents in the real world. This means that our account is an exercise in non-ideal theory, and as such, we will defend moral principles that take motivational and institutional constraints into account.\(^11\) For instance, we will assume that agents are not likely to voluntarily take much cost in order to discharge their moral obligations, and we will assume that our global institutions are not sufficiently robust to realize justice at the global level. Instead of describing what justice

---

\(^9\) To be sure, the costs will vary across countries depending of the kind of institutional setting and broader socio-economic environment.


demands under ideal conditions, we will prescribe action that is feasible and likely to ameliorate the status quo.

To make better sense of the distinction between ideal and non-ideal worlds and the sort of theorizing that is behind our proposal, imagine a world where all states are sufficiently just, and where all persons can protect their most basic human rights. Imagine also that if given the chance, people would choose different destinations for their migratory projects, leading to well-dispersed migration flows and an even distribution of costs and benefits to all those affected by migration. In such a world, the problems associated with the brain drain would not even arise, and the international community would commit no grave injustice by facilitating the movement of health care workers, or by liberalizing migration more generally.

But as the data from the preceding discussion suggests, things look quite different in our real world of gross inequality and severe human rights violations. Under current conditions, the migration of doctors from the developing to the developed world not only contributes to harm by rendering vulnerable populations unable to access health care services, but it also lends support to a system where the global poor help to serve the health needs of the affluent. Indeed, the migration of doctors from South to North is problematic to even the most permissive account of global justice (one where rich countries must at the very least not engage in activity that is likely to contribute to harm abroad).\(^\text{12}\) The upshot of our discussion is that if the international community is serious about ensuring that vulnerable populations can access basic health care services, they will need to dismantle or significantly weaken the migration schemes that

\(^\text{12}\) See Thomas Pogge, *World Poverty and Human Rights: Cosmopolitan Responsibilities and Reforms*, 2nd ed. (Cambridge: Polity Press, 2008) and Dwyer, “What’s Wrong…”, pp. 39-40. In this discussion, we follow Pogge in assuming that the right to basic health care is a human right, and that global justice requires the protection of basic human rights at the global level. As far as what justice requires at the domestic level, we assume a “minimal” liberal conception of justice of the sort advocated by John Rawls in *Justice as fairness, in Justice as fairness a restatement* (Belknap, Cambridge, 2001).
currently encourage the movement of doctors from poor countries to affluent ones. In other words, they will need to recognize that, under current conditions of scarcity in global south, global justice may require exclusion rather than inclusion.

However, we also think that there are duties on the part of sender countries. In particular, those countries should not offer tertiary medical education as a “free lunch”. We know that in many countries and with respect to different domains of professional specialization, it is common practice for governments to ask for compensation in the form of services when the acquisition of skills has been made possible thanks to public efforts. For instance, in the United States, the National Health Service Corps, sponsored by the US Department of Health and Human Services, provides up to $60,000 of loan repayment for committing to serve for at least two years in certain underserved areas of the US. We think that schemes of this sort can provide governments around the world with a legitimate tool to minimize the negative effects of the brain drain.

And yet, there is an obvious problem with this strategy: it temporarily sacrifices the interests of graduates for the benefit of their fellow citizens. This is because doctors have a lot to gain from migration. They can expand their income, enjoy improved work conditions, and often provide their families with a more stable economic, social, and political environment. In the remainder of this essay, we will show that temporarily sacrificing those interests can be morally justified. We argue that there is a further reason, not yet voiced in the literature, for defending the contractual commitment to remain in the country of origin: there is something special about the sort of training doctors receive, which gives them an obligation of reciprocity to serve the health needs of their fellow citizens before moving abroad. What is special about medical students, we

---


contend, is that while receiving their training, they impose high risks, and sometimes even actual harms, on their patients.\textsuperscript{15}

The paper is structured as follows: In Part I, we focus on the justificatory argument for the most effective, albeit highly controversial, measure to redress medical brain drain: the contractual duty to stay. In Part II, we show that the duty to stay ought to be institutionalized in countries where there is an acute shortage of doctors, and that responsibility for enforcement must rest primarily with recipient states (that is, the country of destination). In Part III, we examine the claims of doctors who, due to persecution or certain kinds of social injustice, have a particularly strong moral claim to cross international borders. In Part IV, we deal with key objections to our account.

I. Reciprocity and the “Hidden Curriculum” of Doctors

The health care profession is special in many ways. It has of course the halo of its capacity to give us, whenever is possible, what we cherish: health and the (momentary) prevention of death. But too frequently we forget that in order to do so, physicians and trainees are socially and legally “licensed to sin”.\textsuperscript{16} Indeed, in many jurisdictions the Criminal Code establishes a justification for the harm inflicted by doctors when performing medical procedures that are, presumably in the best interests of the patient, but that would otherwise constitute a crime: such justification does not apply to any other individual who might have similarly acted upon the

\textsuperscript{15} James Dwyer, for one, has noted in passing that in addition to the immediate forms of public investment that one might think of, we should also take into account the following: patients to learn on, cadavers to dissect and teachers who were also trained with public funds; see “What’s Wrong with the Global Migration of Health Care Professionals”, Hastings Center Report, 37, nº5 (2007), p. 38. Our approach deepens Dwyer’s insight. We thank (removed for review) for calling our attention about Dwyer’s paper.

request or consent of the victim. Last, but not least, doctors are recipients of the most intimate information about ourselves.

So, in order to heal, trained health care professionals inflict pain on a daily basis (think about surgical procedures but also in vaccination, biopsies, colonoscopies, the eliciting of reflexes, and so on). In a previous stage, when medical students are in the process of becoming licensed practitioners, we contend that they inflict even more harm and subject the patients to even greater risks. There is no other way, and while closer supervision minimizes harm, it cannot fully prevent it given the fallibility of human communication and cooperation under highly stressful institutional settings. The Ethics Committee of the American College of Obstetricians and Gynecologists make the point clear:

If health care professionals are to benefit society, they must be well educated and experienced. The benefits to society of educating health care professionals provide the justification for exposure to patients to risks and inconveniences with education in clinical medicine. However, although these benefits generally accrue to society at large, the burdens fall primarily on individual patients, especially the economically disadvantaged or the very ill, who are more likely to receive their care at teaching hospitals.

---

17 See P Le Morvan and B Stock, “Medical Learning Curves and the Kantian Ideal,” *Journal of Medical Ethics* 31 (2005), p. 513. And sometimes abuses as when students are allowed to practice pelvic examinations on anesthetized women, a practice which has been the source of a vigorous discussion; see L. Lewis Wall and Douglas Brown “Ethical issues arising from the performance of pelvic examinations by medical students on anesthetized Patients”, *American Journal of Obstetrics and Gynecology* 190 (2004), pp. 319-323. We are aware that doctors are not the only professionals who, during their training, might have put at risk, and eventually harmed, patients, but, as opposed to those other professionals they do so in a degree that, in our opinion, makes their training singular. We thank (removed for review) for pressing us on this point.


There are not many empirical studies evincing a precise quantification of the higher risks and harms that we undergo when our health care is primarily in the hands of not yet fully qualified doctors, but there are some surveys, as well as some indirect evidence showing that, beyond our commonsensical intuitions, being treated by a medical trainee is suboptimal. It is worth quoting Atul Gawande’s recollections when he had to perform his first central line in his fourth week of surgical training:

There were “slight risks” involved, I said [to the patient], such as bleeding or lung collapse; in experienced hands, problems of this sort occur in fewer than one case in a hundred. But, of course, mine were not experienced hands. And the disasters I knew about weighed on my mind: the woman who had died from massive bleeding when a resident lacerated her vena cava; the man who had had to have his chest opened because a resident lost hold of the wire inside the line which then floated down to the patient’s heart; the man who had had a cardiac arrest when the procedure put him into ventricular fibrillation.²⁰

It is therefore unsurprising that in a landmark article by Sally A. Santen, et. al.,²¹ it was shown that when the medical procedures are not invasive, patients in general are willing to be the first patients of a medical trainee, although a vast majority of them think that they should be previously informed about that fact.²² But when the procedure implies major risks or inconveniences (intubation, lumbar puncture, suture of a surgical incision, for instance) things change significantly. Lowe et. al. have reported that between 25 and 40% of antenatal patients

---
²¹ Sally A Santen, Robin R Hemphill, Cindy M Spanier & Nicholas D Fletcher “Sorry, it’s my first time!’ Will patients consent to medical students learning procedures?,” Medical Education 39 (2005), pp. 365–369.
²² Both the American Medical Association, the British Medical Association and the Royal College of Obstetricians and Gynaecologists have stated that patients should be informed about the fact of one’s being treated or examined by a medical student. The reference comes from Sally A. Santen, et. Al., “Sorry, it’s my first time!’.”
are unwilling to have medical students involved in their intrapartum care.\textsuperscript{23} Another interesting study, reviewed 1452 malpractice claims involving medical trainees from 5 insurers between 1984 and 2004 and found that in one third of them the error resulted in significant physical injury.\textsuperscript{24}

Lastly, let us refer to a study that assessed mortality among almost 500,000 patients who underwent several cardiovascular procedures or cancer resections. By using the Medicare claims database, the researchers behind this study were able to show that the patients treated by experienced surgeons (surgeons who had performed the surgical procedure in a large number of occasion) had lower operative mortality rates than those treated by less experienced surgeons.\textsuperscript{25}

So what are we to make of these data? The fact that apprenticeship undoubtedly involves a greater degree of risk, and even very serious harms, means that once medical students complete their training, they have incurred a reciprocity-based obligation to give back to those who have incurred some risk (or suffered actual harm) as a result of their training. We contend that such reciprocity-based obligation on the part of graduates can give rise to a more specific duty to stay in their country of citizenship, at least for some years, before migrating.

The fact that reciprocity is often invoked in moral discourse does not imply that its scope, content and implications are unproblematic, however. As Lawrence Becker has claimed, reciprocity is a poor cousin in contemporary theories of justice and this has led to some common


\textsuperscript{24} Hardeep Singh, et al., “Medical Errors Involving Trainees.”. Similarly Michael Lowe et. al., “Do patients have an obligation to participate in student teaching?.”

misunderstanding and mischaracterization of what reciprocity entails.\textsuperscript{26} In a series of influential works, Becker has attempted to elucidate its conceptual core, has vindicated its importance as a more fine-tuned conception of the notion of “mutual advantage,” advocating reciprocity as one of the necessary social conditions for human flourishing.\textsuperscript{27} But, most important for our purposes, Becker has dissolved several oversimplifications about the requirements of reciprocity.

We are going to take advantage of Becker’s work in regards to this latter aspect, mainly because now that we have presented the grounds of the duty to stay, one could easily jump to the conclusion that there is no correlation between the fact that medical students impose higher risks, and occasionally harms to specific patients, and the way in which the compensation ought to be fleshed out in situations where there is a shortage of health care professional (expecting graduates to serve the health needs of their fellow citizens for some years before migrating). Firstly, it could be objected that the duty to stay would be valid only if the exact individuals who were exposed to increased risks or actual harm were also to benefit from health care provision in the future. Given that there is a partial mismatch between those who were treated by trainees and those who will receive health care by them in the future, there is no such a thing as duty of reciprocity at play. Secondly, it could be pointed out that remaining in one’s home country is a compensation neither equal in kind nor in value to the imposition of higher risk and actual harm. And last, it may be said that there is no actual reciprocity whenever we are compelling doctors to give back.

These are no doubt oversimplifications once we take into account that we are dealing with reciprocal behavior in socially complex settings. Reciprocation is not only conceivable as a

\textsuperscript{26} Lawrence Becker, “Reciprocity, Justice, and Disability,” \textit{Ethics} 116, (2005), p. 20.
\textsuperscript{27} Ibid., p. 31. In the same vein, David Schmidtz has claimed that: “[Reciprocity fosters] a form of justice that enables people to live together in mutually respectful peace”; \textit{Elements of justice} (Cambridge University Press, Cambridge-NY, 2006), p. 79.
one-to-one exchange but also as indirect or many-to-many. Most importantly, reciprocity is not necessarily tit-for-tat conduct, so it could perfectly be said that when unable to reciprocate on equal terms, one may reciprocate with a good that has “less” value.\textsuperscript{28} For instance, we reciprocate your feedback on this paper by sending you a copy of a poem we really like. As to the voluntary aspect of reciprocity, it seems we are perfectly comfortable with the idea of there being reciprocal relations that are not fully voluntary, as is the case of filial relationships.\textsuperscript{29}

A suitable conception of reciprocity, therefore, draws on the idea of proportionality in our returning for what is given. And here, again, Becker’s approach is instructive for our enterprise: “… the fitting return to the wrongdoer is therefore not “bad for bad received” but rather “corrective good for bad received”, where the correction turns the wrongdoer into a productive partner in reciprocal arrangements for mutual advantage – or failing that, simply prevents further harm.”\textsuperscript{30} With the qualification that medical trainees are neither intentional nor negligent wrongdoers, this is exactly what we are defending as the rationale for the duty to stay. When there is a shortage of health care professionals, doctors should compensate for what they have received (which is not only something of monetary value, but most importantly, a population on which to train) with the aim of maintaining an environment where citizens can protect their human right to basic health care. This is the kind of reciprocity that David Schmidtz categorizes as “transitive”, and, again, the idea is not to give back to the benefactor in perfect exchange, but to “do justice” to the received benefit (as when professors evoke the responsibility to nurture their own student in a way that does justice to how they themselves were nurtured in the past).\textsuperscript{31} In a similar fashion, doctors, who refine their skills treating their fellow citizens, should

\textsuperscript{28} Ibid., p. 33.
\textsuperscript{29} Ibid., pp. 20-22.
\textsuperscript{30} Ibid., p. 25.
\textsuperscript{31} Schmidtz, \textit{Elements of justice}, p. 83.
reciprocate by means of working for their benefit for a certain period of time before migrating (they should, as it were, keep nourishing the web of reciprocal exchanges that makes it possible for the sick to protect their human right to basic health care).

To be sure, we already accept this sort of “complex” or “transitive” reciprocity when it comes to public health as well as other public services. Those who pay taxes are not necessarily those who will make use of the public health care system, or public schools. And this seems to be justified on the basis that we all benefit from being part of a society where persons can protect their human right to health care and education. Moreover, the benefits we all acquire in part of such society do not lose their value by virtue of the fact that only some of us are in position to bear the relevant costs (through, say, taxation). The same applies to the training of doctors. We all benefit from residing in a state where citizens can visit a doctor if they so need, even though only some of us will actually be exposed to the risks associated with their training. The fact that some of us might not actually need health care in the future does not cancel the moral obligation to support the educational system that makes the acquisition of medical skills possible.

A well-fitting example of this sort of reciprocity and compensation framework can be found in the closely related area of research on human subjects. In principle 17 of the Helsinki Declaration it is stated that: “Medical research involving a disadvantaged or vulnerable population or community is only justified if the research is responsive to the health needs and priorities of this population or community and if there is a reasonable likelihood that this population or community stands to benefit from the results of the research.”

Medical training imposes costs as bio-medical research does, and so, if we care about the latter, we must also care about the former. Also, it seems that even when the population is not

---

vulnerable, they must benefit from the research or training. This is because the population is *rendered* vulnerable as a result of their participation. We therefore propose an amendment to principle 17: *medical research and training involving a population or community is only justified if the research or training is responsive to the health needs and priorities of this population or community and if there is a reasonable likelihood that this population or community stands to benefit from the results of the training and the research.* This modified principle justifies a duty on the part of physicians to serve the health needs of their fellow citizens, at least for some years after graduation.

Now, it could be claimed that even though the medical trainee is exposing patients to higher risks, inconveniences or even harms, his aim is primarily to meet their health needs. In that sense, by healing them, albeit with greater exposure to harm, he has already paid his dues. In Kantian terms, medical students and residents are not using patients *merely* as means, they are also saving lives. To see how this may affect the normative situation, suppose that you have suffered a cardiac arrest in the street and that the only person who can rush you to the hospital happens to lack a driving license. While this unlicensed driver will undoubtedly expose you to higher risk than a licensed driver would, it seems strange to say that she owes you any kind of compensation. Indeed, most people would undoubtedly agree that by saving your life, she can call it quits.

We agree that matters of life and death make the imposition of risk less troublesome. But a better analogy would involve someone who is taking driving lessons but gives you a lift to your medical appointment in order to learn how to deal with stressful driving situations. In that case, the student does owe you compensation because a better alternative was available, namely the

---

34 The example comes from (removed for review), to whom we thank for pressing us to address this issue.
driving instructor. The same is true of adequately functioning health care systems. In countries where an alternative to the procedure or treatment provided by the trainee exists, there is a sense in which the medical team does treat patients as means. And this is taken to be justified “not for the benefit of the patient, but for the benefit of the resident’s future patients.”

But is this scenario accurate in places where most competent doctors have moved abroad? In extremely poor countries, it is less likely that trainees can count on supervisors because these supervisors are too busy attending others in need. In this sort of educational environment, where students end up doing the job of doctors due to a lack of qualified professionals, there is a stronger sense in which they have already given back to the community (like the non-licensed driver who saves your life). This would be true of trainees in countries where the ratio of qualified doctors per population is extremely low. Does it then follow that trainees in these countries have no moral obligations to their fellow countryman once they complete their studies? We think not. We believe that in cases of this sort, graduates still have a duty not to immigrate for some time so that the next generation of students is less likely than they were to be left to their own devices, and so that their fellow citizens have their right to health care better protected. This means that the duty to stay can, in extreme cases, be grounded, by a less stringent moral responsibility to assist when one can do so at low cost to oneself (this, of course, means that governments cannot impose contractual obligations that are too long). The upshot of accepting both reciprocity and beneficence as grounds for a duty to stay on the part of doctors is that no prospective medical student is morally immune from temporary contractual obligations. Those who are trained in decent medical settings acquire a more stringent duty of reciprocity aimed at compensating their fellow citizens from taking higher risks and sometimes actual harm as a result of their training. Those who are trained in wholly inadequate medical

---

settings (and as a result, treat patients who would otherwise be left untreated) still acquire a less stringent duty of beneficence to serve the needs of vulnerable populations.

II. The Legal Duty to Stay

Our proposal aligns with the contractual commitment by prospective students to serve needy populations in order to gain access to medical schools, an initiative recently defended by Nir Eyal and Till Bärnighausen, and already implemented in many parts of the world. But unlike these authors, our primary motivation here is not to defend long-term contractual obligations (i.e., 20 years), nor to defend it against the objection that they constitute a modern kind of slavery. Rather we have sought to provide the moral foundations for the imposition of short-term contracts on prospective medical students, which provide their future selves with a justification for serving their fellow citizens before moving abroad (indeed, absent a compelling moral justification on the part of the state, medical students could rightly accuse society of treating them unfairly insofar as prospective students outside medicine are not typically expected to sign similar contracts in order to gain access to tertiary education). Moreover, because our account does not appeal to the financial costs of medical education, governments are justified in requiring private medical schools to offer similar contracts to their own applicants.

But for how long should “re-payment” take place? Although we leave it to individual countries to decide the exact duration of these placements, we recommend that they be effective and reasonable (no longer than four years when grounded on reciprocity and no longer than one years when grounded on assistance) so as not to significantly compromise the life plans of these

---

Here we are in partial agreement with Kieran Oberman, who has insisted that doctors are, above all: “human beings who have their own goals and their own lives to lead”\(^\text{38}\). At the same time, we believe that doctors are also moral agents who have moral responsibilities to their fellow citizens, and that these responsibilities must be discharged before they move abroad in search of their personal goals and aspirations.

But would these shorter placements be enough to meet the health needs of vulnerable populations? Indeed, in places where the ratio of worker per population is so low it certainly seems as if we would need doctors to stay much longer (perhaps their whole lives) in order to fully secure the human right to health care of vulnerable populations. But while it is true that the duty to stay cannot fully mitigate the harms associated with the brain drain in some parts of the world, it is important to recognize that even a few years can significantly increase the provision of health care services where the ratio of doctors per population is considerably low.\(^\text{39}\) It is also important to make a distinction between what persons are owed from the point of view of morality and what morality can reasonably demand from individual moral agents. Given that it would be too demanding to expect any individual worker to permanently sacrifice their life plans in order to meet the health needs of others, we can grant that they only have a duty to stay temporarily even though their temporary stay cannot fully meet the health needs of their fellow citizens.\(^\text{40}\) Surely, making things better is preferable over doing nothing.

\(^{37}\) While we assume that the exact content of the duty should be made precise by individual states, we have sought to provide some guidance to states by appealing to the intuitive notion that long-term stay (more than 4 years) would be too costly. Having said that, states should be allowed to take morally relevant considerations into account when deciding exactly how many years graduates should serve their fellow citizens before migrating. States may wish to impose shorter stays for those who did not acquire a specialization, for instance. We thank two anonymous reviewers for pressing us to address this point.

\(^{38}\) Oberman, supra note 7.


\(^{40}\) One aspect of our approach that should also be tackled, albeit briefly, is whether it might be possible for the students to “buyout” their duty to stay, that is, paying a fee or compensation and be discharged from their
Having argued that doctors should stay in their country of origin for some years after graduation, we must now specify the agent that is responsible for enforcing this moral duty. While the literature always assumes that it is the country of origin that has a responsibility to prevent their citizens from leaving (or to fine them if they choose to leave), here we want to suggest that the primarily responsibility actually lies with the country of destination. One reason for this shift is that we must be very careful not to violate the right of citizens to exit their own state of citizenship, a right that gives them an important layer of protection against persecutory state. Another reason is that it best respects their right to freedom of occupation, since at no stage are states given the moral power to coerce their own citizens into employing their skills. Because we want workers to discharge their duty to stay without being subjected to morally problematic coercion (either by being forced to employ their skills against their will or by being prevented from exiting if persecuted), the best enforcement mechanism would have recipient states refusing working visas to doctors who have not yet met their contractual obligations. By shifting the moral burden onto recipient states, we can ensure that prospective immigrants will have a strong incentive to provide health care services to their fellow citizens for some years, without being vulnerable to having their right to exit or freedom of occupation contractual duty. Although in some jurisdictions specific performance as a remedy for contractual breach is seen suspiciously for its presumed liberty-infringing character and Courts grant it with utmost caution, we think that, according to their own specificities in the realm of health care provision and their particular needs, states might legitimately curtail the “buying out” option. As we said at the beginning, monetary compensation might miss the target of relieving suffer. As a matter of fact, even in those countries in which specific performance is not commonly granted there is room for it when “unique goods” are at stake. We consider that a state might consider that providing health care to underserved populations is a “unique service” For more on this discussion that, for our purposes, we can set aside, see the landmark articles by Alan Schwartz, “The Case for Specific Performance”, The Yale Law Journal, Vol. 89, 1979, pp. 271-306, p. 274 and Anthony Kronman, “Paternalism and the Law of Contracts,” The Yale Law Journal, Vol. 92, 5, April 1983, pp. 763-798, p. 775.

Article 13.2. of the Universal Declaration of Human Rights states that: “Everyone has the right to leave any country, including his own, and to return to his country”.

It could be argued that the doctor who, after graduating from medical school, chooses not to employ the acquired skills defaults on his moral obligation in the same way as the doctor who chooses to migrate. We think, however, that whereas the negative freedom of occupation is a basic moral right, freedom of movement at the international level is not.
violated. This also provides recipient states with a way of addressing the negative effects of the brain drain without having to permanently close their borders to these workers.

III. One Exception: the Right to Migrate in Special Cases.

At this stage the reader might be wondering if we have not painted too rosy a picture of the lives of doctors in the developing world. After all, may doctors want to leave not in order to expand their income, but because they are oppressed or persecuted by their state of citizenship. And if that is true, it seems grossly unfair to sacrifice the basic interests of these workers in order to protect the right to basic health care of vulnerable population (it seems analogous to saying that a battered woman must first raise her children and then seek to protect her right to bodily integrity by leaving an abusive relationship). It is certainly true that so far our discussion has focused on doctors who do not have a moral claim to immigrate. This is because we have intentionally assumed that their desire to move abroad is not tied to the protection of their basic human rights. That is, we have assumed that they can lead minimally decent lives in their country of origin, but that migration provides them with a bundle of opportunities that could potentially make their lives go better. However, we know that this picture is not always accurate. We know that many doctors are unable to lead minimally decent lives in their countries of citizenship, either because

---

44 But expecting recipient states to refuse visas to those workers who have not yet discharged their duty to stay, doesn’t in effect deny the right of these workers to exit? An objection along these lines was raised by Joseph Carens in “Migration and morality: A liberal egalitarian perspective,” in Free movement. Ethical issues in the transnational migration of people and of money, Brian Barry y Robert E. Goodin (eds.), Harvester Wheatsheaf, New York, 1992, pp. 25-42 and resembles Hume’s famous example in “Of the Original Contract” (1752) where he compares the tacit consent of citizens to their Government with the situation of a hostage in a boat in the middle of the sea (we owe – removed for review - for having reminded us of this classical image). The force of this objection rests on a misunderstanding of what the human right to exit stands for. If we think that a right to exit entails a right to enter, then we cannot affirm the former without also affirming the latter. But there is a more nuanced way of understanding the right to exit, namely, as a right not to be coerced by one state’s of citizenship when moving across international borders. That is, a right not be treated as a property of one’s government. And if we understand the right to exit in this way, we can grant its importance without also defending the idea that there is a corresponding human right to enter.
they are politically persecuted, or because their state is unwilling to protect other of their basic human rights.\textsuperscript{45} But granting this empirical fact does not undermine our account because we accept that the duty to stay is not absolute and that it can be overridden when more pressing moral considerations are in play. Surely protecting a person’s most basic interests comes before demanding that they discharge their moral responsibilities (even if stringent).

It is important to emphasize here that not only politically persecuted doctors have a moral claim to immigrate. Another group of doctors who should be allowed to immigrate irrespective of whether they have already met their contractual obligations, is what we will refer to as medical conscientious refugees. Medical conscientious refugees, we contend, are doctors who should qualify for asylum in virtue of their inability to exercise their skills without compromising their moral values. Indeed, when doctors are asked to carry out procedures that offend against their deepest moral commitments—think for example in the legal obligation to participate in executions—but also when they are legally compelled to refrain from doing what they consider morally and clinically best—think of the need to perform abortions when terrible anomalies have been diagnosed—their basic interest in living in accordance with their moral values and their basic interest in employing their professional skills become jointly unattainable. The result is that these doctors must either sacrifice some of their moral values or their strong interest in employing the medical skills they have acquired after many years of training. In either case, the government fails to uphold state neutrality (the ideal that no conception of the good should be privileged in the political domain), rendering recipient states with a duty to assist the doctors in “escaping” their situation.

\textsuperscript{45} The case of Shia Doctors in Bahrein has recently called the attention of the international community; see Sharmila Devi, “Bahrein continues to target Shia Doctors,” \textit{The Lancet} 380 (2012), p. 1296.
One way of resisting the concept of medical conscientious refugees would be to argue that doctors don’t have a moral claim to employ their skills, and that if they cannot work as doctors in a way that is in line with their deep moral commitments, they must change professions and get on with their lives. The problem with this response is that the same rationale could be used to deny refugee status for other kinds of refugees, leading to the counter-intuitive implication that only when the state persecute on ascriptive features (i.e., race, gender and ethnicity), the persecuted is deserving of protection. Yet, we typically think that political refugees deserve protection even though they have chosen to engage in politics. We also think that homosexuals deserve protection even when they have chosen to live openly. And the reason we think that political activists and homosexuals (in places like Iran) count as refugees is because we think that the choices they have made are not only morally unproblematic ones, but deeply constitutive of their identity. In any decent society, the state lacks the legitimacy to deny their citizens the right to live in line with their deepest moral commitments. And when states deviate from the ideal of state neutrality in a harmful fashion, other states acquire a positive duty to assist through the provision of refugee status (or through other kinds of assistance that are legitimate and likely to be as effective as the provision of asylum). We contend that this duty to assist the persecuted will, at times, trump the moral requirement on the part of recipient states not to open their borders to doctors who have not yet met their contractual obligations at home.

IV. Objections

In introducing our discussion, we mentioned in passing that not everyone is convinced of the negative effects of the medical brain drain. Fernando R. Tesón, for instance, has argued that the
critics of the brain drain assume that skilled individuals are a mere resource of the state, which “unduly personifies the state as the owner of human capital, just as an investor own his money, and therefore fails to treat persons as autonomous agents.” Is he correct in his critique?

We certainly agree with Tesón that doctors are autonomous agents who have their own lives to lead. But respect for their agency is only one relevant moral consideration here, another being that morality too has its own demands to make. And when doctors impose risks on their fellow citizens in order to later on pursue their autonomous life plans, they are required by morality to assist those rendered vulnerable as a result. In other words, doctors have their own good to pursue, be it in their own country or elsewhere, but they also have either a moral responsibility to reciprocate the benefits (i.e., skills) that made the pursuit of their good possible, or a less stringent moral responsibility to take some personal costs in order to assist the vulnerable patients around them.

Another objection against the prima facie duty to stay, or against any proposal that aims at curbing the brain drain, contends that the departure of skilled workers leads to brain gain because the foreseeability of working and living in the “First World” functions as a carrot for prospect students. The empirical assumption here is that even though some workers do leave, many only acquire the skills because previously they had the intention of leaving. Wouldn’t it be...
best, so this line goes, to keep the incentives as they are and just hope that many of those who pursue tertiary education in order to move abroad will eventually change their minds and stay?

There is reason to be skeptical of the empirical claims underlying this sort of objection. It is true that in places like the Philippines many students do acquire tertiary education in order to move abroad. But it is equally true that in many parts of the world, students acquire skills because they want to earn an income in their own countries and because they are genuinely interested in the area of expertise that they have chosen. Indeed, many students in poor countries have a passion for knowledge and self-development that is independent from whether it also leads to migration.⁵⁰

Moreover, it is important to note here that there is never certainty around migration and for every additional year a person studies in order to immigrate, she potentially gives up on work opportunities in areas where employment is more certain. If immigration is a key motivation for this person’s life choices, then there will be times when unskilled migration will be preferable, since this type of international movement does not require many years of investment in education, and the financial returns can also be significant.

At any rate, it might be worth conceding this point and seeing whether it offers recipient states a reason to refuse to enforce the duty to stay. Assuming, then, that the possibility of immigration is the greatest incentive for students to acquire education in the first place, does it follow that recipient countries should continue to include doctors as they see fit? Or worse, does it follow that there is actually a duty to include so as to create further incentives for medical training? As we see it, this fact still does not give recipient states a reason to adopt immigration as an incentive for education. At best, migration is only one among many potential incentives for

---

⁵⁰ Several surveys show that prospect medical students both in Africa and the USA have altruistic motivations in pursuing a medical career. For references, see Eyal and Bärnighausen, “Precommitting to Serve the Underserved,” *American Journal of Bioethics* 12 (2012), p. 28.
citizens to take up professional skills, including incentives that not only ensure that they study but that they also participate in the local workforce. Adequate working conditions and fair pay are obvious examples, but other incentives should also come into play (extended holidays, more work flexibility, comprehensive social benefits and so on). Given that migration is not the only social phenomena that create incentives for tertiary education, states must implement incentives that not only lead to the acquisition of skills, but to their subsequent employment as well.

A final objection to our discussion challenges the very idea that the role of recipient states matters morally. For the critic who raises that objection, migration does not play any independent contributory role in depleting health care personnel in developing countries. The idea here is that if states dealt with the “root causes” of migration (low wage, bad work conditions, limited resources and so on), these skilled immigrants would not want to emigrate in the first place. In other words, providing workers with the minimum work conditions in sender states is not only necessary but also sufficient to avoid the sorts of severe deprivations we are concerned with in this essay.

Empirically we know that this is not the case. Many New Zealanders, for instance, migrate to Australia in search of greater incomes and better work opportunities even though they live in a developed country where they can access reasonable work conditions and fair pay.51 This is because migration is often a mix of pull and push factors, and even when we get rid of the push factors, the fact that some economies will do better than others will always create incentives for persons to try their luck elsewhere. A case in point is that of a physician from Côte d’Ivoire, who “can raise his real earnings by more than six times by working in France.”52 Côte d’Ivoire can still do a lot to make the local environment more attractive to this worker, but unless it

becomes as developed and as wealthy as France, it will still be the case that physicians can earn more by moving to France than by staying home.

Having said that, recipient states are certainly off the “enforcement” hook when sender states have not taken the necessary steps to ensure that workers are paid fairly and work conditions are appropriate. For instance, if physicians from Côte d’Ivoire will not only earn six times more than they currently do, but will for the first time earn a fair wage and receive basic work entitlements, then they should not be prevented from migrating. The rationale here is simply that it would be unreasonable to expect these workers to actually work as physicians in Côte d’Ivoire given that they may be better off doing something else. Although they have a duty to stay, they also have a right to freedom of occupation and decent working conditions. Under conditions of gross exploitation, doctors are likely to do something else with their lives, which in turn, means that recipient states are not morally required to temporarily close their borders to these workers.

**Conclusion**

While the philosophical literature on the brain drain has wrongly focused on financial contribution as grounds for a duty of reciprocity on the part of doctors in the developing world, we have argued that it is actually the imposition of high health risks and actual harm during medical training that gives rise to a stringent duty of reciprocity on their part (which can have as content the requirement that doctors stay in their country of citizenship for up to four years before migrating). We have also defended the view that when the duty of reciprocity has already been discharged during medical training, graduates will still be left with a less stringent duty of
assistance, given their capacity to assist at low costs to themselves (which can have as content the requirement that doctors stay in their country of citizenship for up to one years before migrating). After providing the moral foundations for requiring that doctors stay at home for some years after graduation, we have argued that the duty to stay should be designed by sender states (according to their needs and priorities and in the form of a contract prior to medical education) but enforced by recipient states, who have a moral obligation not to open their borders to those who have not yet met their contractual obligations. Finally we have granted that the duty to stay is always a prima facie one, and that at times, doctors should be allowed to default on their contractual obligations if migration has ceased to be linked with the enjoyment of greater socio-economic opportunities abroad and has become essential for the protection of their basic human rights.