

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Delayed / back up antibiotic prescriptions – what do the public think?
AUTHORS	McNulty, Cliodna; Lecky, Donna; Hawking, Meredith; Quigley, Anna; Butler, Christopher

VERSION 1 - REVIEW

REVIEWER	Nick Francis Cardiff University Wales
REVIEW RETURNED	03-Sep-2015

GENERAL COMMENTS	<p>I was very pleased to review this interesting study that addresses important questions around public perceptions of delayed/back-up antibiotics. In general, I feel the paper makes a valuable contribution, and I would like to see it published. However, I would like to suggest one key change and a few minor changes.</p> <p>Key change:</p> <p>1) I would like to see an analysis comparing how much respondents favour delayed prescribing with their experience of it (which could be divided into 3 categories, 'Used it', 'Not used it by heard of it', and 'Not heard of it'). Some reference is made to the fact that women were more likely to have heard of it and less likely to favour it, but a direct comparison would be helpful in determining whether increased awareness is likely to lead to greater acceptability or not.</p> <p>Minor comments:</p> <p>Introduction</p> <p>2) I think the statements on lines 24-28 should be toned down a bit. I do not agree that the papers by Little and Coco (refs 9 and 10) provide firm evidence that use of delayed prescribing will not result in increased complications and is probably the least costly option. In Little's paper patients who received delayed antibiotics were not the same as those who received immediate or no antibiotics, and in Coco's paper the proportion that collected their delayed prescription was much lower than in the current study.</p> <p>Methods</p> <p>3) I think there is a typo on line 5 of page 6, 'modified developed'.</p> <p>Discussion</p> <p>4) I don't completely agree with the interpretation that the low levels of awareness and acceptance found indicate the need for efforts to increase acceptance. The additional analysis that I suggest above may shed a bit more light on this but, as you suggest, there is a need for a greater understanding of the reasons for fairly low levels of acceptance (amongst patients and clinicians) before we can conclude that more should be done to increase acceptance amongst the public. Therefore, I suggest that the interpretation / conclusions</p>
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	<p>be toned down a bit in this regard.</p> <p>Competing interests - very minor point The Wales School of Primary Care Research no longer exists and CCB is not the Director of the organisation that replaced WSPCR.</p>
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REVIEWER	Jonathan Cooke Imperial College London United Kingdom
REVIEW RETURNED	08-Sep-2015

GENERAL COMMENTS	<p>This paper is an up to date analysis of the perceptions and acceptability by the general public in England of the concept of delayed antibiotic prescriptions. The work describes the results from a face-to-face computer assisted survey undertaken in randomly selected households using qualitative methods.</p> <p>This work is highly relevant due to the importance of dealing with antimicrobial resistance (AMR) as well as trying to assess the understanding and co-operation of the patient.</p> <p>The research team are well-known as leaders of groups assessing attitudes of patients to antimicrobial prescribing and AMR concepts as well as interventions designed to attenuate antibiotic prescribing in general practice.</p> <p>The work is well written, identifies the main outputs, considers strengths and limitations and offers suggestions for further research. The tables and figures offer additional clarification for the paper.</p> <p>Clarification: Please can you report the total number of members of the public approached to undertake the interviews? Please can you advise whether NHS R&D approval was obtained. Please can you advise on what information was provided to the interviewees?</p> <p>Minor correction: In the abstract please replace "A representative sample of 1,625 adults aged 15 years and recruited from....." with "A representative sample of 1,625 adults aged over 15 years and recruited from....."</p> <p>Figure 1. Please consider alternative colouring for the chart as the figures are difficult to read.</p>
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REVIEWER	Bruce Arroll University of Auckland New Zealand
REVIEW RETURNED	26-Sep-2015

GENERAL COMMENTS	<p>An interesting and well conducted study. It would be helpful if the authors could "speculate" as to the actual response rate - given that 1 in 4 households replied. The percentage who received an antibiotic 34% would be low by New Zealand standards (50 to 55%). If there is collateral UK data on antibiotic use that suggests a similar rate to 34% then the authors could be very confident of their survey population. My own view on delayed prescriptions is that they are a necessary evil but the long term goal is to get patients satisfied with an explanation and no antibiotics.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Nick Francis

Institution and Country: Cardiff University, Wales

1) I would like to see an analysis comparing how much respondents favour delayed prescribing with their experience of it (which could be divided into 3 categories, 'Used it', 'Not used it by heard of it', and 'Not heard of it'). Some reference is made to the fact that women were more likely to have heard of it and less likely to favour it, but a direct comparison would be helpful in determining whether increased awareness is likely to lead to greater acceptability or not.

Thank you this suggestion has produced some interesting results, which we have added to the paper as a paragraph and Table.

Those 280 respondents who were aware of the term and practice of delayed antibiotics were significantly more likely than those 1163 respondents who hadn't heard of the term or the practice, to be in favour or strongly to GP's, nurses or dentists issuing delayed antibiotic prescriptions for chest, urine, ear or throat infections (49% versus 32% in favour for throat infection and 54% versus 36% in favour for chest infections). Table 3.

Minor comments:

Introduction

2) I think the statements on lines 24-28 should be toned down a bit. I do not agree that the papers by Little and Coco (refs 9 and 10) provide firm evidence that use of delayed prescribing will not result in increased complications and is probably the least costly option. In Little's paper patients who received delayed antibiotics were not the same as those who received immediate or no antibiotics, and in Coco's paper the proportion that collected their delayed prescription was much lower than in the current study.

Thank you we have toned this sentence down a bit.

Delayed antibiotics not only reduce antibiotic use compared to immediate antibiotics, they have similar complication rates,⁹ and costs when treating upper RTIs,¹⁰ and reduce future expectations for antibiotics.¹¹

Methods

3) I think there is a typo on line 5 of page 6, 'modified developed'.

Yes thank you we have deleted the word modified

Discussion

4) I don't completely agree with the interpretation that the low levels of awareness and acceptance found indicate the need for efforts to increase acceptance. The additional analysis that I suggest above may shed a bit more light on this but, as you suggest, there is a need for a greater understanding of the reasons for fairly low levels of acceptance (amongst patients and clinicians) before we can conclude that more should be done to increase acceptance amongst the public. Therefore, I suggest that the interpretation / conclusions be toned down a bit in this regard.

We have changed the first part of the implications – to be in line with the new analysis the referee

suggested:

Half of patients who understand the term are in favour of being offered delayed antibiotics, indicating that there is an opportunity to increase their use in this group. Our research also indicates that there is an opportunity to further increase understanding of, acceptance and use of delayed antibiotic prescribing amongst the general public who do not understand the term or practice.

Competing interests - very minor point

1. The Wales School of Primary Care Research no longer exists and CCB is not the Director of the organisation that replaced WSPCR.

We have deleted this.

Reviewer: 2

Reviewer Name: Jonathan Cooke

Institution and Country: Imperial College, London, United Kingdom

1. Please can you report the total number of members of the public approached to undertake the interviews?

We cannot give the total number of members of the public approached, as interviewers use a quota system to ensure enough respondents in each age, household tenure, working status and gender.

2. Please can you advise whether NHS R&D approval was obtained.

This is stated in the ethical approval section - The Ipsos MORI surveys and interviews were undertaken outside the NHS setting and therefore did not need NHS ethical approval. Consent to take part in the survey was by verbal agreement to participate with completion of the questionnaire considered as indicating consent; respondents were not given any financial incentive. Respondents were able to refuse to participate in the questionnaire at any stage in the process. All data was processed in accordance with the Data Protection Act 1998.

3. Please can you advise on what information was provided to the interviewees?

As described in the methods in italics, respondents were told: The next question is about delayed (or deferred) antibiotics, in which an antibiotic prescription is usually written by a GP, nurse or dentist for use at a later date.

The prescription is usually offered in one of two ways:

Written at the time of diagnosis, to be taken to a pharmacy ONLY if you felt no better or felt worse after several days

An opportunity is offered to return to the surgery to pick up an antibiotic prescription ONLY if you felt no better or felt worse after several days

We have clarified this slightly by changing the word following to "next", and adding respondent were "then" asked.....

4. Minor correction: In the abstract please replace "A representative sample of 1,625 adults aged 15 years and recruited from....." with "A representative sample of 1,625 adults aged over 15 years and recruited from....."

We have added this word.

5. Figure 1. Please consider alternative colouring for the chart as the figures are difficult to read. Did the reviewer have this in colour as provided – as it should have been very clear? We are happy to provide a different format if BMJ Open want it in black and white – but as it will be on-line – I do not think this is necessary – but please advise.

Reviewer: 3
Reviewer Name: Bruce Arroll
Institution and Country: University of Auckland, New Zealand

1. It would be helpful if the authors could "speculate" as to the actual response rate - given that 1 in 4 households replied. We cannot give the total number of members of the public approached, as interviewers use a quota system to ensure enough respondents in each age, household tenure, working status and gender.

2. The percentage who received an antibiotic 34% would be low by New Zealand standards (50 to 55%). If there is collateral UK data on antibiotic use that suggests a similar rate to 34% then the authors could be very confident of their survey population.
Our population is likely to be typical, as the percentage who received an antibiotic 34%, is similar to a previous survey in England in which 32.5% reported being prescribed antibiotics in the past year.¹⁴ WE have added this to the discussion.

3. My own view on delayed prescriptions is that they are a necessary evil but the long term goal is to get patients satisfied with an explanation and no antibiotics.
We presume this is a personal opinion and we do not need to discuss this point in this particular paper.

VERSION 2 – REVIEW

REVIEWER	Nick Francis Cardiff University, UK
REVIEW RETURNED	21-Oct-2015

GENERAL COMMENTS	The reviewer completed the checklist but made no further comments.
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REVIEWER	Bruce Arroll University of Auckland
REVIEW RETURNED	21-Oct-2015

GENERAL COMMENTS	The reviewer completed the checklist but made no further comments.
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