Author’s response to reviews

Title: Use of smartphone and perception towards the usefulness and practicality of its medical applications among healthcare providers in Saudi Arabia

Authors:

Mostafa Abolfotouh (mabolfotouh@gmail.com)
Ala’a BaniMustafa (banimustafa.alaa.a@gmail.com)
Mahmoud Salam (mahmoudsalam@hotmail.com)
Mohammed Al-Assiri (assirim@nga.med.sa)
Bader Aldebasi (DebasiB@NGHA.MED.SA)
Ebrahim Buchnak (BushnakIb@NGHA.MED.SA)

Version: 1 Date: 03 Sep 2019

Author’s response to reviews:

Dear Editor,

Thank you for your email with all the reviewers' comments to our manuscript. These comments were reviewed thoroughly and all of them were responded to point by point as shown below. The manuscript was revised based on these comments, with all modifications/corrections highlighted in RED. We will be more than happy to respond to any other comments regarding our manuscript.

Looking forward to receiving from you,

Best regards

Prof. Abolfotouh

Corresponding author
Response to Reviewers’ Comments

Technical Comments:

Editor Comments:

BMC Health Services Research operates a policy of open peer review, which means that you will be able to see the names of the reviewers who provided the reports via the online peer review system. We encourage you to also view the reports there, via the action links on the left-hand side of the page, to see the names of the reviewers.

Reviewer reports:

Nasser Ibrahim Abu-El-Noor, Ph.D (Reviewer 1):

1. The word "installation" is repeated in the following sentence in the abstract "Installation of medical installation was also predicted by physicians (β=0.008, p=0.024)."

Corrected. [abstract-result section]

2. Abbreviation should be written on full at their first appearance and should be avoided to be included in the abstract. For example, KAMC appeared twice in the abstract and introduction before the authors defined it in the method section.

Done.[highlighted all through the manuscript]

3. What is the total number of target population?

Around 4000 HCWs. [page 5, --sample size & sampling technique]

4. Any inclusion/exclusion criteria.

All HCWs who agreed to fill the questionnaire were included in the study with no exclusion criteria.
5. How did the author ensure reliability and validity of the instrument. Was it pilot test. What about employees who speak Arabic only, were they included in the study, if so, how they answered the survey.

To test the feasibility of the study and the reliability and validity of data collection tool, a pilot study was performed on 20 randomly selected participants who were subsequently excluded from the main study.  [page 7, Data Collection]

HCWs are Saudis and expatriates of different nationalities, with Arab and non-Arab speakers, yet English language is the official language of communication among the HCWs at KAMC. [page 6, Data Collection]

6. In table one, be specific in the age group, for example, first group should be 20-29, not only 20. Same applies to work experience

Done [Table 1]

7. I read the following sentence and could not understand what did the author mean "It shows that the prevalence of smartphone use of 26% among subjects with negative attitude to its use was doubled (43.2%, OR=2.17, p=0.025) and tripled (74.3%, OR=8.22, p<0.001), among those with neutral and positive attitudes respectively"

The statement was rewritten.[page 8, Results section]

8. Same is to the following sentence "Likewise, the prevalence of installation of medical applications was doubled and tripled as we shifted from those with negative perception (20.0%) to neutral (48.4%, OR=3.76, p<0.001) and positive (66.7%, OR=8.0, p<0.001) perceptions."

The statement was rewritten. [page 8, Results section]

9. In the discussion, it would be great if the authors try to explain the reasons for low positive attitude toward smartphones.
A statement was added “This finding might be attributed to the non-existence of a formal system implemented in the healthcare facilities in Saudi Arabia that allows healthcare providers to be convinced of use of smartphone as a new technology that would impact the healthcare quality, by providing practitioners with immediate access to medical and health information.” [page 9, Discussion section].

Devaraj Acharya, PhD Scholar (Reviewer 2): Reviewer's comment on

Use of smartphone and perception towards the usefulness and practicality of its medical applications among health care providers in Saudi Arabia by Mostafa A. Abolfotouh, Ala'a BaniMustafa, Mahmoud Salam, Mohammed Al-Assiri, Bader Aldebsi, Ebrahim Buchnak

Article code: BHSR-D-19-00689

Strong points

The article is relevant, concise, interesting, reader friendly, statistical analysis, written in simple language, newness and clear in terms of title, objectives and presentation.

Queries

1. What are the causes for choosing KAMC, MNG-HA as study site/area?

King abdulaziz medical city (KAMC), Ministry of National Guard-Health Affairs (MNG-HA), in Riyadh, is a distinguished healthcare provider, with the bed capacity of 1501 beds in addition to 25 beds allocated for expected surgical operations for admission of emergency cases. At KAMC, it is estimated that the number of healthcare providers exceeds 7,000 between the central, eastern and western regions. However, rules and regulations regarding using smartphone at hospital by healthcare providers in Saudi Arabia are not yet existant. Accordingly, it was expected that the feedback provided by these professionals would provide better understanding of the efficiency and practicality of a number of currently used health applications. [page 4, Introduction]

2. Since the sample size(basic) was 378 and adjusted sample size (after adjusting 25% of non-response expected) was 470 and sampling procedure was convenient, but response recorded from 351. Was it not possible to record the information from others HCWs since minimum sample size was calculated 378?
Estimated sample size was 378 HCWs and the number of questionnaires distributed proportionally to different hospital wards was 470 HCWs, and those who responded were 351 with a response rate of 75%.[page 5, Sample size & sampling technique]

3. What are the rules and regulation regarding using smart phone at hospital by healthcare providers in Saudi?

Rules and regulations regarding using smartphone at hospital by healthcare providers in Saudi Arabia have not yet existed. [page 5, Introduction].

4. Which one was used in statements: Likert's scale or Likert type scale?

Likert type scale was used. [page 6, Data Collection]

5. How could be the response rate 93% when adjusted sample size was 470 and response collected from 351?

This figure was corrected to be 75%. [page 5, Sample size & sampling technique]

Suggestions …Please mind the following aspects:

1. keywords order: manage ascending [A to Z order]
Done. [page 2, key words]

2. words consistency: health care or healthcare, health provider or healthcare provider
Corrected. All are corrected to “healthcare”

3. page 4 line 30/31 appropriate use of period or initial letters [uppercase]
Corrected [page 4, Introduction]

4. independent variables and dependent variable in methods section
logistic regression analyses were applied, with age group, nationality, education level, marital status, job title, working experience in years and total perception mean score as the independent variables. [page 7, Data analysis]

5. qualitative data may be included to support the findings if possible

Please accept my apology for not being able to include qualitative data at this stage.

6. mind the place of in text citation [page 8 line 32]

Corrected.[Page 1, line 1,Discussion section].