Author's response to reviews

Title: Community Pharmacists Role in Obesity Treatment in Kuwait: A cross-sectional Study

Authors:

Abdelmoneim Awad (amoneim@hsc.edu.kw)
Mohammad Waheedi (mohdw@hsc.edu.kw)

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Author's response to reviews: see over
To: Dr. Jean Adams  
BMC-Public Health

05/08/2012

Re: MS: 3912957207368238- Community Pharmacists Role in Obesity Treatment: A cross-sectional Study

Dear Dr. Adams,

We thank you and the reviewers for the excellent comments.

We meticulously revised the manuscript in the light of the editor and reviewers’ comments and as a result we believe that the quality of the manuscript is now substantially improved.

Included are:
1. Response to the editor and each of the reviewer’s comments with indication of changes made in the manuscript.
2. Revised manuscript.
3. Study questionnaire

I hope our revision satisfies the reviewers and look forward to hearing from you soon.

Yours sincerely,

Dr. Abdelmoneim Awad  
Associate Professor of Clinical Pharmacy  
Chairman  
Department of Pharmacy Practice  
Faculty of Pharmacy  
Kuwait University
**Editor**

1. The discussion section is presented in subheadings as being suggested (pages 12-19)
2. The quality of written English was revised and improved.
3. The manuscript was revised to conform to the journal style.
4. The visible vertical lines of the tables were removed.

**Reviewer: Janet Krska**

**Major compulsory revisions**

1. **Title needs to reflect the setting of the study**

   The title was modified to reflect the setting of the study. The new title is “Community Pharmacists Role in Obesity Treatment in Kuwait: A cross-sectional Study” (page 1).

2. **Abstract methods do not describe in sufficient detail the questionnaire.**

   Description of the questionnaire was provided in the abstract (page 2, paragraph 2, lines 2-8).

3. **Abstract conclusions repeat results and makes suggestions not supported by data.**

   The abstract conclusion was modified (page 3, paragraph 2).

4. **Other recent references to relevant work on weight management in the UK and systematic reviews on pharmacy role in weight management are not cited. The literature review is thus not comprehensive. Published work is also available on general public views of pharmacy weight management services and pharmacy public health services in general, which is also not cited.**

   Old references to Kuwaiti practice that seem of little relevance to the work were deleted. The introduction was modified to include recent references relevant to work on weight management in the UK and other European countries and on general public views of pharmacy weight management services. (page 5, paragraph 1, lines 4-8 and paragraph 2, lines 11-14; page 6, paragraph 1 and paragraph 2, lines 3-5) and references 25,26 (page 6, paragraph 2, line 8).

5. **It is not clear why it was decided to calculate a sample size based on obtaining a difference of 20% in population between two groups. This seems a most unusual method and needs some justification and further explanation.**

   The 20% is not a set value statistics-wise; it represents the difference that has been chosen as being of significance i.e. that a difference of 20% (or more) between group a and b would be of relevance. We determined that the survey would be able to detect at least a 20% difference, with 80% power (there is a 20% probability of a real difference that will not be detected - beta error; false negatives) and 5% significance (there is a 5% probability of a difference being
'found' that is not real; alpha error; false positive) then the sample size calculated. Reference no.28 was used for sample size calculation.

The 20% difference was selected for the sample size calculation as a difference that was considered to be relevant for comparing the respondents perceptions/behaviours regarding obesity counseling since differences less than that would not have important implications for future interventions. The way the text has been written may be what is leading to confusion - "20% difference in population between two groups (male vs female)’ actually mean”. It is not a "20% difference in population" but a "20% difference in proportion" The text was edited to change the 'population' to 'proportion' (page 7, paragraph 2, line 3).

6. Authors need to provide details in the main paper on how pharmacies were selected, (abstract gives some information).

More information is provided in the methods about the selection of pharmacies (page 7, paragraph 2, lines 4-11).

7. Explain how the questionnaire was modified after piloting.

The modifications made were as follows:
i. The question about the approximate proportion of the turnover in the following products groups (prescription only drugs, OTC drugs, Cosmetics and Others please specify…,) was deleted. Many of the participants in the pilot study refused to answer this question because they believe that the requested information is confidential and the pharmacy owner/manager will not allow them to reveal such information.

ii. “Herbal therapies” as an aspect of obesity in the original tool was changed to “Nonprescription products and dietary supplements for weight loss”

iii. The wording of some questions was modified to allow easy readability and comprehension.

8. State how many data collectors were used and how consistency in approach between data collectors was guaranteed/ maximised.

Four data collectors were used to distribute and collect the questionnaires by hand from 220 community pharmacies within the five governorates. The information that should be provided to the study participants was written on a paper and was discussed with the data collectors to ensure the consistency in their approach to the pharmacists. This included the purpose of the study, and that the individual responses of the respondents will not be shared with anyone and will be reported in summary form along with the responses of other pharmacists. Furthermore, that the pharmacists’ names and that of the pharmacies will not be included in the questionnaires The questionnaires were not completed in the presence of the data collectors. The study participants were given one week to complete the survey. However; some of the respondents completed the surveys within 2 weeks. They were provided with the mobile phone numbers of the principal investigator and the co-investigator to ask questions/clarifications.
9. Explain how data collectors ensured anonymity of responses. If they were truly anonymous, confidentiality is not an issue.

The pharmacists’ names and that of the pharmacies were not included in the questionnaires. The only available identity in the questionnaire is the location of the pharmacy (i.e., the governorate at which the pharmacy is located). ID numbers or codes were not used on the questionnaires to identify the pharmacist or the pharmacy.

10. State how many pharmacies were approached to participate.

220 community pharmacies (page 7, paragraph 2, line 7), and (page 10, paragraph 1).

11. Give more details of how t tests were used and correlations were carried out. The statistical methods given in methods are not the same as those reported in results.

\( t \) tests were used to evaluate the differences in means between two groups of the independent variables (gender: males vs. females, age: 20-40 years vs. 41-60 years and experience as practitioners: \( \leq 10 \) years vs. \( > 10 \) years). Correlational analysis was used to measure the association between respondents’ frequency of counseling and their comfort level with counseling, frequency of counseling and perceived effectiveness of aspects of obesity management; and frequency of counseling and perceived confidence in achieving positive outcomes. (page 9, paragraph 2, lines 4-11). The statistical tests given in the methods are similar to those reported in results.

12. The Discussion includes a small section on limitations, but no mention of strengths. Self-reporting and social desirability bias are the only limitations mentioned. No comment is made on the suitability or limitations of the questionnaire used, sampling or response rate.

The section on strengths and limitations of the study was modified as being suggested (page 18, paragraph 3 and page 19, paragraph 1).

13. The Conclusion requires re-drafting. The first paragraph simply re-iterates results and method and the second paragraph makes sweeping generalisations, not drawn from the data in this paper.

The conclusion was modified (page 19, paragraphs 3 and 4).

Minor Essential Revisions

14. The English requires attention throughout.

The quality of written English was improved.
15. The Discussion would be enhanced by expansion of comments on the current suitability of pharmacists expertise in dietary management for weight control, bearing in mind that pharmacists are not trained dieticians, and the somewhat surprising finding that they feel more confident in providing this as opposed to counseling on product use.

The recommended comments were included in the discussion (page 13, paragraph 3, lines 5-7; page 14, paragraph 1 and page 15, paragraph 1, lines 6-13)

16. No mention is made of the type of interventions pharmacists may need to deliver to support weight management, such as motivational interviewing, or behaviour change therapy.

Type of interventions were included in the discussion (page 14, paragraph 1).

Reviewer: Betty Chaar

1. I would have liked to see the survey and read more about how it was constructed. The manuscript needs to explain further on this particular point. Was the survey based on validated US surveys? Did the authors use all items in the US surveys? Were the items in the survey modified for Kuwaiti participants? [more explanation needed]

The basis of developing the study questionnaire was obtained from validated surveys that investigated community pharmacists’ counseling on obesity management and barriers to obesity counseling in the USA (Dastani HB, Brown CM, O'Donnell DC: Combating the obesity epidemic: community pharmacists' counseling on obesity management. *Ann Pharmacother* 2004, 38:1800-1804; O'Donnell DC, Brown CM, Dastani HB: Barriers to counseling patients with obesity: a study of Texas community pharmacists. *J Am Pharm Assoc* 2006, 46: 465-471. The original surveys remained unchanged except for few items that were not applicable to pharmacists in Kuwait. (page 7, paragraph 3). The survey is attached to this document.

Modifications made to the original tool

The initial modifications that were made to the original tool by the authors were as follows:

[a] **Demographic and other characteristics of the respondents**

- Two questions about ethnicity and primary practice site from the original tool were not included in our instrument since these do not exist in Kuwait.
- The question about the highest degree in the original survey was modified to be three questions (Basic qualification in pharmacy, Do you have any postgraduate qualification(s) in pharmacy?, If yes to question (4), please tick below all that apply) included in our instrument.
- Two questions were included in our instrument, which were not in the original tool. These were about location of the pharmacy and the approximate proportion of the turnover in the
following products groups (prescription only drugs, OTC drugs, Cosmetics and Others please specify...).

[b, c, d] Frequency of counseling patients with obesity, comfort level with counseling patients with obesity and perceived effectiveness of obesity treatments

The five aspects of obesity management in the original tool were reduced to four in our instrument due to the lack of self-help groups in Kuwait.

[e] Confidence in achieving positive outcomes as a result of counseling patients with obesity

The nine obesity management related items in the original tool were reduced to seven in our instrument due to the lack of self-help groups in Kuwait.

[f] Barriers to counseling patients with obesity

The questions for barriers in our instrument were similar to those in the original tool. A question was added (other barrier(s), please specify)

[g] Strategies to overcome barriers to obesity counseling

The questions for strategies were similar to those in the original tool

The modified instrument was refined based on discussions with 3 researchers (2 from the Department of Pharmacy Practice, Faculty of Pharmacy and 1 from the Department of Community Medicine, Faculty of Medicine, Kuwait University). Then it was pre-tested for content, design, readability, and comprehension on 15 community pharmacists, and the following modifications were made:

i. The question about the approximate proportion of the turnover in the following products groups (prescription only drugs, OTC drugs, Cosmetics and Others please specify....) was deleted. Many of the participants in the pilot study refused to answer this question because they believe that the requested information is confidential and the pharmacy owner/manager will not allow them to reveal such information.

ii. “Herbal therapies” as an aspect of obesity in the original tool was changed to “Nonprescription products and dietary supplements for weight loss”

iii. The wording of some questions was modified to allow easy readability and comprehension.

The manuscript provided an adequate explanation about the survey with regard to the sociodemographic and other characteristics, frequency of counseling, comfort level with counseling, and the perceived effectiveness of the four aspects of obesity management (page 8, lines 3-14). The remaining part of this page provided the number of the items used to identify the respondents’ perceptions in relation to their confidence in achieving positive outcomes as a result of obesity counseling, the barriers and strategies that could help overcome them; however, these were listed in tables 3, 4 and 5, respectively.
2. How many pharmacies were approached? How many pharmacies are there in Kuwait? The response rate must be carefully reported.

This information was provided on page 7, paragraph 2, lines 4-9 and page 10, paragraph 1. Due to the lack of lists with the names and addresses of community pharmacists in Kuwait, the community pharmacies lists at different governorates were obtained from the Ministry of Health (current at the time of the study) and were used for sample selection. 220 community pharmacies were approached out of a total 287 community pharmacies in Kuwait at the time of the study. A pharmacy employing more than one registered pharmacist, only one was included. 206 pharmacists agreed to participate in the study (response rate 93.6%).

3. Introduction:

a. Where in the world have pharmacists ‘started working with other HCPs...’?

In the USA. It was included in the introduction (page 5, paragraph 1, line 4).

b. ‘Community pharmacies are being recognised as highly suitable health promotion settings due to the high volume of the population that use their services’ Where?

In the UK and Australia, community pharmacies are recognised as the most accessible healthcare settings due to the high volume of the population that use their services (page 5, paragraph 2, lines 3-5).

4. Why is it that pharmacists do not engage that much in counselling when it comes to weight management therapies compared to other countries? What is the extent of use of anti-obesity medicines?

The less involvement of the respondents in counseling about prescription and non-prescription antiobesity products may be explained by their neutral responses to comfort level and effectiveness of both therapeutic interventions. This may be due to their beliefs that these medications are less effective compared to diet and exercise, and with poor safety profiles. Furthermore, the low use of antiobesity therapies in Kuwait compared to other countries could be another contributing factor. In Kuwait, a study was conducted to investigate the general practitioners’ attitudes and current practices in obesity management showed that most of the respondents preferred not to prescribe antiobesity medications [Amal Homoud Al-Jeheidli, Farida Ismael Moquddan, Maha Khalid Al-Rumh, Naheel Naser Salmin. General Practitioners’ Attitudes and Practices toward Managing Obesity. Kuwait Medical Journal 2007, 39 (2):138-143]. (page 15, paragraph 1, lines 6-13).

5. I believe this study should be published, as it brings about awareness of the role a pharmacist could take in weight management and public awareness in Kuwait, and this should be encouraged. I think the authors have conducted an interesting study. However I do advise they acquire good quality editing for publishing in English.

The quality of written English was improved.
Reviewer: Anita Weidmann

Major compulsory revisions

Abstract

1. The different descriptions of the results as % values for some results and mean (SD) values for others makes comparison of the results difficult. It may be more appropriate to show all results as % values (n=x) throughout, to provide the number of respondent and the overall % these reflect.

We preferred to use the mean because it takes into account every response rather than presenting the results as percentages of all the spectrum of responses. Given the ordinal basis of the Likert scale, it remains correct to summarize the central tendency of responses from a Likert scale. Pharmacists’ responses to statements with Likert scale were treated as ordinal data and the results were presented as mean (Standard deviation) to provide a better understanding of the data. In this way a better ordering or ranking of responses was achieved. Pharmacists’ responses to the barriers’ questions with binary choices (yes/no) were reported as % and 95% CI. This was included in the methods of the abstract to avoid confusion and to make it easier for the reader to follow the main outcomes of the study. (page 2, paragraph 2, lines 8-9).

2. I am unclear why the mean values are so low as most are within 2-4. Does that represent an average of 3-4 respondents out of a possible 186? And if that is the case why are the response rates so limited?

The mean values represent the responses of 206 community pharmacists who agreed to participate in the study. As mentioned above the responses were treated as ordinal data and analysed descriptively using SPSS to determine means and standard deviations.

Minor essential revisions

3. Abstract: It may be useful to include the themes of the questionnaire in the methods section as the results section keeps referring to “four aspects of obesity”. It is unclear to the reader which four aspects of obesity are referred to.

The four aspects of obesity were indicated in the abstract (page 2, paragraph 2, lines 4-5).

Methods

4. Did the study population include ALL full licensed pharmacist working in a community pharmacy? If so how many are there in total? – clarify! The sample size returned a figure of 186 pharmacists to be included – please clarify out of how many in total. How was random sampling and stratification done – clarify!
These issues were clarified in the methods (page 7, paragraph 2, lines 4-11).

5. Please clarify who developed the questionnaire and how it was validated.

The basis of developing the study questionnaire was obtained from validated surveys that investigated community pharmacists' counseling on obesity management and barriers to obesity counseling in the USA [Dastani HB, Brown CM, O'Donnell DC: Combating the obesity epidemic: community pharmacists' counseling on obesity management. Ann Pharmacother 2004, 38:1800-1804; O'Donnell DC, Brown CM, Dastani HB: Barriers to counseling patients with obesity: a study of Texas community pharmacists. J Am Pharm Assoc 2006, 46: 465-471. The original surveys remained unchanged except for few items that were not applicable to pharmacists in Kuwait. (page 7, paragraph 3). The survey is attached to this document.

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ii. “Herbal therapies” as an aspect of obesity in the original tool was changed to “Nonprescription products and dietary supplements for weight loss”

iii. The wording of some questions was modified to allow easy readability and comprehension.

6. How were pharmacies approached – face to face, letter, email? – please clarify. Please clarify how the completed questionnaires were returned as the last sentence on page 8 states that they were collected after completion and the following sentence states that the participants were asked to return them anonymously.

On approaching a pharmacy, the data collectors (pharmacists) briefly explained the purpose of the study to the community pharmacist on duty (face to face). The data collectors distributed and collected the questionnaires by hand from 220 community pharmacies within the five governorates. The questionnaires were not completed in the presence of the data collectors. The study participants were given one week to complete the survey. However; some of the respondents completed the surveys within 2 weeks. They were provided with the mobile phone numbers of the principal investigator and the co-investigator to ask questions/clarifications. This paragraph was revised to avoid confusion (page 9, paragraph 1).

Results

7. I am unfamiliar with the use of r-values – please clarify.

Correlation coefficient (r) is a statistic used for measuring the strength of a supposed linear association between two variables.

Discussion/Conclusion

8. It would be beneficial to the context of the findings and the paper to compare the findings to other countries than the USA alone. This is not only true for the study findings but also were the use of technical support within community pharmacy is suggested, a system which has been successfully employed in many European countries as well as the USA.
Studies from other countries than USA were included in the
(i) Introduction (page 5, paragraph 1, lines 4-8 and paragraph 2, lines 11-14; page 6, paragraph 1 and paragraph 2, lines 3-5) and reverences 25,26 (page 6, paragraph 2, line 4).
(ii) Discussion (page 12, paragraph 2, lines 5-6; page 13, paragraph 2, lines 7-9; page 14, paragraph 1; page 16, paragraph 2, lines 5-6 and page 17, paragraph 1, line1).

9. Aspects such as areas of future research and strengths and weaknesses of the study should be addressed more thoroughly.

They were addressed more thoroughly (page 18, paragraph 3 and page 19, paragraphs 1 and 2).

Discretionary revisions

Abstract

10. The last sentence in the Conclusion section sounds like a statement of more study results “Pharmacists are widely accepted as the most accessible health care providers, given the effective professional service training and practical skills…” – I can’t see any evidence for the data collection as part of this study. If these are not principal findings may be re-word.

It was deleted (page 3, paragraph 2).

Results

11. In order to make it easier to follow the coherent flow of the results section it may be useful to use subheadings under which the results of the main study themes are illustrated.

The results section is presented in subheadings as being suggested (Pages 10-11).

Discussion/Conclusion

12. All results are addressed, however this section could may be benefit from using subheadings more effectively as the current layout just uses a string of new paragraphs which impairs the text flow

The discussion section is presented in subheadings as being suggested (pages 12-19).

13. The final paragraph in the Conclusion is not needed.
It was deleted (page 19, paragraphs 3 and 4).

14. **Quality of written English:** Needs some language corrections before being published

   The quality of written English was improved.