PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	How timely is access to palliative care medicines in the community? A mixed methods study in a UK city
AUTHORS	Miller, Elizabeth; Morgan, Julie; Blenkinsopp, Alison

VERSION 1 – REVIEW

REVIEWER	Professor Ellen Schafheutle Division of Pharmacy and Optometry School of Health Sciences Faculty of Biology, Medicine and Health The University of Manchester
REVIEW RETURNED	06-Feb-2019

GENERAL COMMENTS	This paper reports the role of community pharmacies in the timely supply of medicines needed in the final stages of life, which is an important and difficult time for patients, their relatives and healthcare professionals, and one where community pharmacy have the potential to make a significant contribution. The study is original in that it appears to be the first to audit the supply of these particular medicines; it also seeks qualitative views from community pharmacists and a number of other healthcare stakeholders, and surveys those collecting the prescribed 'palliative medicines'. The authors acknowledge the limitations of this study, which are mainly related to the small number of just 5 pharmacies participating in this 6-month audit. I provide detailed comments on how this manuscript could be improved. However, certainly as this paper is framed at the moment, I do not think it makes its message to a multi professional audience/ readership sufficiently clear and, as such, in its current form may be better suited to a pharmacy journal. GENERAL COMMENTS Overall, the paper is unnecessarily long. Much can be condensed and the key policy context etc. strengthened. I will highlight some sections in my comments under each heading where I think detail can be considerably reduced or indeed removed altogether. I think it is very important to add a number of clear definitions which underpin what this paper is about. Firstly, my understanding is that palliative care is not the same as end of life care; so I think it is important that the authors define their understanding clearly, ideally underpinned and referenced with an accepted/ established definition. From reading the paper I think the authors really mean end of life care.

	A number of abbreviations are introduced throughout the paper, but most are not needed, in my opinion. Px (which should actually be Rx, derived from Latin 'recipere' - 'to take') should just be written as the word 'prescription'. NMP (page 10, line 41) is not required as an abbreviation, as it is only used once INTRODUCTION A number of references are required to support the statements made in the sentences ending in lines 16, 20, 25, 35 (page 3), and lines 12, 24, on page 4. Some detail needs to be better explained (and supported with appropriate references) for the non-pharmacy and even non-end of life specialist readership, such as: local formularies (page 3, line 34); legal errors particularly CDs (esp. for international audience page 3, line 43). What are 'stock lists' and what is on them (page 4, line 5). I would suggest that J Stuart's unpublished MSc dissertation (first on page 3, line 45-51) is not included in the paper (that will also cut quite a few words). Where it is cited, other published references are also used in support and they should be sufficient. Or there may be a published conference abstract at least? page 4, lines 49-51: I am not convinced this paper manages to go very far in offering meaningful "recommendations to inform the commissioning of services and future practice" METHODS Is the definition for PMs (lines 21 on page 6) an accepted definition? If so, please add a reference; if not how was this definition informed - see my earlier comment re palliative vs. end of life. Were all recorded data used for analysis? E.g. patient's postal code (page 6, line 31) Page 6, line 41. What is on the stock list? Urgency (page 6, line 50). Was the date on the Rx recorded also? That may give another indication of urgency. Page 7, line 6. Why was the CPPQ used as the basis for the patient questionnaire? One reason might be to make comparisons with general pharmacy customer feedback using this survey. Page 7, line 38. Please include detail on how informed consent was sought to link the customer (patient or representative collecting) survey data and pharmacy/ Rx data. I would think the Rx etc. data is owned by the patient, so it is important to know if and how the representative (or otherwise) could give consent to linkage? Page 8, line 14: no statistical analysis is mentioned here, but at least one such analysis is reported in the findings (page 12, line 50) - which stats test? Page 8, lines 36-43: It would be good to understand better (possibly in the results and discussion also) how triangulation was applied and used. RESULTS Page 10, line 60: where was allergy information got from? This would not normally/ legally be recorded on a Rx. Also table 4 on page 12. Page 3. Is this table needed? If so, please check n which is = 271 for all but with different %?

	Page 13, line 12. I don't recall the SCR being mentioned in the methods, re data collected? Interview finding page 14 and 15 and Box 1. It is difficult to follow an iterative or thematic presentation of interview findings. This should be improved and key quotes need to be incorporated into the text and not presented separately in a box. Page 14, line 40: will readers know what MURs are? And how are they relevant here? Would the pharmacist not have a conversation with the patient or representative as part of the dispensing service they provide? PLACES TO SHORTEN/ DELETE Page 6, line 27. It should suffice to say data collection for this audit was for 6 months. Page 10, Table 2. Remove as all required information can be incorporated into the text. As noted earlier, I suggest removing all in text citations of J Stuart's MSc dissertation. Page 18, lines 51-53. The Medicines Act does not need to be mentioned here, as the relevant CD Rx writing requirements are in the Misuse of Drugs Regulations. Page 19, lines 7-22. The Misuse of Drugs Act may date back to 1971, but the regulations made under the Act are much more recent, so I would be careful about these comments. Equally, EPS was not part of this study, so - unless supported with further evidence pointing in this direction - why introduce this commentary here? Page 19, lines 39-50. Detail contained here. The same goes for comments on community pharmacy cuts mentioned on page 20, lines 49-55. Page 20, line 9: This may be the first study looking specifically at this area, but there are other studies on use of community pharmacies etc. REFERENCES 16. Is this the most recent annual publication of these? 20 is not complete, place of publication? 22. Ditto 23. Needs a web address

REVIEWER	Rhiannon Braund NZPhvC, DSM, University of Otago
REVIEW RETURNED	12-Mar-2019

GENERAL COMMENTS	As end-of-life care becomes more embedded in the continuum of health care, adequate research into to the factors that can cause unnecessary delays to timely medicine access and impact of the patient and care-team is important. This study is of interest given the sequential use of mixed methods to firstly quantify the "problem" and then qualitative aspects to provide context to what the barriers are. As acknowledge by the authors, the number of sites that participated was low, but the findings could be extrapolated. My comments are minor in nature: On page 4 the overarching question is stated as "what is the community pharmacists role in the delivery of timely access to palliative care medicines" , I think that the study is not about the "role" but what are the "barriers". In the introduction, and throughout I think, there was very little mention of the potential for these medicine to be diverted. I know that space considerations was one aspect mentioned, but I am

	also aware that many pharmacies do not wish to hold large supplies of these medications, for risk of being targeted. Did this come through in the interviews? The methodology was well constructed. I was interested in the relatively low error rate on these prescriptions, and wonder how this compares to other medications. In Table 2 I would leave the values as whole numbers. In the boxes representing the findings of the interviews, I wonder if sub-themes could be identified, i.e. under timely access, there were issues around supply (i.e. from a wholesaler), and communication (i.e. forewarning the pharmacy, or prescribing what the pharmacy held). This indicated a different level of interaction, and showed HCP that considered pharmacists "part of the team" and others that saw pharmacists as "supply". I was particularly interested in the lack of awareness of which pharmacies provided this service, and the perceived concerns around "confidentiality". I think the authors could be bolder in some recommendations for practice. In summary this is a well considered and timely study, possible limited by low number of sites, but adds value to the literature in terms of barriers that need to be considered if these services are to be more widely implemented.

VERSION 1 – AUTHOR RESPONSE

Referee comments and changes made – Elizabeth Miller

Manuscript ID bmjopen-2019-029016

Reviewers comments	**Revisions made**	**Comments**
Reviewer 1		
Clarification of palliative/end of life care	Definition added to clarify end of life care i.e. medicines in the last 12 months of life	
Unnecessary abbreviations	Removed	
Add references to support statements in introduction	References added where appropriate	
Making terms understandable for non-pharmacy/international audience	Paper amended to provide clarification, further detail or remove unnecessary terms	
Unpublished references	Removed where other references available.	
Recommendations to inform the commissioning of services and future practice	Recommendations strengthened and made more explicit.	

Definition of palliative medicines (PMs)	No accepted definition – specified list of medicines provided in study and clarification added to paper	
Data analysis (several comments)	Clarification of items used in data analysis to address these comments Removal of postal code in recorded data.	
Why CPPQ was used as a basis for the patient questionnaire	Used as standard instrument, readily available and could be modified at no cost.	
Consent to link the customer survey data and prescription data	This was implied, rather than explicit, consent. Customer survey information sheet provided further information on the research and contacts for further information. Appropriate ethical approval was sought and obtained.	
Triangulation	Additional information added to results and discussion on how triangulation applied and used	
Allergy information	Clarified on table 3 allergy information from pharmacy system. Table 4 removed.	
Summary Care Record (SCR)	More information provided in methods	
Presentation of interview findings	Boxes removed and quotes incorporated into text. This has resulted in a higher word count.	
Medicines Use Reviews (MURs)	Reference to MURs removed	
Length of paper	Reviewed the suggested pages and removed detail to address reviewer comments and shorten overall length of paper	
References	Updated as suggested by the reviewer	

Reviewer 2		
Overarching question on community pharmacists' role	Amended wording to state barriers rather than role	
Diversion of medicines	Diversion of drugs not mentioned explicitly in interviews	
Low error rate on prescriptions	Compared to previous published research but data not specific to palliative care or controlled drugs. Error rate may be time/location dependent. Explanation of CCG template for prescribing PMs used	
Table 2	Now removed and results incorporated into text as per reviewer 1.	
Interview findings	Findings amended to try and incorporate main themes, full detail of sub-themes not possible within word count	
Awareness of service and confidentiality	Recommendations for practice strengthened	
Summary	Added to strengths and limitations of study	

VERSION 2 – REVIEW

REVIEWER	Rhiannon Braund NZPhvC, University of Otago, Dunedin, New Zealand
REVIEW RETURNED	20-Jun-2019

GENERAL COMMENTS	Thank you for addressing the comments. An interesting piece of work

VERSION 2 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 2

Reviewer Name: Rhiannon Braund

Institution and Country: NZPhvC, University of Otago, Dunedin, New Zealand

Please state any competing interests or state ‘None declared’: None declared

Please leave your comments for the authors below

Thank you for addressing the comments. An interesting piece of work

Authors’ Response:

We thank the reviewer for their comments.