Perceptions of Knowledge Transfer via Poster Presentations at a Nursing Conference

Sandra L. Siedlecki PhD RN CNS Senior Nurse Scientist
Office of Nursing Research and Innovation | Nursing Institute, Cleveland Clinic

Problem
Dissemination of research evidence from the investigator to the user (clinical nurses) has traditionally been facilitated through publications and research conferences. Although numerous articles have been written in the past decade about how to create a “winning poster”, no nursing studies have actually been conducted to determine what poster-specific variables promote poster viewing and transfer of knowledge from the researcher to the attendee.

The literature on the usefulness of poster presentations for knowledge transfer is limited and conflicting.

In addition, while a few studies have been conducted at poster presentations at medical conferences, none have been conducted at a nursing research conference in the Midwest. The sample size was limited by the number of attendees who complete and return the survey (56%).

Purpose
The purpose of this study is to identify nurses’ perceptions of knowledge transfer via poster presentations.

Methods
A descriptive study using paper survey methodology was used to explore poster-specific (aesthetic) and content variables that impact knowledge transfer by nurses attending a nursing research conference; to determine what poster-specific variables impact knowledge transfer by nurses attending a nursing research conference; and to explore the impact of specific poster and content variables and likelihood that nurses will use this knowledge in their practice.

The survey consists of four sections.

1. Demographics—this section includes questions about respondents’ age, gender, years of experience, and level of education.

2. Content specific variables that impact knowledge transfer by nurses attending a nursing research conference

3. Explore the importance of presentation characteristics that impact decisions to view a poster

4. The last section asks nurses general questions about the usefulness of poster presentations as a format for dissemination of nursing research and knowledge transfer decisions.

Data Collection
An announcement was made at the start of each day of the conference, explaining the study, its purpose, and asking for attendees to participate in the study by viewing the posters, completing the survey, and returning it in a sealed box monitored by the administrative staff during the conference.

Measure
The survey instrument was developed by the researcher and based upon a review of the literature; content validity was established using a two-stage Delphi technique and three doctoral prepared nurses with personal experience as both poster presenters and attendees at a poster presentation.

The survey consists of four sections.

1. The first section asks basic demographic and education information (6 items).

2. The second section asks attendees about the aesthetic characteristics of the posters and poster presenters that most influenced their intention to view the poster more closely or to interact with the presenter/ poster standing at the poster (12 items).

3. The third section asks the attendees’ opinion of the content and perceived scientific merit of the posters that most influenced the intent to read the entire poster and use the information in practice (13 items).

4. The last section of the survey asks nurses general questions about the usefulness of poster presentations as a format for dissemination of nursing research and knowledge transfer decisions.

Analysis
Descriptive statistics and measures of central tendencies appropriate to the level of data were used to describe the sample and the poster specific (aesthetic) and content specific variables most important to attendees.

Findings
Poster specific (aesthetic) variables that impact knowledge transfer by nurses attending a nursing research conference

• Transfer of knowledge from the poster presentation requires active, rather than passive participation from the attendee.

• Unless the poster is viewed by the attendee, no knowledge transfer can occur, so visual appeal (aesthetics) is an important criterion to consider when developing a poster presentation to disseminate research findings.

• The idea behind the poster presentation is to present the most information in the smallest space while retaining the visual appeal of the poster.

• Some sources recommend a light background, while others recommend a dark background. However, it is not known if choice of color influences attendees’ decisions to view one specific poster over another.

• The amount of content and the size of poster font have also been debated, with some sources suggesting larger font and less content, and others suggesting smaller font and more content.

• 79% prefer a white or light background with black or dark font

• After white, the background color respondents are most drawn to is light (33%) or medium (31%) blue

• Colors respondents are least drawn to are the neon colors (50%) and dark colors (27%)

• Overwhelmingly respondents are attracted to three column symmetrical poster layouts (78%)

• 87% of respondents say the browse the display until something “catches their eye”

• Multiple complicated graphs, plots, and tables do not attract viewers

• Poster presentations can be used to enhance knowledge. However, the challenge for nurses attending a research conference is to find and use knowledge disseminated through a poster presentation for the enhancement of their personal practice.

• Knowledge transfer is impacted by decisions to view or not view a poster

• 87% of respondents say the browse the display until something “catches their eye”

• After aesthetics, the title and topic is used to decide to read or not read the poster

• 77% of respondents say the title and topic is used to decide to read or not read the poster content (91%)

• Most respondents view and read less than 50% of posters, and only 4% report that they read all posters at a conference.

• Although researcher presence was important to many of the respondents, just over 30% prefer to view the posters without having to interact with the presenter.

• Impacts of specific poster (aesthetic) and content variables on the likelihood that nurses will use this knowledge in their practice

• Overall quality of the poster presentation (aesthetics, content, and clarity) and importance of the problem, the topic, or the population increased likelihood that knowledge would be used by the respondent

• Perception of scientific rigor of the study and believability about the adequacy of sample size were considered but were less important than the overall message

Additional Findings
When comparing nurse respondents in this study by education, higher education does not have a greater impact in statistical tables and scientific rigor for knowledge transfer decisions (p < .05).

Implications
Poster presentations can be used to enhance knowledge. However, the challenge for nurses attending a research conference is to find and use knowledge disseminated through a poster presentation for the enhancement of their personal practice.

The sample for this study was predominantly clinical nurses and thus the findings can only be generalized to this group. Nurse researchers attending a research poster presentation at a conference for nurses may be affected by or interested in different poster characteristics. As this is the first nursing study on this topic, it is clear that much more investigation is needed.

The Importance of Knowledge Transfer
Research will not impact practice unless nurses learn how to best transfer this knowledge to the end-user: The clinical nurse

References

Importance of Poster Characteristics that Impact Decisions to View

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Poster Items Important to Viewers

• Visual appeal (aesthetics) is an important criterion to consider when developing a poster presentation to disseminate research findings.

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