

Research Round up May- Sustainable Practice

Introduction

Last month the research round-up provided you with an overview of articles looking prescribing in a young population. This month we look at the emerging concept of green and sustainable prescribing. The first article looks at barriers to green inhaler prescribing in clinical practice while the second looks at general practice and sustainability. Finally, we review a perspective piece on taking a sustainable approach to healthcare in the 21st century.

Barriers to green inhaler prescribing: ethical issues in environmentally sustainable clinical practice

Parker, J. (2023) *Barriers to green inhaler prescribing: ethical issues in environmentally sustainable clinical practice*. Journal of Medical Ethics; 49:92-98

This article published in the Journal of Medical Ethics sought to identify the barriers to prescribing more environmentally friendly inhalers. One of the drivers for this article was the 2020 NHS declaration that it intended to become net carbon neutral for all emissions under its direct control by 2040. One known area of prescribing that contributed to greenhouse gas emissions was that of the prescribing of metered-dose inhalers. It was identified that many patients could in fact move from these traditionally used inhalers to dry powder inhalers which do not contain these powerful greenhouse gases without any loss of therapeutic effect. The authors of the paper give a very good and useful overview of the carbon footprint of inhaler prescribing which sets the paper well and gives valuable context. The article discusses two ethical issues that may be barriers to switching from metered dose inhalers. The first issue is that some patients do not wish to switch from their inhalers especially if they have been using the same type for a long time. This raises a question of moral justification on the part of the patient and invokes ethical issues around autonomy. They follow up with how the prescribers could respond to patient refusal to switch and issues around informed consent and the trust relationship. The second issue discussed is that of cost. Dry powder inhalers are more expensive and the article does allude to the fact that switching from the cheapest metered dose inhalers to the dry powder could attract an annual cost increase of £12.7 million for every 10% of inhalers changed. The authors make the point that this is not a given increase and some targeted prescribing changes could mitigate this cost.

The authors conclude that with an annual saving of 58 kilotons of carbon dioxide emissions the task of changing inhalers is urgent and important.

<https://jme.bmj.com/content/medethics/49/2/92.full.pdf>

Sustainable development in general practice

J Legrand, I Aubin-Auger, L De Bary, É Fossembas, D Baruch, A Malmartel (2023) *Sustainable development in general practice*. Journal of Family Practice

This paper published in the Journal of Family Practice looks at sustainable development in general practice. The authors conducted this study in the primary care arena in France. The qualitative study sought to explore the practices in the chosen population of study with regards to sustainability and to identify any actions that may be appropriate and achievable to be applied to the wider healthcare arena. The paper identifies that around 4-5% of all global carbon emissions come from health care practices. They also suggest that previous evidence shows that health care practitioners in general practice do not implement sustainable development measures, largely they identify physicians as being less than proactive. They conducted a qualitative study of 12 French based GPs and using semi structured interviews either face-to-face or over the telephone to gather data on waste management, relationships between health care professionals, the practice of sustainable development and the activity of the GPs themselves.

Data analysis on demographics showed the mean age of the GPs involved in the research to be 42.8 years and working largely in an urban environment. From analysis of responses four themes emerged. Firstly, there was a concern over balancing the need to act to reduce environmental impact with the constraints related to the medical care that was needed to manage the conditions effectively. The second theme was around thinking about how to integrate sustainable development into everyday practice which necessitates a commitment from the GPs. Another theme was around the need to reassess consumption and prescribing and a move to preventative practices. Finally, this needed to be seen in light of the GP as a role model for their patients as well as their role as business leaders and as members of the healthcare system. What emerged was that the GPs were concerned about sustainability and reducing the carbon footprint, and many had already begun to be involved in implementing practices to impact on emissions. The article also highlights tools are available to assist with a move towards a more sustainable healthcare model and that impact should continue to be investigated and assessed.

<https://academic.oup.com/fampra/advance-article-abstract/doi/10.1093/fampra/cmadv003/6991318>

It's time to take a sustainable approach to health care in the face of the challenges of the 21st century

Laprise, C. (2023) *It's time to take a sustainable approach to health care in the face of the challenges of the 21st century*. One Health. 100510

This final article, published in the journal One Health is worth looking at to give a good overview of this topic. The author starts by giving a good context to climate change and its relationship with health issues and healthcare. The aim of this article is to give a broader overview of the context we are living in and how it affects people's health globally. It looks at factors such as the ageing population and comorbidities alongside human health challenges as well as globalisation and the environment. Notable mention is given to the COVID-19 pandemic and its influence. The author investigates and outlines the issues of environmental health and air pollution as well as globalisation and the significant increase in population movement and migration and its impact on healthcare systems. The article then focusses on an integrated and sustainable approach to healthcare where a balance must be found between needs and resources. They suggest actions need to be taken at an individual and local level but also the need for national and international focus. They present a sustainable health model in the paper encompassing social, economic, and physical environments and vulnerabilities and health. Their proposed approach acknowledges that everyone has a role to play but that policy makers and stakeholders need to work together in partnership with the population to develop intersectional research projects to meet the needs of the community.

<https://reader.elsevier.com/reader/sd/pii/S2352771423000307?token=0354D955665C254F4D92DA A340B4983213756594D44B47539D863F33B37E1A917BAED85B82D39EFBB0335F7CC1C937B8&originRegion=eu-west-1&originCreation=20230329095255>

Conclusion

Sustainable prescribing may be a new concept to many of you and of course it is reflected in the 2021 Competency Framework published by the Royal Pharmaceutical Society (RPS 2021) and therefore needs to be incorporated into your prescribing practice. These articles will help you understand the need to move to a more sustainable prescribing practice and give you tools and information to put this into practice.

Additional References

Royal Pharmaceutical Society (2021) *The Single Competency Framework*