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Pharmacists and Pandemic Misinformation

Pharmacists have always had a responsibility to communicate evidence-based, accurate health related information to patients and the public; traditionally this related to medicines in particular but increasingly this has broadened into many other areas such as public health advice and no more so than in the recent COVID pandemic. What the pandemic has highlighted in particular, however, have been concerns about the increasing influence of false beliefs and misinformation, particularly on the internet and social media (Pennycock and Rand 2021). Misinformation had been defined narrowly as the reporting of false information where there is no intention to harm others (CDC 2021) but is also understood in terms of different mechanism through which it is manifest such as rumours, urban myths, government, fiction and vested interests (Lewandowsly et al 2012). It represents a key public health and societal concern due to the effect that it can have, with an impact on the public (in terms of reduced vaccination uptake) but also contributing to health professional's incorrect beliefs (Petrovic et al 2001).

This article considers the role that pharmacists have in relation to misinformation and argues that there are two key groups of pharmacists with attendant responsibilities and also two main domains of concern linked to everyday pharmacy practice but also the internet and social media. A key distinction is made in these two groups between pharmacists who hold views aligned to current best evidence and understanding of a topic and, in contract, pharmacists who hold alternative views which do not represent current best evidence and practice and who arguably therefore contribute to misinformation. In the context of the COVID pandemic, this could be crudely expressed as pharmacists who recognise the benefits of vaccination and associated policy, and alternatively pharmacists who do not consider vaccination and associated policy to be appropriate and/or safe. But of even greater importance is the intended impact of this upon patients and the public and these will now be considered in turn in greater detail using the example of the COVID pandemic as an example.

Misinformation by pharmacists

The first category of pharmacist to be considered relates to those who hold views which are not aligned to current accepted best practice and evidence relating to COVID vaccination; in summary these pharmacists would be considered to oppose vaccination. An immediate thought is whether this represents a significant enough number of pharmacists to be of concern and it is argued that COVID vaccination hesitancy is a useful proxy for understanding negative views about COVID vaccination. Among pharmacists, COVID hesitancy has been found to range from 13% in Malta (Cushieri et al 2022) to 15% in the US (Jacob et al 2021) with 8% of the latter sample crucially not recommending a COVID vaccine to others (Jacob et al 2021).

The issue of a health care professional holding an alternative view is one that has been recognised many times and is captured in principles such as conscience clauses (GPhC 2017). A classic scenario relates to the provision (or not) of services such as the supply of

contraception. In such cases, it is usually argued that a pharmacist is permitted to hold an alternative view and can decide not to supply contraception provided alternative provision is offered and the issue is managed sensitively (Deans 2013). In the case of COVID, holding an alternative belief about the value of vaccination could arise in a number of scenarios:

- Refusing to participate in a vaccination programme directly
- Providing advice to patients and public in a pharmacy context that vaccination is not appropriate
- Promoting anti-vaccination beliefs more widely via internet and social media.

Arguably the analogy to conscience clauses would only arise in scenario one above, and would require a pharmacist to ensure that a patient was provided with advice on where that service could be obtained. The second scenario which is still related to the provision of pharmacy services qua advice and communication, would not be covered by a conscience clause as this would constitute actively providing information which is not current accepted guidance and practice. Perhaps the most complex area related to the third scenario, which has been the subject of much debate in the context of health professionals more generally and doctors in particular. There has been surprisingly little written about pharmacist's active promotion of misinformation online but it is argued to involve the same principles and concerns. These relate to several important factors such as the power of internet mediated information (Christie 2021, Pennycook and Rand 2021), the perceived credibility of health care professionals' views and also appeals to individual freedom of speech (Yang and DeRoo 2022). The predominant view in existing literature is that health professionals' promotion of misinformation online is not appropriate and there is public support also, with a US survey of the public supporting the disciplining of doctors who intentionally spread COVID misinformation (Rubin 2022). However, explicit guidance on this is lacking and, in the UK, whilst there is some guidance to support pharmacists in relation to maintaining professionalism online, this focuses more on professional-personal boundaries and does not explicitly cover misinformation (GPhC 2022). The broader nature of online misinformation dissemination has also been argued to lead to a potential lack of legal enforcement for healthcare professionals since, like the first two scenarios above, it is not targeting individual patients and is not what is termed in the US professional speech (Yang and DeRoo 2022). There is surprisingly little ethical reflection on misinformation and health care professional responsibilities; Reflecting on nurses' role in hesitancy, Dinkins and Sorrell (2021) draw on utilitarian, deontological and principles such as autonomy non-maleficience and the harm principle to justify nursing interventions to address misinformation, and implicitly would reject the position of pharmacists with alternative views.

Role of pharmacists who follow current best practice and evidence and misinformation

In contract to the scenarios considered above, which concern pharmacists who actively promote alternative views about COVID, it is clear that pharmacists who do uphold current

best practice and evidence in relation to COVID will not encounter any of the three scenarios above. However, key concerns still arise in relation to what role these pharmacists may have specifically in relation to COVID misinformation. For some writers, this involves continuing to undertake existing practices and simply providing current best practice and evidence when requests from the public and patients are made (Erku et al 2021). Others have more creatively argued that behaviour change theory such as the health belief model can be used to ensure *pharmacists 'have a direct role in combatting misinformation and helping patients select healthy behaviours'* (Carico et al 2021 p 1987). Others have gone further and argued that a much more active role is required and:

> *Pharmacists must actively combat and correct medication misinformation. Actively combating misinformation is a professional responsibility and public health goal especially during a concurrent pandemic and infodemic.* (Marwitz 2021)

Suggested activity includes actively attempts to engaging in pandemic-related research, acting as role-models by being vaccinated themselves (Wubishet et al 2022), checking the veracity of internet sources, reporting of websites that are considered to carry fake news and misinformation, and providing patients and the public with credible alternative explanations in contrast to misinformation sources (Marwitz 2021)

Such active sentiments are echoed in the wider literature about doctors and other health professionals and misinformation (O'Connor and Murphy 2020) and although these typically focus on direct clinical practices, some go further; pre-dating the COVID pandemic but of considerable salience, Wu and McCormick (2018) argue that health professionals must go beyond merely correcting misinformation in patient encounters and should actively correct this in their wider *'communities and spheres of influence'.* The authors even suggest health professionals should use social media like Twitter to address misinformation and that this is part of their obligation when they chose their health profession.

Implications

In considering the role of pharmacists and misinformation relating to the COVID pandemic, it has been argued that there are two key categories of pharmacist based on those who follow current pandemic best evidence and practice and those who do not. Based on pharmacy hesitancy evidence, this may be a not insubstantial group, who may have some support through conscience clauses to avoid participating in some practices like undertaking vaccinations directly; however, support for actively trying to promote alternative pandemic views to patients or the public, either in a pharmacy setting or more widely on social media and the internet are lacking. The latter prohibition may be supported more through ethical rather than legal or professional justification however. There are also responsibilities for pharmacists who do align with current best evidence and practice, and a number of areas of current pharmacy practice where this can be done, with some arguing that a more pro-active

countering of misinformation is needed beyond the immediate pharmacy setting. The pandemic has exposed again the tensions between individual liberty and freedom of belief and speech, with professional obligations and wider public health ethical concerns about benefits to overall populations.

References

Carico, R Sheppard, J., & Thomas, C. B. (2021). Community pharmacists and communication in the time of COVID-19: Applying the health belief model. *Research in Social and Administrative Pharmacy*, *17*(1), 1984-1987.

Centers for Disease Control and Prevention. (2021). How to address COVID-19 vaccine misinformation. *Vaccine Recipient Education; Centers for Disease Control and Prevention: Atlanta, GA, USA*.

Christie, L (2021) COVID-19 vaccine misinformation. UK Parliament POST Rapid Responses. Accessed online 1/11/22 https://post.parliament.uk/covid-19-vaccine-misinformation/

Cuschieri, S., & Grech, V. (2022). A comparative assessment of attitudes and hesitancy for influenza vis-à-vis COVID-19 vaccination among healthcare students and professionals in Malta. *Journal of public health*, *30*(10), 2441-2448.

Deans Z. Conscientious objections in pharmacy practice in Great Britain. Bioethics. 2013 Jan;27(1):48-57

Dinkins, C.S., Sorrell, J.M., (January 29, 2021) "Ethics Column: Resisting Vaccination: How Can Nurses Respond Ethically?" *OJIN: The Online Journal of Issues in Nursing* Vol. 26, No. 1.

Erku, D. A., Belachew, S. A., Abrha, S., Sinnollareddy, M., Thomas, J., Steadman, K. J., & Tesfaye, W. H. (2021). When fear and misinformation go viral: Pharmacists' role in deterring medication misinformation during the'infodemic'surrounding COVID-19. *Research in Social and Administrative Pharmacy*, *17*(1), 1954-1963.

General Pharmaceutical Council 2017 In Practice: Guidance on Religion, Personal Values and Beliefs.

General Pharmaceutical Council 2022 Demonstrating Professionalism Online.

Jacob, S.S., Bridgeman, M.B., Kim, H., Toscani, M., Kohler, R., Shiau, S., Jimenez, H.R., Barone, J.A. and Narayanan, N., 2021. Pharmacists' perceptions and drivers of immunization practices for COVID-19 vaccines: results of a nationwide survey prior to COVID-19 vaccine emergency use authorization. *Pharmacy*, *9*(3), p.131.

Lewandowsky, S., Ecker, U. K., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and its correction: Continued influence and successful debiasing. *Psychological science in the public interest*, *13*(3), 106-131.

Marwitz, K. K. (2021). The pharmacist's active role in combating COVID-19 medication misinformation. *Journal of the American Pharmacists Association*, *61*(2), e71-e74.

O'Connor, C., & Murphy, M. (2020). Going viral: doctors must tackle fake news in the covid-19 pandemic. *Bmj*, *369*(10.1136).

Pennycook, G., & Rand, D. G. (2021). The psychology of fake news. *Trends in cognitive sciences*, *25*(5), 388-402.
Petrovic M., Roberts R., Ramsay M. (2001). Second dose of measles, mumps, and rubella vaccine: Questionnaire survey of health professionals. *British Medical Journal*, 322, 82–85.
Wu, J. T., & McCormick, J. B. (2018). Why health professionals should speak out against false beliefs on the internet. *AMA journal of ethics*, *20*(11), 1052-1058.
Wubishet, B.L., Tesfaye, W.H., Khan, M.N., Thomas, J., Tuffaha, H., Comans, T.A., Scuffham, P. and Erku, D.A., 2021. Public hesitancy to COVID-19 vaccine and the role of pharmacists in addressing the problem and improving uptake. *Journal of Pharmacy Practice and Research*, *51*(6), pp.494-500.
Yang, Y. T., & DeRoo, S. S. (2022). Disciplining Physicians Who Spread Medical Misinformation. *Journal of Public Health Management and Practice*, *28*(6), 595-598.