PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	A cross-sectional questionnaire study of the experiences of community pharmacists in Northern Ireland during the early phases of the COVID-19 pandemic: preparation, experience and response
AUTHORS	Patterson, Susan M.; Cadogan, Cathal; Barry, Heather; Bennett, Kathleen; Hughes, Carmel

VERSION 1 – REVIEW

REVIEWER	Cooper, Richard University of Sheffield, ScHARR
REVIEW RETURNED	14-Jun-2022

GENERAL COMMENTS	This paper adds to the burgeoning evidence around how health professionals responded in the pandemic and focuses on community pharmacists. Important insights and could be of value in future preparedness planning. Only a few relatively minor suggestions: - abstract quite long and perhaps shorten in places (percentages and not n= for example). Also refers to 'workforce' but this was only to pharmacists so should refer to the latter and not wider team (dispensers, checking technicians, assistants etc). - intro gave references to similar pharmacy and pandemic papers but very little detail and could be expanded so reader gets more of a sense of existing evidence. (P5l20 refers to importance of medicines which gave a strange emphasis (particularly as community pharmacy is moving away from this!) - methods very detailed and only two main queries: can it be confirmed that no pharmacist was able to complete this twice (eg working in a different pharmacy as a locus or as part of a chain? Also, was any comparison made with the demographic characteristics of the responders to the overall pharmacist population in Table 1 (ie was the sample sufficiently similar in terms of key things like gender, age, chain, independent employer etc)? Some repetition (p7l35 and p6 l50/51 repeats publicly available contact details) p7l7 is 'confidence interval' more commonly used/understood than 'precision'? p8l2v SPSS reference seems to be in Harvard and not numbered Vancouver with the SPSS version going in the reference list. - Results were very detailed again. I found percentages harder to read when in brackets and writing only 'n' looked odd and suggest 'n=' or better switch the emphasis to '% (n=)'. Table 3 runs over two pages but not an issue when online! Remove 'questionnaire section' wording as this is quite obvious. p10l37 'COVID-19 related issues' ie no hyphen after 19? Table 5 refers to 'don't know' but is this appropriate and for example would not cover 'unsure.' Former implies having no insight but latter covers having say conflicting or multiple views and not able to reach a decision.

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.

	- discussion summarised key findings but could have been stronger linking to existing literature (see earlier comment) and only refers to 'previously reported' and 'noted elsewhere' - this suggests the study found similar things and if so, could this be emphasised more but also were there no differences and contrasts in other settings. The only other key omission perhaps even staying in the UK was to compare pharmacy to other health services. Could the authors reflect on the status of community pharmacists in NI compared to other HCP and NHS workers? Interesting study showing how agile NI pharmacists were and summarising the extreme measures needed at this challenging time. Interesting to reflect that some staff did not follow guidance on things like PPE and is this of concern?

REVIEWER	The University of Manchester, Stopford Building, Oxford Road, Manchester, Division of Pharmacy, School of Health Sciences, Faculty of Biology Medicine and Health
REVIEW RETURNED	18-Jun-2022

GENERAL COMMENTS	Please note I was invited to review this quantitative paper and also a qualitative paper entitled ""It stayed there, front and centre": Perspectives on community pharmacy's contribution to front-line health care services during the COVID-19 pandemic" by the same authors. I accepted to review both papers, as I thought there may be a way to connect the two papers, particularly if both are accepted by BMJ Open. General comments This paper reports the findings from an important study investigating how pandemic measures were implemented and services changed at two time points, in the very early stages of the COVID-19 pandemic, and a few months later. The paper is very well written and easy to read. It does feel that it could be shortened, particularly in the discussion, so that the key message and novel insights can become a clearer focus. Introduction: Possibly in the introduction – or elsewhere if deemed more appropriate – it may be helpful to add dates of guidance around protective policies, measures and funding mechanisms, including whether there were differences in dates when pharmacy staff were included in protective measures and guidance issued to the NHS. I am less familiar with the situation in Northern Ireland, but I know that in England community pharmacies were initially not included in protective equipment for which NHS staff were eligible, for example. Also, NHSE funded some additional services from community pharmacies in the early stages, such as extended opening (particularly over the Easter Bank Holidays) and home delivery services to vulnerable patients – were similar measures implemented in NI? Some of this is referred to on page 12/13, but it would be helpful to introduce the policy context in the introduction, and focus clearly on survey findings in the results section. Methods: Page 6 (7 BMJ Open): How was it ensured that staff who were called for survey completion had seen the study information, and was this offered to be viewed if not? Page 7/8, line 21: Were no inferential statistics performed? PPI. Great to see involvement. Were they involved in data analysis and particularly interpretation? Results:

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.

	Page 9/10: Implementation of preventive strategies, especially during the first wave: Is there any indication of time, i.e. how long it took or if there were any delays, where staff felt unprotected? Table 3, page 9/10: - 'in the shop' – were community pharmacies really referred to as 'shops' in the questionnaire? Or does this refer to the 'shop floor'? If so, was a difference made between how measures were implemented 'behind the counter', to ensure a level of protection amongst pharmacy staff? - 'lunchtime closing' – did this question differentiate between pharmacies which closed over lunch pre-pandemic vs. those which introduced it in response to the COVID-19 pandemic? Page 11/12: See my earlier comment re introducing background to policy change and services in general in the introduction, and then focussing on actual uptake in the results – it is very interesting. Throughout the results, I think it would be helpful to identify clearly when findings have been obtained in response to open questions; reported percentages can then be viewed with this awareness. I am also wondering whether it may be worth doing some comparative analysis, particularly looking at the different areas in NI, or comparing urban vs. rural areas, to investigate whether there were any differences in pandemic preparedness or service provision – I appreciate that where uptake was high, any such analysis will be difficult to perform. Discussion: The discussion is quite long and could be shortened, so that the key findings and novel contribution can be clearer. Are there any points of learning or recommendations which could be made about the role of community pharmacy as responders to a pandemic specifically, and as healthcare providers, integrating with other NHS/ publicly funded services?

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Dr. Richard Cooper, University of Sheffield Comments to the Author:

This paper adds to the burgeoning evidence around how health professionals responded in the pandemic and focuses on community pharmacists. Important insights and could be of value in future preparedness planning. Only a few relatively minor suggestions:

<u>Response</u>: We thank the reviewer for the helpful and constructive comments which have strengthened the paper.

- abstract quite long and perhaps shorten in places (percentages and not n= for example). Also refers to 'workforce' but this was only to pharmacists so should refer to the latter and not wider team (dispensers, checking technicians, assistants etc).

<u>Response</u>: We have now only reported the percentages (n= has been removed) and have referred specifically to community pharmacists as opposed to the wider community pharmacy team.

- intro gave references to similar pharmacy and pandemic papers but very little detail and could be expanded so reader gets more of a sense of existing evidence. (P5l20 refers to importance of medicines which gave a strange emphasis (particularly as community pharmacy is moving away from this!)

<u>Response:</u> We have added some further detail to the introduction as requested [page 4 (second and final paragraph) and page 5 (first paragraph)], including details about the over-arching three-phase study. However, we have retained the comment about the importance of medicines, and have edited

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.

this slightly, as the taking of medicines is widely considered to be the most common intervention experienced by patients and it was essential that supply was maintained during the pandemic when many other aspects of health care were not available/accessible (page 4, paragraph 3).

- methods very detailed and only two main queries: can it be confirmed that no pharmacist was able to complete this twice (eg working in a different pharmacy as a locus or as part of a chain?

Response: We are confident that no pharmacist completed the questionnaire twice as the researcher was able to confirm this. A line to this effect has been added to the Method, page 7.

Also, was any comparison made with the demographic characteristics of the responders to the overall pharmacist population in Table 1 (ie was the sample sufficiently similar in terms of key things like gender, age, chain, independent employer etc)?

Response: We did not undertake any formal analysis of the similarities/differences between the sample and the overall pharmacist population as in the case of the latter, information on many of these characteristics is not publicly available.

Some repetition (p7l35 and p6 l50/51 repeats publicly available contact details)

Response: This repetition has now been removed from page 6.

p7l7 is 'confidence interval' more commonly used/understood than 'precision'?

Response: Thank you for this comment. We agree that confidence interval is perhaps better understood than precision and have revised the manuscript to state 'and to estimate the percentage response to any questions in the questionnaire with a 95% confidence level to within ±7.5% of any questionnaire responses.' (see Method, page 6).

p8l2v SPSS reference seems to be in Harvard and not numbered Vancouver with the SPSS version going in the reference list.

Response: We thank the reviewer for this comment and have now added a number (Ref 12) to the SPPS reference.

- Results were very detailed again. I found percentages harder to read when in brackets and writing only 'n' looked odd and suggest 'n=' or better switch the emphasis to '% (n=)'.

Response: We thank the reviewer for this suggestion and have now reported findings as % (n=) where appropriate.

Table 3 runs over two pages but not an issue when online! Remove 'questionnaire section' wording as this is quite obvious.

Response: We have removed 'questionnaire section' from each of the headings throughout the manuscript.

p10l37 'COVID-19 related issues' ie no hyphen after 19?

Response: Strictly speaking this should be hyphenated, but in view of the hyphen being used for COVID-19, we agree that this looks overly busy and have removed it in this instance.

Table 5 refers to 'don't know' but is this appropriate and for example would not cover 'unsure.' Former implies having no insight but latter covers having say conflicting or multiple views and not able to reach a decision.

Response: We thank the reviewer for this comment, and have now retitled this column in Table 5 heading as 'Don't know/Unsure' to cover the range of responses that were received.

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.

- discussion summarised key findings but could have been stronger linking to existing literature (see earlier comment) and only refers to 'previously reported' and 'noted elsewhere' - this suggests the study found similar things and if so, could this be emphasised more but also were there no differences and contrasts in other settings.

Response: We have revised the Discussion, noting similarities, and some of the important insights identified in this study. These changes have been made throughout the Discussion and are highlighted in yellow [page 19 (first paragraph, second paragraph) and page 20 (final paragraph)].

The only other key omission perhaps even staying in the UK was to compare pharmacy to other health services. Could the authors reflect on the status of community pharmacists in NI compared to other HCP and NHS workers?

Response: In an effort to provide a succinct Discussion (as has been recommended by the other reviewer), we have opted not to compare pharmacy with other health services in this paper. However, such a comparison does form part of the Discussion of an accompanying paper (submitted to the same journal and now cited as reference 9) which describes a qualitative study with community pharmacists and a diverse range of stakeholders in which comparisons with other professions were discussed and highlighted (Page 20, final paragraph).

Interesting study showing how agile NI pharmacists were and summarising the extreme measures needed at this challenging time. Interesting to reflect that some staff did not follow guidance on things like PPE and is this of concern?

Response: We have highlighted in the Discussion that the information received on a range of issues was overwhelming and sometimes contradictory. PPE was one such topic and we have now clarified this on page 19 (third paragraph) by using PPE as a distinct example, where guidance/evidence was not always clear.

Reviewer: 2
Prof. Ellen Schafheutle, The University of Manchester, Stopford Building, Oxford Road, Manchester
Comments to the Author:
Please note I was invited to review this quantitative paper and also a qualitative paper entitled ""It stayed there, front and centre": Perspectives on community pharmacy's contribution to front-line health care services during the COVID-19 pandemic" by the same authors. I accepted to review both papers, as I thought there may be a way to connect the two papers, particularly if both are accepted by BMJ Open.

General comments
This paper reports the findings from an important study investigating how pandemic measures were implemented and services changed at two time points, in the very early stages of the COVID-19 pandemic, and a few months later. The paper is very well written and easy to read. It does feel that it could be shortened, particularly in the discussion, so that the key message and novel insights can become a clearer focus.

Response: We thank the reviewer for these very constructive comments. The other reviewer asked some additional text to be added to the Discussion, but we have tried to edit other sections of the text in the Discussion to ensure that we do not have an excessive word count.

Introduction:
Possibly in the introduction – or elsewhere if deemed more appropriate – it may be helpful to add dates of guidance around protective policies, measures and funding mechanisms, including whether there were differences in dates when pharmacy staff were included in protective measures and guidance issued to the NHS. I am less familiar with the situation in Northern Ireland, but I know that in England community pharmacies were initially not included in protective equipment for which NHS staff were eligible, for example. Also, NHSE funded some additional services from community pharmacies in the early stages, such as extended opening (particularly over the Easter Bank Holidays) and home delivery services to vulnerable patients – were similar measures implemented in

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.

NI? Some of this is referred to on page 12/13, but it would be helpful to introduce the policy context in the introduction, and focus clearly on survey findings in the results section.

Response: We thank the reviewer for this very useful comment. We have moved text from the Results section which had outlined the major policy changes into the Introduction (second paragraph). Hopefully, this provides the reader with some clearer context about the changes that happened in community pharmacy in Northern Ireland at that time.

Methods:
Page 6 (7 BMJ Open): How was it ensured that staff who were called for survey completion had seen the study information, and was this offered to be viewed if not?

Response: This information is outlined under the Recruitment and consent section. Briefly, summary information about the study had already been circulated from a range of sources. On initial contact with pharmacists, the researcher briefly outlined the study, referred to the previously circulated information and if the pharmacist wanted more information, this was provided via email.

Page 7/8, line 21: Were no inferential statistics performed?

Response: This study was exploratory in nature and the analyses descriptive; we were not able to compare characteristics of our sample to the community pharmacist population of Northern Ireland as there are very little publicly available data. In addition, we had not stated any explicit hypotheses a priori as to the association between participants' demographics and their questionnaire responses and did not conduct any post-hoc analysis of the data which is not recommended.

PPI. Great to see involvement. Were they involved in data analysis and particularly interpretation?

Response: Our PPI representatives who sat on the Study Advisory Group were involved in advising on the content of the questionnaire. As the research progressed, we presented our findings to the Group, and again, PPI members commented on these (some text-page 5-has been added to describe this), but did not actively contribute to the analysis per se.

Results:
Page 9/10: Implementation of preventive strategies, especially during the first wave: Is there any indication of time, i.e. how long it took or if there were any delays, where staff felt unprotected?

Response: Thank you. This is an important point, but this was not a question that we explicitly asked in the questionnaire and therefore do not have such data.

Table 3, page 9/10:
- 'in the shop' – were community pharmacies really referred to as 'shops' in the questionnaire? Or does this refer to the 'shop floor'? If so, was a difference made between how measures were implemented 'behind the counter', to ensure a level of protection amongst pharmacy staff?

Response: Thank-you for this comment. We had edited the statement from the original questionnaire for inclusion in Table 3 (see the complete questionnaire which was uploaded with the manuscript) to read 'Management of social distancing in the shop'. The full statement had been 'Management of social distancing, e.g. number of people in the shop, floor markings for queuing in the pharmacy. We have now edited the text in Table 3 which now reads 'Management of social distancing'.   We did not differentiate between measures that were taken within the pharmacy or 'behind the counter''. All questions/statements relating to Table 3 can be found in the section in the questionnaire relating to 'Preventing the spread of COVID-19'.

- 'lunchtime closing' – did this question differentiate between pharmacies which closed over lunch pre-pandemic vs. those which introduced it in response to the COVID-19 pandemic?

Response: This question (as indicated in Table 3) referred specifically to the implementation of lunchtime closing between March-May 2020. We did not ask if pharmacies had such a policy before March 2020.

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.

Page 11/12: See my earlier comment re introducing background to policy change and services in general in the introduction, and then focussing on actual uptake in the results – it is very interesting.

Response: We thank the reviewer for this comment and have edited the text in the Introduction accordingly.

Throughout the results, I think it would be helpful to identify clearly when findings have been obtained in response to open questions; reported percentages can then be viewed with this awareness.

Response: We thank the reviewer for this comment. We have addressed this issue on page 16 in which pharmacists were questioned about which aspect of the pandemic they had felt most/least prepared for.

I am also wondering whether it may be worth doing some comparative analysis, particularly looking at the different areas in NI, or comparing urban vs. rural areas, to investigate whether there were any differences in pandemic preparedness or service provision – I appreciate that where uptake was high, any such analysis will be difficult to perform.

Response: This study was descriptive and we were not able to compare characteristics of our sample to the community pharmacist population of Northern Ireland as there are very little public available data. In addition, we had not stated any explicit hypotheses a priori as to the association between participants' demographics and their questionnaire responses and did not conduct any post-hoc analysis of the data which is not recommended.

Discussion:
The discussion is quite long and could be shortened, so that the key findings and novel contribution can be clearer. Are there any points of learning or recommendations which could be made about the role of community pharmacy as responders to a pandemic specifically, and as healthcare providers, integrating with other NHS/ publicly funded services?

Response: We have edited the discussion, and highlighted the key insights from this study. Because of the nature of this study, and the questions that were asked, we have been cautious in our comments about pharmacy in future pandemics and integrating with other services. The accompanying paper (qualitative study) and referenced in this paper (reference 9) does highlight these issues, based on the reflections of participants, as these were specifically explored in the interviews.

BMJ Open: first published as 10.1136/bmjopen-2022-064545 on 22 September 2022. Downloaded from http://bmjopen.bmj.com/ on June 20, 2024 by guest. Protected by copyright.