FEATURE

# Environmental Risk Factors for NCDs: The Interdependence between the Right to Health and a Healthy Environment

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## Introduction

*The condition of the environment is a significant determinant of health. According to the World Health Organization (WHO), an estimated 13 million deaths each year are attributable to known and avoidable environmental risks (WHO 2020: 4). A host of environmental challenges, including droughts, heat-waves, air and water pollution, degradation and contamination of land, extreme weather events, and loss of biodiversity, pose critical threats to health. Climate change and environmental degradation not only contribute to the incidence of infectious diseases, such as the Covid-19 pandemic, but also affect the prevalence and severity of a range of non-communicable diseases (NCDs).*

As it is not possible to address the full range of environmental risks here, this article will focus on air pollution. Air pollution is linked to premature deaths from NCDs, including strokes, ischaemic heart disease, chronic obstructive pulmonary disease, acute lower respiratory infections, and lung cancer; it is also a major cause of pneumonia, bronchitis and asthma in children (Academy of Science of South Africa [ASSAf] et al. 2019: 2). It has been estimated that, globally, air pollution contributes to at least 5 million premature deaths annually (ASSAf et al. 2019: 1).

The health-related burden of air pollution is often disproportionately placed on the vulnerable and marginalised, including women, children and those living in poverty. In 2019 the severity of the threat prompted five National Academies of Sciences and Medicine (including the ASSAf) to propose 'the adoption of a global compact on air pollution to make air pollution control and reduction a priority for all' (ASSAf et al. 2019: 1).

In South Africa, the relationship between poor air quality and NCDs is of particular concern. A 2016 report from the World Bank and the Institute for Health Metrics and Evaluation at the University of Washington indicated that in South Africa about 20,000 deaths a year are linked to air pollution (World Bank and Institute for Health Metrics and Evaluation 2016: 100).

Effectively managing NCDs requires the consideration of relevant environmental risk factors and determinants. Given the relationship between the environment and NCDs, the state's constitutional obligations in this regard should be understood in view of both the right of access to health-care services in section 27 and the environmental rights in section 24 of the Constitution. In this article, we consider the role of both these rights in the prevention and treatment of NCDs that are caused or exacerbated by environmental factors. We also explore the possibilities presented by seeing these rights as interdependent.

## The right to access health-care services

The right of access to health-care services is contained in section 27(1)(a) of the Constitution. Section 27(2) qualifies the positive obligation to realise the right contained in 27(1)(a) by providing that '[t]he state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of [the right]'. The main negative obligation associated with the right is contained in section 27(3), which provides that no one may be refused emergency medical treatment.

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The jurisprudence on section 27(1)(a) is limited. In *Soobramoney v Minister of Health* (1997) (*Soobramoney*), the Constitutional Court interpreted sections 27(1)(a), 27(3) and the right to life in section 11 of the Constitution. The appellant, Mr Soobramoney, was refused access to a dialysis treatment programme at a public hospital as he did not qualify for a kidney transplant, due to lifestyle diseases.

The Court's interpretation of the right of access to health-care services was narrow in *Soobramoney*, as the claim was based primarily on sections 27(3) and 11 of the Constitution. In regard to section 27(1), the Court reasoned that the resource constraints experienced by the hospital, such as a limited budget, were inconsistent with the argument to provide dialysis treatment to persons with no chance of recovery. Resources should rather be allocated to preventative health care interventions. The Court therefore exclusively defined and limited what the right of access to health-care services encompasses in terms of existing resources and budgetary considerations (Pieterse 2004: 891; Liebenberg 2016: 139).

*In Treatment Action Campaign v Minister of Health* (2002), the Constitutional Court adopted a similar interpretive position as it did in *Soobramoney*. The case concerned the question of whether the obligation to provide access to health-care services includes the provision of nevirapine, an anti-retroviral drug, to pregnant women with HIV/AIDS. The Court based its analysis on the reasonableness of the decision to exclude women and children from the programme providing nevirapine, which concerns section 27(2). The Court reasoned that section 27(1) 'does not give rise to a self-standing and independent positive right enforceable irrespective of the considerations mentioned in section 27(2)' (para 39). Consequently, the realisation of section 27(1) is subject to available resources and the reasonableness of the measures taken (Brickhill & Ferreria 2014: 591; Liebenberg 2016: 176).

Academic commentary on the right has been more extensive. 'Health' in section 27(1)(a) has been understood as encompassing various dimensions and factors, including 'biological, behavioural, cultural, environmental, social, economic and health-system-related determinants' (Pieterse 2008: 555). Such an understanding would support a reading of section 27(1) that includes obligations to adopt reasonable measures in addressing the environmental determinants of NCDs. In conceptualising the role of section 27 in addressing NCDs and their environmental determinants, it is important to note that it does not provide an unqualified right of access to health-care services. However, there is scope to argue that reasonable measures under section 27 could include an obligation to prevent or mitigate environmental degradation such as air pollution, and an obligation to provide reasonable treatment for NCDs caused by the state's failures in relation to its obligations under section 24.

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## Section 24 and health

Section 24(a) of the Constitution states that '[e]veryone has the right to an environment that is not harmful to their health or well-being'. The right establishes an obligation on the state to prevent harm to health that is caused by pollution, environmental degradation or climate change. In addition, subsection(b) includes the right to have the environment protected through measures that, among others, 'prevent pollution and ecological degradation'. The environmental right is therefore critical in addressing the underlying determinants of NCDs that are caused or exacerbated by such pollution or ecological degradation. Effective realisation of section 24 would contribute significantly to the health of the population, particularly where air pollution is concerned. If the incidence of environmentally related NCDs could be reduced through the promotion of section 24, more resources would be available to contribute to the progressive realisation of access to health-care services.

As we know from section 27, the Constitution does not include a right to a certain standard of health but rather a right to have access to health-care services. While section 27 is subject to progressive realisation, the right to an environment not harmful to health is not qualified in this way. This suggests scope for more immediate obligations on the state to protect people from the health impacts of environmental harm.

The existence of the right to health-care services has implications for how section 24 is interpreted. The concept of health in the environmental right must mean more than access to health-care services which is already covered under section 27. As a result of the limited scope of section 27(1)(a), the environmental right has an important role to play in advancing health in South Africa.

It is clear that the environmental right aims to guarantee a certain quality of environment which is, at a minimum, not harmful to an individual's health. The scope and application of this right has not yet been clearly delineated by the courts. However, a handful of cases shed light on the scope of this right. For example, *Minister of Health and Welfare v Woodcarb (Pty) Ltd* (1996), which was decided under the interim constitution, confirmed that air pollution can lead to a violation of the right to an environment that is not detrimental to health or well-being. In relation to the scope of well-being, the court in *HTF Developers (Pty) Ltd v Minister of Environmental Affairs and Tourism* (2006) held that the environmental right 'does not confine itself to protection against conduct harmful to health but seeks also by, inter alia, the promotion of conservation and ecologically sustainable development, to ensure an environment beneficial to our "well-being"' (para 18).

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While other cases have relied on section 24, few have done so in relation to direct harm to health. The notion of well-being in the context of section 24 has also been the subject of greater academic interest than harm to health. This is perhaps due to the more nebulous nature of 'well-being' and the existence of a separate right to health-care services in section 27. Despite the fact that the meaning of 'health' in section 24(a) is relatively clear, 'harm to health' under the environmental right has not been a common cause of action in the courts.

There may, however, be an opportunity for clarification on the meaning and scope of section 24 in a forthcoming case brought by the trustees of groundWork trust and the Vukani Environmental Justice Alliance Movement in Action. The applicants are represented by the Centre for Environmental Rights (CER), and their notice of motion seeks, among other things, a declaration that 'the poor air quality in the Highveld Priority Area is in breach of

residents' section 24(a) right to an environment that is not harmful to their health and well-being' (CER 2020). This case, dubbed the 'deadly air' case, has significant potential to affirm the right to be protected from the harmful health effects of air pollution, including its contribution to the prevalence and severity of NCDs. It is significant that the court received submissions from the UN Special Rapporteur on Human Rights and the Environment, David Boyd, as an amicus curiae. The case was heard in May 2021, but judgment has not yet been handed down.

It is clear from the content of section 24 that the state has a responsibility to prevent and mitigate harm to health that results from environmental degradation such as air pollution. The state therefore has obligations not only in relation to the provision of health-care services and the treatment of NCDs, but also to the prevention of NCDs insofar as they are caused by a harmful environment. The section below explores the possibilities of an interdependent reading of the rights in sections 24 and 27.

## The interdependence of sections 24 and 27

The interdependence of all human rights is a central principle in international human rights law and is based on the notion that all human rights can be mutually supporting (Porter 2020: 301-3). For socio-economic rights specifically, interdependence has been utilised to support the protections afforded by these rights and develop their normative content to integrate and support other rights, such as civil and political rights (Scott 1989: 781; Liebenberg & Goldblatt 2007: 341). In the South African context, the interdependent and interrelated nature of socio-economic rights (with other rights and between different socio-economic rights) was recognised by the Constitutional Court in *Government of South Africa v Grootboom* (2001) (paras 23-24).

Prominent socio-economic rights scholars have advanced arguments on how other constitutional rights, such as the right to human dignity, equality and freedom, could be utilised interdependently to develop the normative content of socio-economic rights and the reasonableness review standard (Liebenberg & Goldblatt 2007). The Constitutional Court has also utilised interdependence in this fashion, most prominently in the case of *Khosa v Minister of Social Development* (2003). In that case, the Court found individual violations of the rights to equality and social security, but utilised equality in assessing the reasonableness of the measures to realise the right to social security. Interdependence in South African law therefore has a solid academic and jurisprudential foundation, with great potential to be utilised in future socio-economic rights cases.

Attempts to develop the interdependence of the right to health with other constitutional rights have been limited. The court in *Soobramoney* recognised the interdependence between section 27 and the right to life, but reasoned that an unqualified right cannot be used to define a qualified right. The court therefore ascribed a limited role to interdependence, one that Sandra Liebenberg has argued could have been stronger. For example, the right to life could have been utilised to examine the budgetary justifications for refusing treatment for Mr Soobramoney (Liebenberg 2016: 143-4). Marius Pieterse has also attempted to promote the interdependence of the right to health by linking it with notions of autonomy (Pieterse 2008).

The concept of interdependence between socio-economic and environmental rights is still in its infancy. There has been limited scholarship exploring

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the specific interdependence between the right of access to health-care services in section 27 and the right to an environment not harmful to health or well-being in section 24. While scholars have highlighted the interlinkages between section 24 and socio-economic rights, a number of cases have been criticised as failing to recognise or develop this interdependence. These include the missed opportunities in *Grootboom* (Fuo 2011) and *Mazibuko v City of Johannesburg* (Kotzé 2010).

> **The state's obligation in this regard is not subject to progressive realisation and should therefore be realised without delay**

The concepts of health, well-being and sustainable development in section 24 have relevance for socio-economic rights such as the right of access to health-care services, the right to sufficient water and food, and the right of access to adequate housing. Developing the interlinkages between these rights enhances their potential to address the intersecting socio-economic and environmental injustices that vulnerable groups face (Du Plessis 2011: 290-1; Murcott 2015: 879, 893). For example, addressing the health impacts of air pollution requires addressing the environmental regulation of emissions and polluting industries as well as issues of spatial injustice and access to health care.

In the case of severe air pollution, the interrelationship between the rights in sections 24 and 27 is clear. Ideally, section 24 and its subsidiary legislation would prevent harm to health that is caused by pollution and environmental degradation, thereby reducing the incidence and prevalence of NCDs linked to environmental harm. The state's obligation in this regard is not subject to progressive realisation and should therefore be realised without delay. Where there is a failure to prevent such harm to health, the state has an obligation under section 27 to address the continuing harm through access to appropriate health care.

It could be argued that the state has a greater responsibility to ensure access to health care under section 27 when the cause of the ill-health is the state's own failure to realise the right in section 24(a). Where the health consequences of air pollution persist despite a later improvement in air quality, section 27 could be utilised to ensure that NCDs resulting from environmental factors (and the state's failure to prevent resultant harm to health) continue to be treated. An interdependent reading of the two sections could therefore extend the initial obligation on the state.

Sections 24 and 27 can also be utilised to emphasise the disproportionate impact of environmental degradation on vulnerable groups. In the deadly air case, for example, the CER has pointed out that it is children, the elderly, and people with existing medical conditions who are most affected by the polluted air in the Highveld Priority Area (CER 2020). While the state should ensure that no one experiences environmental harm to health, vulnerable groups are significantly more at risk of NCDs resulting from exposure to environmental risk factors. An interdependent reading of sections 24 and 27 underscores the conclusion that, in meeting its obligations under these rights, the state should prioritise the most vulnerable groups.

## Conclusion

Given the significant risk that environmental harm poses for the incidence and severity of many NCDs, it is essential to consider the environmental dimensions of the problem alongside questions related to health care. We have proposed that a more interdependent understanding of sections 24 and 27 can strengthen state obligations related to the prevention and treatment of NCDs that are caused or exacerbated by environmental factors. In the context of NCDs, this interdependent approach underscores the following:

- the state has an obligation under section 24 to prevent NCDs resulting from environmental harm;
- the state has a particular obligation to treat NCDs where they are caused or exacerbated by its failure to prevent harm to health in accordance with section 24(a); and,

- properly preventing environmental harm will promote the effective use of state resources by avoiding the unnecessary costs associated with treating preventable diseases.

While we have focused on the problem of air pollution and NCDs, this interdependent approach is potentially valuable for any health impacts resulting from environmental harm. The interdependence of the rights to health-care services and the environment is therefore relevant for health concerns related to various environmental threats such as those arising from waste management, land contamination, water pollution, mining operations or hydraulic fracturing. In addition assisting in the identification of state obligations under section 24 and 27, this interdependence has the potential to contribute to the formulation and design of remedies in cases such as the forthcoming deadly air case, where both rights are implicated.

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