Physicians' duty to climate protection as an expression of their professional identity: a defence from Korsgaard's neo-Kantian moral framework

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ABSTRACT

The medical profession is observing a rising number of calls to action considering the threat that climate change poses to global human health. Theory-led bioethical analyses of the scope and weight of physicians' normative duty towards climate protection and its conflict with individual patient care are currently scarce. This article offers an analysis of the normative issues at stake by using Korsgaard's neo-Kantian moral account of practical identities. We begin by showing the case of physicians' duty to climate protection, before we succinctly introduce Korsgaard's account. We subsequently show how the duty to climate protection can follow from physicians' identity of being a healthcare professional. We structure conflicts between individual patient care and climate protection, and show how a transformation in physicians' professional ethos is possible and what mechanisms could be used for doing so. An important limit of our analysis is that we mainly address the level of individual physicians and their practical identities, leaving out important measures to respond to climate change at the mesolevels and macrolevels of healthcare institutions and systems, respectively.

CLIMATE CHANGE AND HUMAN HEALTH

Climate change has been recognised as the most important threat to human health and become a dominant topic of global politics in the last decade, especially since the 2009 landmark report by *The Lancet* and University College London Institute for Global Health Commission. Depending on the worldwide adherence to Nationally Determined Contributions the earth's surface temperature will likely break the threshold of 2.0°C above preindustrial levels (period from 1850 to 1900) during this century.[1] The UN Paris Agreement of December 2015 documents the aim of pursuing efforts to limit global warming to 1.5°C. At first glance, this reduction might appear to be a modest goal, given the fact that we have already reached a global warming of approximately 1.0°C by today with a strong temperature increase since the 1970s. The perception of 1.5°C as a minor change, however, is misleading because it ignores the fact of 'global warming' being a construct because the global distribution of the pace and extent of temperature changes at concrete regions is uneven and it is most likely that 'highly unusual and even unprecedented temperatures may occur even in a 1.5°C climate.'[2] Deleterious effects can be anticipated worldwide, but their consequences on human, animal and ecological welfare depend highly on both the extent of being affected and national and regional mitigation potentials.

Against this background, intensive debates on climate change as a major health threat have developed. Healthcare scientists agree that if the global warming continues as predicted, enormous increases in morbidity and mortality must be expected. Concrete health risks emerging from climate change relate to diverse mechanisms, such as:[3]

- Direct effects of extreme weather events (eg, heat-related illness and death, injuries, drowning).
- Low air quality (leading to the exacerbation of pre-existing diseases, increase of allergies and cardiovascular disease).
- Health effects of disturbances in the food supply and food quality.
- Changes in the vector distribution of infective (especially insectborne) diseases (eg, Malaria, West Nile virus disease, Zika virus disease).
- Health effects caused by social and political factors (eg, migration and armed conflicts).

Next to such direct and indirect effects of global warming fossil fuel consumption as such comes along with health effects. Exposure to air pollution, for example, increases the risk of cardiovascular and respiratory disease, lung cancer, diabetes, and other conditions. Ambient air pollution significantly contributes to worldwide mortality. For 2020, 1.2 million deaths were estimated to be directly related to the combustion of fossil fuels.[4]

Climate change will not only increase the worldwide disease burden but also multiply global inequity as it primarily affects low-industrialised regions that contribute only relatively small proportions to greenhouse gases pollution. African countries, for example, are among those that emit the lowest amount of carbon dioxide per capita. However, Africa remains the most vulnerable continent regarding deleterious effects of climate change on the agricultural sector, which is of the highest importance for many African economies and the immediate health of the population.[5] In addition, the magnitude of health risks to different populations also depends significantly on the health status of the population and the performance of the healthcare systems, leading to highly uneven potentials of dealing adequately with emergent healthcare risks. Climate change, therefore, must be seen as an important environmental justice issue.[6]

The intricate relationship between climate change and human health cannot be fully appreciated without considering the 'other direction'—so,

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the effects that healthcare systems themselves have on global warming. Healthcare counts as one of the largest economic sectors, is a big employer, and has a considerable 'environmental footprint' in most countries. According to the Lancet Countdown on health and climate change the healthcare sector contributes about 5.2% to the global greenhouse gas emissions.[4] In the USA, as a highly industrialised country, healthcare is responsible for approximately 8.5% of national carbon emissions.[7] The latter stem directly from not only the operation of healthcare facilities, but also from healthcare supply chains (eg, production, heating, cooling) and the transportation of people and goods to or between healthcare services. Repeated initiatives towards 'decarbonising the healthcare sector' (eg, in the USA and the UK) highlight the need to not only address immediate healthcare delivery and supply chains but also target professional education, policy, financing, and metrics.[7] The 'green hospital' has become a catchphrase referring to attempts of decarbonisation at the institutional level, for example, addressing waste management[8] and the sustainable design of buildings. Initiatives such as 'Healthcare Without Harm' build international networks to promote environmental health and social justice. There have also been attempts to account for the climate impact in research and development, for example, by incorporating carbon emissions in health technology assessments[9] or including sustainability aspects in research ethics evaluations.[10]

On a conceptual level, proponents of 'Planetary Health' promote the ideal of 'a planet that nourishes and sustains the diversity of life with which we coexist and on which we depend.'[11] The Planetary Health movement unifies ideas of social justice and fairness, health, and well-being with a critique against overconsumption and unjust economic systems. Action against climate change is, thus, integrated in the general plea for a sustainable transformation of the healthcare system. Planetary Health aims to transcend a conventional Public Health perspective in addressing all levels of society including the global perspective.[11 12] In addition, Planetary Health—similar to other climate ethics initiatives—has a strong forward-looking character as it 'seeks to safeguard the health of present and future generations and promote intergenerational and intragenerational equity and justice.'[13] Clinicians are seen as the main addressees for promoting Planetary Health interests in concrete practice especially because they belong to one of the most trusted groups in society.[13]

CLIMATE CHANGE AS A MATTER OF PHYSICIANS' PROFESSIONAL ETHICS

Against both backgrounds—the health risks emerging from climate change and healthcare systems being major drivers of global warming—medical professionals and institutions cannot escape from responding to the debate on climate change.[14] They are advocates for individual and public health and, simultaneously, part of a carbon-emitting healthcare industry. Consequently, they must be seen among the key players in societal debates and concrete action on climate change. On the practical level, physician initiatives responding to climate change are already established in many countries and on an international basis.[15] Such advocacy movements often have a 'grass roots' character and document the high involvement and concern of (parts of) the physician community who exhibit a strong engagement with climate change as a major health threat and measures for its mitigation.

It can also be observed that climate-related professional duties are increasingly becoming a topic in documents on medical professionalism. Whereas older conceptualisations of physicians' professional identity (eg, the CanMed roles[16]) remain silent on ecological and sustainability issues, physicians' responsibility in climate change is mirrored by more recent codes. The last revision of the World Medical Association's International Code of Medical Ethics, for example, now includes the statement that '[t]he physician should strive to practise medicine in ways that are environmentally sustainable with a view to minimising environmental health risks to current and future generations.'[17] The (Model) Professional Code for Physicians in Germany in its most recent version holds that, next to other tasks, physicians have to 'participate in the preservation of the natural foundations of life with regard for their importance for human health.'[18] Other documents, such as the American Medical Association (AMA) Code of Medical Ethics contains opinions that, at least, can be related to physicians' role in climate change.[19] The AMA Code, for example, states that physicians need to consider the health of the community.[20] Other established documents of professional ethics, such as the Declaration of Geneva, have been criticised for not addressing climate change and sustainability so far. There has even been the—controversial[21]—attempt to complement the Declaration of Geneva with a pledge dedicated to physicians' duties from a Planetary Health perspective.[13] Sensitivity towards climate responsibility is, by far, not limited to the medical profession. Just to mention one example, the International Council of Nurses Code of Ethics for Nurses includes in its newest version dating from 2021 the provisions that nurses 'are aware of the health consequences of environmental degradation, e.g. climate change' and that they 'advocate for initiatives that reduce environmentally harmful practices to promote health and well-being.'[22]

Healthcare professionals' engagement in climate protection is, prima facie, highly plausible against the background of their role as advocates of human health and main stakeholders in the healthcare system that is a major emitter of greenhouse gases. It also stands in a long tradition of physicians being committed to the public good—be it Virchow's 19th century Social Hygiene Movement or the more recent International Physicians for the Prevention of Nuclear War who stand for social responsibility. On a more theoretical level, however, the ethical basis for the claim of healthcare professionals having a special responsibility in climate change is far from being obvious. A more thorough understanding of the nature and scope of physicians' climate-related obligations, therefore, stands in a long tradition but is insofar controversial as climate protection can conflict with other ethical duties, such as the optimal care for individual patients or the aim of maintaining patient trust.[23] Decision situations in which potential conflict can arise are the choice for certain the use of certain anaesthetic gases, the transportation between hospitals, or the use of disposable gowns and gloves as they all (in)directly impact on patients' health. In other words, operational decisions about the care for patients must be balanced against carbon mitigation and the effects on the health of patients. On the other hand, recent literature increasingly highlights how issues of climate protection are integrated in patient–physician communication, for example, to arrive at a 'Green Informed Consent' which is in line with the patient's preferences and values.[24] Philosophical theories of climate ethics[25 26] may serve as starting points for an analysis for ethical duties of preserving the world wide ecosystem, but do not fully account for the specific social and ethical role of physicians as highly trusted professionals.

This article provides a first basis for a theory-led ethical analysis of the character and scope of physicians' professional

ethical duties in light of climate change. We introduce Christine M. Korsgaard's moral theory of practical identities and use a distinct neo-Kantian framework for understanding the synergies and conflicts between obligations towards patients and environmental perspectives. We analyse how the individual physician may experience such conflicts and how the tension between environmental duties and individual patient welfare manifests within the identity of being a physician. Lastly, we show how the medical profession can deal with the growing evidence on climate change and its effects on population and individual health by making use of the mechanism to change the dominant understanding of the identity of being a physician. Our focus on physicians' opportunities and competencies in climate protection is not meant as a depreciation of (a) the patient's role in clinical decision-making or (b) the role of other healthcare professionals (eg, medical assistants) for an ecologically friendly healthcare practice. We explicitly embrace attempts to analyse concepts such as the 'Green Informed Consent' or programmes enabling all healthcare professionals to make ecologically informed decisions. Due to the specific character of our background theory, however, we see the need to restricting our analysis to one healthcare profession. As argued elsewhere[27] we feel that Korsgaard's theory is well suited for understanding the character of professional ethics in a distinct way, namely as a normative self-commitment which is closely tied to the physician as a person with multiples practical identities. We argue there that Korsgaard's view, based on multiplicity of our practical identities, has strong explanatory power at 'the margins of professionalism' where professional duties coincide with duties from other life domains. As the duty to climate protection also reaches beyond the domain of professionalism, it is interesting to analyse this case through Korsgaard's theory, or so we hold. If other ethical theories were applied to the topic of physicians' obligations in the climate crisis (utilitarian accounts, for example) the results of the analysis might have had an emphasis deviating from ours. The impact of our theoretical background therefore needs to be acknowledged as a limitation of this work.

KORSGAARD'S THEORY OF PRACTICAL IDENTITIES VIS-À-VIS PHYSICIANS' CLIMATE-RELATED OBLIGATIONS

Normative affordances (ie, moral demands) that arise from within a situation, such as the obligation for a physician to take care of the help-seeking patient in front of them, can productively be understood through the lens of Korsgaard's moral theory on practical identities.[27] According to Korsgaard, our practical identities ground our reasons for action, as they provide 'a description under which one values oneself, a description under which one believes one's life to be worth living and one's actions to be worthwhile.'[28] In other words, our practical identities, as the expression of what we value in our lives and what we value, ground our choices and actions. This capacity to act and choose based on a conception of ourselves is nothing else than our capacity for autonomous action. As Korsgaard formulates, '[a]utonomy is commanding yourself to do what you think it would be a good idea to do, but that in turn depends on who you think you are.'[28] So, regarding Korsgaard's theory, if physicians encounter the normative affordance of taking care of the patient immediately in front of them to the best possible extent, they need to weight this affordance as a reason to act on in light of the understanding of their practical identity of being a physician.

Yet, it can occur that multiple affordances that arise from the same situation are in tension with each other. This can happen as our practical identities are pluralistic, in the sense that we have more than one concrete practical identity. You may, for example, place value in that 'you are a human being, a woman or a man, a member of a certain profession, someone's lover or friend, a citizen or an officer of the court, a feminist or an environmentalist, or whatever.'[28] Thus, a person may understand themselves as both physician and environmentalist. In this case, the physician may experience a conflict: they may find the affordance to act in the patient's best interest a good reason to act from their identity as a physician and the affordance to act according to a duty to climate protection to protect the health of future generations from their identity as an environmentalist. In this case, Korsgaard's theory offers us a perspective to understand this tension. First, it explains that the tension between the affordances only becomes a practical conflict if both affordances provide the person with good reasons to act on. Thus, if the physician understands their identity as a commitment to give each individual patient in front of them the best possible care, it is clear that the normative affordance of climate protection does not provide a good reason to act on; at least, from the perspective of their identity as a physician. Yet, as environmentalist, they do experience the affordance of climate protection as a good reason. Thus constituting a practical conflict, as both provide the physician with reasons that favour conflicting actions.

However, this depiction of the physician's situation would be too simplistic. As shown in the introduction, the dominant understanding of the identity of 'being a physician' is already changing, moving away from a focus on the individual patient immediately in front of the physician to include obligations towards climate protection. Yet, this does not make the normative conflict any easier, as it is reproduced within the physician's understanding of their identity as a physician, as now the physician needs to make deliberate choices between what is best for the patient, such as transporting the patient to another hospital, and the value of carbon mitigation for its effect on the public health. In other words, by internalising the value of climate action within their own health practices, physicians will be more often confronted with choices between care options with a high(er) and lower carbon footprint of which the outcomes for the individual and the public health are to be weighted.

For the discussion of the next section, we want to introduce one more aspect of Korsgaard's theory. Namely, one aspect of our practical identity we all share constrains all of our actions: our humanity. Korsgaard defines our humanity as our capacity to act for reasons. As she explains, we are reflective beings who can question whether it is good to act on our desires and inclinations. Because of this, we need to have reasons to endorse these and, as explained, reasons stem from our practical identities—from the conceptions we have of ourselves. Therefore, 'you must be governed by some conception of your practical identity,' and this is a reason that 'springs from your humanity itself, from your identity simply as a human being, a reflective animal who needs reasons to act and to live.'[28] However, as the identity of humanity is the capacity of autonomy both in ourselves and in others, we also have an obligation to respect the humanity, their capacity to be autonomous, in others. The reason for this is that others act based on their own reasons—their own practical identities—and just as we must respect this capacity of autonomy as the source of value in our lives, so we need to respect it in others as the source of value in their lives.

In the following, we aim to show how the distinction between the general practical identity of humanity and the practical identity as a physician helps us gain a better understanding of the 'issue at stake.' We, therefore, discuss, first, how the obligation towards climate protection that arises within the physician's

identity relates to that which arises from their general identity of humanity. Second, how Korsgaard's moral theory helps to solve the conflict between environmental duties (collective and future-directed addressee) and individual patient welfare (individual and immediate addressee). Third, how changes in the professional identity due to evidence and growing debates on climate change may legitimately occur from Korsgaard's understanding of practical identities. By doing so, we defend the thesis that climate protection is not (merely) a private issue for physicians considering their general identity of humanity, but part of their particular professional identity. If this is correct, then climate protection is a duty to which the medical profession needs to relate as a community.

Climate change and physicians' professional ethics: analysis

Understanding the issue through Korsgaard's approach

In the foregoing, we have briefly outlined the ethical obligations of physicians qua being physicians considering climate change. At a closer look, there are a number of synergies between climate protection and the optimal care for the individual patient. The recommendation to reduce meat intake, for example, in dietary counselling for a patient with cardiovascular disease serves both aims. A reference to air pollution might come up rather naturally when explaining the pathogenesis of chronic pulmonary disease. In their report 'The health argument for climate action', for example, the WHO provides guidance on how to align climate and health goals.[29] In other cases, however, there is a seeming tension within the identity of the physician between duties towards the individual patient and the climate, considering how climate change negatively impacts the health of (future) people. This arises, for example, if a patient asks for the prescription of a metered-dose inhaler containing powerful greenhouse gases as propellants.[23] In this section, we aim to structure the normative issue better to allow for a fuller understanding of physicians' ethical situatedness.

It is generally agreed within the ethics of climate change that all people have an obligation towards sustainable action once we consider future generations.[30] The basis for this can be explained within Korsgaard's theory:[31] we all have the obligation to respect the autonomy-grounding capacities of other people and allow them to give expression to their own identity in whatever way they want (as long as they respect the autonomy-grounding capacities of other people). However, to give expression to oneself depends on natural and socioeconomic resources. Before we can even start to give expression to ourselves as a physician, a citizen, an officer of the court, or an environmentalist, we need to have access to food, education, and clean air. In other words, we need to have our 'basic needs' fulfilled. The current climate change, however, impacts the fulfilment of these basic needs negatively, and our best estimation is that this will worsen for future generations. This is the basic argument why all people, considering their identity of humanity, have an obligation to consider the impact of our actions on climate change, and to seek ways to avert or mitigate that impact. In other words, we all have an obligation to consider the impact of our actions on climate change.

Yet, being in good health is an important precondition for people to also be able to give expression to their identity. It seems, thus, that medical professionals have an additional duty towards climate change stemming from their professional duty as 'advocates of health.' This specific duty of physicians shows first in the recent development that climate-related duties have increasingly become a topic in documents on medical professionalism and also in bioethical debates. The basis of these arguments are that physicians do not merely have a duty to the single patient immediately in front of them but also to the health of the public (see the next section and our previous work[27] for two different argumentative lines within Korsgaard's theory to defend this claim). One implication of this, as has been argued by Parker,[23] is that regulatory bodies, such as the National Health Service (in the UK), need to take climate impact into their considerations. Issues of climate protection could then be introduced in patient–physician communication. The National Institute for Health and Care Excellence in the UK, for example, launched a patient decision aid supporting patients to choose the best inhaler for their condition and providing them with the opportunity to opt for a more environmentally friendly option.

However, the general question remains how physicians can and should deal with the tension between environmental duties that have a collective as addressee (society) and the duties towards the individual patient welfare (individual addressee). It also needs to be asked in which ways physicians' professional duty to climate protection might supersede the general duty that each member of the human species has qua their general practical identity. As an ethical-theoretical perspective, Korsgaard's approach at least helps us to understand this interweaving of identities better and the twofold way in which practical identities come into play when we ask for physicians' ethical role in climate protection.

Resolving conflicts between patient care and climate protection

Physicians' ethical duties in light of climate change are especially characterised by an ambivalence regarding the subject of obligation: Whereas it lies beyond dispute that physicians' professional practice needs to be oriented towards the welfare and autonomy of patients, action for climate protection impacts public and future health, often without the option to break down its effects to the individual level. Clinical examples of potential conflicts between the quality of care and climate protection might include the prescription of polluting medical products or the use of certain anaesthetic gases, and regular long-distance transports to healthcare facilities (eg, taxi transport to specialised dialysis units).

The need to make trade-offs between optimal care for the individual and the promotion of public health is generally a challenge well-known from public health ethics and policy-making,[32] especially when it comes to clinical priority setting.[33] However, the challenge of weighing and balancing individual and public interests presents itself in climate change in a new guise, as not only the health of the present (global) population but also, above all, the health of future generations is affected. Furthermore, it has been repeatedly highlighted how future-directed ethical obligations tend to escape major mechanisms of moral psychology.[34] Handfield *et al*, for example, stress that '[t]he human faculty of moral judgement is not well suited to address problems, such as climate change, that are global in scope and remote in time.'[35] Psychological traits, such as parochialism, reputation monitoring, or retribution, might prevent individuals from making choices in favour of addressees that are remote to them socially as well as in space and time. With respect to climate, this can be seen as a reason also to highlight the direct effects of fossil fuel consumption on human health instead of always placing the focus on the effects of global warming on future generations.

Within Korsgaard's framework, one way to deal with conflicts between the obligations that arise from within one identity is to provide a reinterpretation of one or both aspects that give

rise to the conflict. So, against the background just sketched, a need can be seen that physicians overcome their 'natural' moral perspectives that focus on the individual immediately in front of them and allow the realisation that their commitment to human health also includes individuals with whom they are not directly confronted (and may potentially not yet be born). To allow for this reinterpretation, physicians may focus on their commitment to all (future, potentially not yet born) patients they will encounter during their working life, which creates the obligation to ensure the preconditions for giving the best standard of care not only for the immediate patient but also for future patients they will encounter. One of the preconditions for doing so, it might be argued, is to transform their own healthcare practice into a more sustainable one that privileges neither the older generations (which already suffer from, eg, pulmonary or cardiovascular disease) nor those patients who are already born, in disfavour of those who are not yet on earth.

Beyond these considerations, however, it is very important not to uniformly depict clinical and climate-related moral duties as being in conflict with each other but highlight that 'our responsibility for promoting patient autonomy and avoiding harm coexists with our responsibilities towards the planet and one another.[36] Speaking from Korsgaard's perspective, this means that it is just a normal feature in the 'moral constitution' of agents that different practical identities coexist as well as moral judgement and sometimes the reinterpretation of an (aspect of an) identity is needed to determine how they can be realised in concrete cases. In addition (and linked to this point), positive effects might arise if physicians understand climate change more as a health issue, and, thus, as something that immediately bears on their identity as a physician, and not as something separate from their profession. This might not only help them to 'unify' their practical identities but provide them with the chance of functioning as advocates of climate protection. According to Valles writing in 2015, '[r]ecent climate framing communication research indicates that when audiences hear climate change presented specifically as a health risk then they tend to respond by taking climate change quite seriously.'[37] Thus, there are also pragmatic reasons for framing climate change as a health issue in the clinical and public encounter. Empirical evidence, however, indicates that healthcare professionals to date often do not feel a special obligation to climate change mitigation.[38] Education and awareness raising is, therefore, needed to enable physicians to fulfil their function as climate advocates and reconcile this with their commitment to providing optimal care to individual patients.

Transformation of physicians' practical identity through the confrontation with climate change

Both issues discussed so far—Korsgaard's theory as a theoretical lens for professional ethics and for conflicts between patient care and climate protection—support the assumption that changes in professional identity can take place. That change can occur is, of course, not a surprise. The bioethics community, for example, is very familiar with the emergence of patient autonomy as a major principle of medical ethics through the second half of the 20th century.[39] Hence, we nowadays recognise particular ethical duties of physicians that were not recognised as such in the past.[40] Such changes are partially grounded in new societal expectations and growing evidence on certain topics. Yet, this leaves the question unanswered regarding what mechanisms are available for physicians to intentionally change the understanding of the obligations included with their identity. Korsgaard's theory can help us to provide an understanding of the mechanisms available that include the changing of the understanding of a practical identity and, therewith, the normative commitments that follow from it.

One obvious way in which a change in the duties and obligations of physicians takes place is by supplementing the ethical codes that guide the profession's self-understanding. Examples are the World Medical Association's International Code of Medical Ethics or the AMA Code of Medical Ethics that both provide a basis for introducing duties considering climate change (for the AMA, see Norling[19]). The same happens within scientific discourse, as can be observed in the contribution by Wabnitz *et al* that complements the Declaration of Geneva with a pledge regarding duties to Planetary Health.[13] Despite Korsgaard's focus on how the individual person commits themself autonomously to a specific identity, changes in the ethical codices that guide the medical profession can be understood as normatively binding for the medical professional.

It may be thought that external influences on the physician's self-understanding, such as the codices mentioned, are problematic to give a place within Korsgaard's theory—and on the surface, for seemingly good reasons. A practical identity is about what a person finds valuable in their life and what grounds they find which make their life worth living. Thus, it could be a plausible conclusion that, as it is up to the individual to commit to an identity and give expression to it or not, how they give expression to this identity is also up to them. However, although it is up to the individual, within Korsgaard's framework, to decide whether to uphold their commitment to a practical identity or not, this does not imply that what it means to be committed to the identity is completely up to the individual and, thus, the ways in which they give expression to it. This shows, first, in the fact that one's ability to work as a physician depends on formal requirements. One must obtain the right to practise medicine through training and a medical licence of the state. Even more so, by giving out the medical licence, states also prescribe obligations to physicians, such as providing a certain standard of skill and care to their existing patients whom they have agreed to treat (for a discussion regarding physicians' legal duty of care during a pandemic, see Davies and Shaul[41]). Insofar as the ethical codes stem from medical associations of which medical professionals are members and, thus, have committed themselves to follow their guidelines, a strong argument can be given that physicians are bound by these ethical codes. Practising as a medical professional is not a 'private issue' but inevitably takes place in the context of the collective of all physician colleagues. A physician's stance towards climate protection, therefore, must also not be regarded (merely) as a private decision but also bears on their having a stake in the shared practical identity of the profession. With respect to potential conflicts occurring between patient autonomy or welfare and climate protection such a collectivist interpretation might at least prevent physicians from being accused of unduly let their private (eg, political) convictions have an influence on professional decision-making. If climate protection is perceived (at least within certain boundaries) as part of the physician's 'job' raising such issues in the clinical encounter might come up more naturally and be less irritating to patients.

The way in which the practical identity of physicians is intersubjectively constituted goes very deep. We could even speak of it being intersubjectively intertwined. This can be explained by having one common standard for determining the level of skill and care that must be provided depending on what a 'reasonable physician' would provide under the circumstances. Yet, it can be observed that what the community of physicians believes a reasonable physician would do changes over time and in interaction with medical associations, and political and legal

institutions that regulate who is allowed to practise medicine and who is not.[40] Examples of such regulations are authorities that give physicians their licence to practise and hospitals that only employ physicians who uphold the good standards of the profession (which are defined by the associations mentioned). In other words, insofar as physicians are committed to their profession, they need to conform to the standards and rules determined by their professional and regulatory bodies. This does not mean, of course, that physicians have nothing to say about such regulations and codes. First, codes and regulations leave ample room for physicians' self-determination. Second, they can engage with their colleagues to voice their own values and perspectives on certain matters, make use of the participatory codetermination processes within medical associations to change codes and regulations, or engage with others via academic publications. Thus, in other words, what actions and choices amount to being a 'reasonable physician' are determined within a discourse between different stakeholders that regulate the standard by which physicians are allowed to give expression to their practical identity. Such standards can change under the influence of new facts and scientific discourse, as currently happens considering the obligation to climate protection.

What is central, thus, to Korsgaard's theory of practical identities is that the question *whether* to commit to a practical identity and stay committed to it is up to the free and autonomous choice of the physician (insofar as they respect the laws and codes that regulate their profession). Physicians may choose, however, to stop giving expression to their identity as physicians. It is important, as we have argued, that if physicians choose to give expression to their identity, it does not mean they can set the standards of how to give expression fully by themselves, although they do have ways to change what it means to give expression to being a physician through discursive structures within the professional and regulatory bodies of their profession.

SUMMARY AND PERSPECTIVES

Members of the medical profession and the profession itself cannot remain silent in light of the enormous threats that climate change poses to global human health and continuing into the future. Whereas a call for action is frequently voiced internationally and in various contexts, theory-led bioethical analyses of the background and scope of physicians' climate-related duties are rare so far. This article has made a first attempt to use Korsgaard's neo-Kantian account of practical identities to provide a better understanding of the normative issues at stake, structuring conflicts between individual patient care and climate protection, and conceptualising the transformation of physicians' professional ethos.

Limitations to our account occur from the fact that utilising Korsgaard's theory, we mainly address the individual decision-maker and their practical identities. A great share of relevant decisions in climate protection, however, are made on the meso and macro levels of healthcare institutions and systems, respectively, involving many different stakeholders and societal structures that we have not addressed in this article. Even more so, these aspects are not obviously conceptualised within Korsgaard's theory, as it focusses on the individual's decision-making capacities and their commitments to specific practical identities. However, Korsgaard's theory leaves open what duties our commitment to an identity commits us to and the authority on what duties constitute an identity does not lie solely with the individual. This is especially true for the medical profession as we have argued elsewhere,[27] as being a medical professional is defined by intersubjective practices that include the medical profession as a community and society at large. Attributing responsibility to individuals for issues that need to be solved from a systemic perspective is a widespread flaw in ethical discourses and should not be repeated regarding physicians and climate change.

We come to the conclusion in our analysis that a physician's stance towards climate protection is not a private issue but is deeply embedded in their self-understanding and the practical identity they share with physician colleagues. This has remarkable consequences on the individual and professional level. If we are correct, physicians must no longer consider their climate-related behaviour as a matter of personal choice or political ideology. Instead, it needs to be linked to their overall professional performance that is guided and standardised by the profession. Physicians' professional organisations then need to accept the widening of their mandate and consider health-related issues of climate change as part of their genuine business.

From a practical perspective, we see the need for raising more consciousness in this direction. From the viewpoint of bioethics as an academic discipline, we would encourage other scholars to contribute and use their theoretical and methodological 'tools' and competencies for shedding light on pressing issues in the intersection between physicians' professional ethics and climate change as a health issue.

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