

Using Video Conferencing and Checklist for Nursing Research Through Distance Learning

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1. Introduction

Currently, nursing research is conducted in many healthcare facilities in Japan, but nurses' basic knowledge on research methods may not be sufficient. Therefore, in this study, nurses assessed the quality of their research plans using a checklist, and then carried out distance learning by video conferencing with university lecturers, and the effectiveness of distance learning was evaluated.

2. Method

2.1. How the Remote Lectures were Conducted

A checklist consisting of 12 items was created using existing literature on nursing research published in Japan as a reference [1]. The checklist was given out to nurses participating in this study so they could perform a self-assessment before the start of remote lectures (1. Description of research question(s) based on their background, 2. Making use of on-site questions, personal experiences, etc., 3. Description of patient condition, 4. Use of the PICO framework, 5. Literature search methods, search keywords, description of search results, 6. Listing references, 7. The levels of research question(s), 8. Description of research objectives taking into account the level of the research question(s), 9. Description of research significance, 10. Description of research methods corresponding to the level of the research question(s), 11. Description of ethical considerations, 12. Questions for the lecturer).

A web conferencing tool was used to establish connection. Research plans for six research topics were examined (30 minutes per topic). Screen-sharing function was used during the remote lectures to project the research plans on each monitor, and the chat function was used to share key points. Furthermore, the connection was tested and the procedure was confirmed in advance.

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2.2. Procedure

A case study design was used. The participants consisted of twelve nurses who engaged in nursing research at Hospital A (ten out of the twelve nurses used the checklist and two nurses were involved in running nursing research within the facility).

Following the end of the remote lectures, the purpose of this study was explained to the participants and their cooperation was requested. Self-administered questionnaires were hand-delivered and later collected.

3. Result

3.1. Checklist

The top three items deemed helpful were “Description of research question(s) within their background”, “Making use of simple on-site resources, personal experiences, etc.”, and “Description of ethical considerations” (92% each).

Furthermore, the top three perceived advantages of preliminary assessments with the use of a checklist were “It leads to the broadening of knowledge pertaining to research” (83%), “It leads to the enrichment of lecture content”, and “It leads to the improvement of research quality” (both 75%).

When asked whether they felt that they could effectively use the time assigned for the video conference by making revisions beforehand using the checklist, ten participants chose either the “Strongly” or “Somewhat” categories.

3.2. Evaluation of Remote Lectures

With regards to the ease of hearing the voice of the remote lecturer, nine participants (75%) responded either “No different than in a face-to-face lecture” or “Easier to hear than in a face-to-face lecture”. Furthermore, with regards to the ease of asking questions, ten participants (83%) responded either “No different than in a face-to-face lecture” or “Easier to ask questions than in a face-to-face lecture.” With regards to answering the lecturer’s questions, ten participants (88%) responded either “No different than in a face-to-face lecture” or “Easier to answer questions than in a face-to-face lecture”.

When asked to provide reasons why they felt it was easier to ask questions than in a face-to-face lecture, the participants provided such responses as “Because I could be more aware of the lecturer’s facial expression than usual and respond with a smile.”, and “It is easier to see when the timing is right to ask a question.” When asked to provide reasons why they felt it would be more difficult to answer questions than in a face-to-face lecture, a participant responded, “The lectures were interrupted, as the image and sound were distorted, and I could not understand the subject.”

4. Conclusions

The participants felt that using a checklist beforehand can promote self-regulated learning and broaden their knowledge pertaining to research, and that they could effectively use lecture time. Furthermore, without any decline in the ease of audio output

and the ease of asking questions in comparison with traditional face-to-face lectures, the participants experienced advantages of distance learning, such as viewing necessary lecture materials using the screen-sharing function.

References

- [1] Reiko S, Tomoko M, Hirofumi O. Nursing research. IGAKU-SHOIN Ltd., Tokyo; 2016.