OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

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- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

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Peer Review

International Journal of Infection
Article DOI: https://doi.org/10.5812/iji-130579
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Peer Review Report for "Investigation of the Microbial Contamination of the Hands of Healthcare Workers in Different Wards of Sheikh Hospital in Mashhad"

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Review Timeline:

Submit Date:	4 Aug 2022
Revised Date:	16 Aug 2022
Accepted Date:	17 Aug 2022

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE : Reviewer

13 Aug 2022

Dear AE
Investigation of the microbial contamination of the hands of healthcare workers in different wards of Sheikh Hospital in Mashhad
- It is a very short article.
- It is written in the abstract that:
Alcohol-based hand sanitizer can reduce the microbial load. How did you come to this conclusion? While in the work method and results part, it seems that a palm swap of the samples was done, and the samples were done on the culture medium

based on it.
- The work method should be stated based on the reference.
- The conclusion was very brief and should be corrected.
- In the discussion section, use other studies and compare their results with this study.
- The contents mentioned in the abstract are not consistent with the results. The abstract mentions the finding of bacteria that are not mentioned in the results.
- It would have been better if the results were expressed in two sections: before hand disinfection and after hand disinfection.
Best regards.

REFEREE : Reviewer 13 Aug 2022

Dear AE
The manuscript under review attempts to evaluate the investigation of the microbial contamination of the hands of healthcare workers in different wards of Sheikh Hospital in Mashhad. In general, the study is well designed and carried out well.
comment:
- English needs native editing
- How was the sample size calculated?
- Are there any inclusion and exclusion criteria in this study?
- Is the sampling done randomly?
- Is there no statistical relationship between the prevalence of bacteria in different wards?
Best Regards

REFEREE : Reviewer 16 Aug 2022

Dear AE
No comments.
Best regards

REFEREE : Associate Editor 16 Aug 2022

Dear EIC
Please ask the author to correct the following comments
Reviewer1:
- English needs native editing
- How was the sample size calculated?
- Are there any inclusion and exclusion criteria in this study?
- Is the sampling done randomly?
- Is there no statistical relationship between the prevalence of bacteria in different wards?

Reviewer2:
- It is a very short article.
- It is written in the abstract that:
Alcohol-based hand sanitizer can reduce the microbial load. How did you come to this conclusion? While in the work method and results part, it seems that a palm swap of the samples was done, and the samples were done on the culture medium based on it.
- The work method should be stated based on the reference.
- The conclusion was very brief and should be corrected.
- In the discussion section, use other studies and compare their results with this study.
- The contents mentioned in the abstract are not consistent with the results. The abstract mentions the finding of bacteria that are not mentioned in the results.
- It would have been better if the results were expressed in two sections: before hand disinfection and after hand disinfection
Best regards.

Hamidreza Kouhpayeh : EIC

16 Aug 2022

Dear Author
Please answer the following comments.
Reviewer1:
- English needs native editing
- How was the sample size calculated?
- Are there any inclusion and exclusion criteria in this study?
- Is the sampling done randomly?
- Is there no statistical relationship between the prevalence of bacteria in different wards?

Reviewer2:
- It is a very short article.
- It is written in the abstract that:
Alcohol-based hand sanitizer can reduce the microbial load. How did you come to this conclusion? While in the work method and results part, it seems that a palm swap of the samples was done, and the samples were done on the culture medium based on it.
- The work method should be stated based on the reference.
- The conclusion was very brief and should be corrected.
- In the discussion section, use other studies and compare their results with this study.
- The contents mentioned in the abstract are not consistent with the results. The abstract mentions the finding of bacteria that are not mentioned in the results.
- It would have been better if the results were expressed in two sections: before hand disinfection and after hand disinfection.
best regards
EIC

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

,'Dear Editor

.Thank you for your email dated 16 August 2022 enclosing the reviewer' comments

We have carefully reviewed the comments and have revised the manuscript carefully. Our .responses are given in point-by-point manner below

.We hope revised version is now suitable for publication

Sincerely

:Response to Reviewer 1

.Thank you for your review of our paper

:It is written in the abstract that-1
Alcohol-based hand sanitizer has the ability to reduce the microbial load. How did you come to this conclusion? While in the work method and results part, it seems that a palm swap of the ?.samples was drawn and the samples were done on the culture medium based on it

In the paper results we mentioned: Following hand hygiene procedure, most effective decontamination for wide variety of organism was observed. After the procedure, the number of cultured S. aureus and Coagulase-negative staphylococci (CoNS) reduced to 1 and 3, respectively. In other words, the percentage decrease growth of other species, including Klebsiella pneumoniae, Escherichia coli (E. coli), Pseudomonas aeruginosa, Bacillus, Klebsiella oxytoca, Acinetobacter baumannii, Stenotrophomonas (Xanthomonas) maltophilia, and Burkholderia cepacia was almost 100%. Based on the results, a significant decrease was observed

The work method should be stated based on the reference. The reference was added to the -2 material method section

The conclusion was very brief and should be corrected. The conclusion section revised -3

In the discussion section, use other studies and compare their results with this study. several -4 .studies mention in result section that results compared with our study

The contents mentioned in the abstract are not consistent with the results. The abstract -5 mentions the finding of bacteria that are not mentioned in the results. The isolated bacteria are mentioned in the tables

It would have been better if the results were expressed in two sections: before hand .6 .disinfection and after hand disinfection. The sections were separated and highlighted

:Response to Reviewer 2

.Thank you for your comments

The number of samples needed in this research was determined after preliminary studies with .1
:a confidence factor of 95% and an accuracy of 0.1 using this formula

$$1-n=\frac{p(1-p)z^2}{d^2}$$

?Is there any inclusion and exclusion criteria in this study-2

The samples include 32 male and female nurses of Dr. Sheikh Hospital who have a bachelor's degree or higher

They did not have skin disease and cuts and wounds on their hands

They have not used antibiotic creams and softeners before and during the research

Do not wear rings, rings or watches while washing your hands

Is the sampling done randomly? Yes -3

Is there no statistical relationship between the prevalence of bacteria in different wards? No, -4
.we did not observe a significant relationship

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Revision (1)

REFEREE : Reviewer — 17 Aug 2022

Dear AE
The manuscript is well edited and acceptable
Kind regards

REFEREE : Reviewer — 17 Aug 2022

Dear AE
Although the conclusion is still incomplete, it is acceptable because of the rest of the changes.
Best regards.

REFEREE : Associate Editor — 17 Aug 2022

Dear EIC

We announce that this manuscript has been accepted for publication in the International Journal of Infection.
Best regards.

Hamidreza Kouhpayeh : EIC — 17 Aug 2022

Dear Author
Congratulations
Hereby, we announce that your manuscript has been accepted for publication in the International Journal of Infection. The manuscript will be available online in future issues.
Wish you all the best
EIC