

Klemenc Ketis Z, Rochfort A. Sustainability for planetary health: a seventh domain of quality in primary care. Zdr Varst. 2022;61(4):198-200. doi: 10.2478/sjph-2022-0026.

SUSTAINABILITY FOR PLANETARY HEALTH: A SEVENTH DOMAIN OF QUALITY IN PRIMARY CARE

TRAJNOST ZA PLANETARNO ZDRAVJE: SEDMA DOMENA KAKOVOSTI NA PRIMARNI RAVNI

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Received: Sep 9, 2022 Accepted: Sep 12, 2022 Invited editorial

ABSTRACT

Keywords: primary care, sustainability, carbon footprint, quality

Climate change is one of the biggest threats to public health. Sustainability is characterized by using resources wisely in a way that protects finite resources and the environment, and takes into account the needs of our planets' inhabitants in the future. Sustainability in health care should be considered as a seventh domain of quality, as it can lead to improvement of patient outcomes, and more capacity for health care workers to engage in quality improvement and thereby improve the quality of care.

The carbon footprint of primary care is high, mainly due to prescribing medication, but also due to the transport of patients to hospitals and primary care services for interventions requested by family medicine. Other causes are the transport of staff and supplies, consumables and staff involved in laboratory analysis and radiation, medical and non-medical equipment, clinical and non-clinical waste, heating and cooling systems and other activities. Small adjustments in these areas could significantly decrease the carbon footprint of primary care practices. The suggested steps for primary care to achieve a more sustainable practice are fostering research, raising awareness, reducing the burden on primary care, engaging in quality improvement, and leadership and advocacy.

Each individual primary care practice has the potential to be a leader and role model for sustainable health care. With the implementation of interventions to reduce carbon footprints, primary care could set an example within the health sector and for patients. This could significantly raise the awareness of the public about the need to take actions for a greener health system.

IZVLEČEK

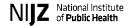
Ključne besede: primarno zdravstveno varstvo, trajnost, ogljični odtis, kakovost

Podnebne spremembe so ena največjih groženj javnemu zdravju in so že začele povzročati zdravstveno krizo. Za trajnost je značilna pametna raba virov na način, ki varuje omejene vire in okolje ter upošteva potrebe prebivalcev našega planeta v prihodnosti. Trajnost v zdravstvenem varstvu je treba obravnavati kot sedmo domeno kakovosti, saj lahko vodi v boljše izide zdravljenja in s tem izboljšanje kakovosti oskrbe.

Ogljični odtis je na primarni ravni visok, predvsem zaradi predpisovanja zdravil, pa tudi zaradi prevoza osebja in bolnikov, ogrevalnih sistemov, medicinskega potrošnega materiala, nemedicinske opreme, odpadkov, laboratorijskih analiz, nemedicinskega potrošnega materiala, medicinske opreme in električne energije. Majhne prilagoditve na teh področjih bi lahko znatno zmanjšale ogljični odtis primarnega zdravstva. Možnosti za povečanje trajnosti na primarni ravni so spodbujanje raziskav, ozaveščanje, zmanjšanje obremenitev primarnega zdravstva, sodelovanje pri izboljšanju kakovosti ter vodenje in zagovorništvo.

Vsaka ambulanta na primarni ravni ima potencial, da postane vzor za trajnostno zdravstveno varstvo. Z izvajanjem intervencij za zmanjševanje ogljičnega odtisa bi lahko bile ambulante družinske medicine zgled v zdravstvenem sektorju, pa tudi za bolnike oz. celotno prebivalstvo. S tem bi lahko močno dvignili zavest javnosti o potrebi po bolj zelenem okolju.

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1 INTRODUCTION

Climate change is one of the biggest threats to public health, and has already begun to cause a health crisis. "Public health policy is set in a world of complexity, ambiguity and politics, in which evidence is important, but insufficient" (1). The health sector has the responsibility to take immediate and decisive action to achieve sustainable health care. Sustainability is characterized by protecting finite resources and the environment by using resources wisely while taking into account the needs of our planet's inhabitants in the future (2). There are an increasing number of initiatives supporting the inclusion of sustainability as an additional domain of quality in health care (3). Indeed, a more sustainable health care service can improve patient outcomes, and improve capacity for health care workers to engage in quality improvement (4) and thereby improve the quality of care (3).

Primary care has huge potential to significantly influence the sustainability of health care and mitigate the effects of climate change. High quality primary care leads to decreased health care costs and better health outcomes (5). Primary care workers are in the frontline within patients' own communities, which enables them to advocate for actions to reduce the effects of climate change, increase public participation and promote activities to protect people from the effects of climate change (6).

2 CARBON FOOTPRINT IN PRIMARY CARE

The health care sector is a significant carbon emitter, and if health care were a country it would be the fifth largest global emitter on the planet (7). Primary care has a high carbon footprint, in particular from prescribing medication, which accounts for up to 60% of this (8, 9). If we exclude the latter, the greatest source is transport by patients and staff to health care sites (9). Other sources are heating systems, medical consumables, non-medical equipment, waste, laboratory analysis, non-medical consumables, medical equipment, and electricity (2, 8) The average primary care consultation can produce up to 66 CO_{200} kg of carbon (8).

3 WHAT CAN BE IMPROVED IN PRIMARY CARE?

We can see from the literature (2, 8, 9) that the main areas for improvement are on the micro and meso levels. That is a very promising finding, as such changes can be made quickly and with minimum effort.

An infographic was created by six family doctors to succinctly illustrate some of the small but effective actions that can be initiated in general practice at the micro and meso levels. The infographic was endorsed by the Irish College of General Practitioners in 2021 (10).

Primary care practices should aim at reducing the environmental impact of prescribing and drug use. Currently, a major problem is polypharmacy and overprescribing (11), and other examples such as overuse of antibiotics and hypnotics. Tapering off medication can help improve the quality of life for patients (12), and better uptake of lifestyle interventions and social prescribing (13) can also be beneficial to patient outcomes.

More sustainable primary care is harder to achieve if the health care workers are not educated on the benefits of action, if they are not supported by the health systems in which they work or the professional organizations they belong to, and if work time constraints, which is the most frequently reported barrier, are not managed (6).

4 STEPS TOWARDS MORE SUSTAINABLE PRIMARY CARE

We suggest several steps that could help to achieve more sustainable and greener primary care.

4.1 Foster research

There is a lack of studies on this topic, so it is difficult to suggest evidence-based interventions. We need international data to understand the scope of the problem (i.e. the carbon footprint in primary care in different countries and health care systems). We need qualitative studies among health care workers and patients to assess their understanding, barriers, and readiness for improvement. Sustainability research should thus be declared one of the main target areas in primary care research in the coming years.

4.2 Raising awareness of health care workers and patients

Sustainability and planetary health topics should become an obligatory part of the curriculum at the undergraduate, postgraduate and continuous medical education levels. Public campaigns should be initiated and continuously implemented. Primary care workers have high levels of public trust, and can be strong advocates for planetary health. They are influential role models for their patients with regard to the adoption of green behaviours and lifestyles.

4.3 Reducing the burden on primary health care

An integrative approach to managing patients in primary care can reduce the burden on individual health workers, increase the quality of care and foster patient satisfaction (14). Improving health literacy among patients is a critical factor in the prevention and management of non-communicable diseases (15). Empowering patients through education and self-management support results in the more rational use of health services. Digitalization has great potential to reduce the burden when used

appropriately, and remote care should be used when possible and safe for the patient.

4.4 Engaging in quality improvement

Each primary care practice should engage in a structured approach to improving sustainability in their practice. A sustainability in quality improvement (SusQI) framework and educator's toolkit (3) could serve as a starting point in identifying the possibilities and developing interventions. Quality indicators on sustainability in primary care should be developed as part of the promotion of sustainability as a quality improvement domain. Interventions should be developed, tested and monitored.

4.5 Leadership and advocacy

Academic, administrative and clinical leaders in primary care need to work closely with researchers and health policy makers, with each other and in partnership with patients. Medical organizations can lead the way in keeping patients informed of the benefits of including the concepts of sustainability and planetary health as part of routine medical care.

Regulators, indemnity insurers and legal professionals have a role to play in managing the increase in legal complaints against doctors (16), so that it becomes more acceptable to practice sustainably than to practice defensively.

5 CONCLUSION

Primary care manages the majority of health problems in the population, and it is responsible for a proportion of the health care sector's carbon footprint. Small adjustments could significantly decrease the carbon footprint of primary care practices over time, whilst also fostering better quality of care and patient outcomes. Each individual primary care practice has the potential to be a leader and a role model for sustainable health care, which is a domain of quality improvement. A structured approach is needed at the practice level, and in transitions of care with other service providers to identify possible interventions. The best way to start these changes is by adopting a bottom-up approach by clinicians in partnership with patients.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

FUNDING

This editorial was produced without external funding.

ETHICAL APPROVAL

Ethical approval is not required for this editorial.

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