

## **Sigma's 30th International Nursing Research Congress**

### **Collaboration Between Industry and Academic Staff Using Delphi Technique in Developing Nursing Assessment Scenarios**

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#### **Purpose:**

Delphi studies are a recognized process for gaining an expert group's consensus on a specific issue (Bowling, 2014; Jacob, Duffield & Jacob, 2018). They are used to provide expert opinion in areas for which current evidence cannot provide definitive answers (Keeney, Hasson & McKenna, 2011). Delphi studies consist of several rounds of surveys with experts responding to collated responses from the group from previous rounds until consensus is reached. Experts in the field are chosen to participate based on their knowledge of the specific issues under investigation (Townsend, Hofer, Hanick, & Brunetti, 2016). Delphi studies are cited as having strengths such as; they enable information to be gathered using electronic media from diverse geographical areas; provide for fearless expression of opinions as responses are anonymous to other participants; and enable reassessment of previous responses through the use of a controlled feedback process; decrease influence of dominant personalities or group pressure which may be found in focus groups (Hsu & Sandford, 2007; Keeney et al., 2011; Townsend et al., 2016; Haji et al., 2015). Limitations of Delphi studies include the loss of live discussion and interaction and possible slow response times that may delay the rate of discussion. This presentation reports on the use of a Delphi study which used a collaboration between industry and academics to develop clinical scenarios and answers for student assessments.

#### **Methods:**

Ethical approval for the study was obtained from the university. Initial scenarios were developed by a team of academics and clinicians with the focus of utilizing students' critical thinking skills to determine responses to a given clinical situation. The scenarios were based on Australian government data to enable them to reflect the most common conditions presenting to acute health services in Australia for care. Scenarios included information such as background to the current presentation, presenting symptoms, family support, diagnosis, vital signs and blood test results. Questions were posed for each scenario in multiple choice format. There were four possible answers with a rationale for each question. The Delphi study was conducted using Qualtrics software. Experts in acute nursing care were identified from three universities and five acute health services in two states in Australia. An email letter of invitation was sent to 16 experts explaining the Delphi process and asking for participation. They were asked to comment on the validity of the scenario and rank the answers in order from most correct to least correct. Opportunity was provided for panelists to comment on the question or explain their responses. Each round was open for two weeks from when panelists were provided with the scenarios.

#### **Results:**

Four rounds of Delphi were undertaken over a three month period. Consensus of 80% was reached on the answers to 25 questions based on five clinical scenarios after these four rounds. Thirteen experts (seven acute care nurses and six academics) agreed to participate in the study. The number of panelists decreased from thirteen for the first round to seven for the final round. This is one of the recognized limitations of undertaking a Delphi study as panelists were required to be available for an extended period to participate in the study.

## Conclusion:

The use of a Delphi study to develop nursing scenarios with the appropriate nursing management responses for students enables collaboration between industry and academic staff. This process ensures that students are presented with realistic scenarios and taught the nursing management of the condition which reflects current practice in industry. In future projects, Delphi studies may provide the ability to collaborate with international colleagues to determine global answers for specific issues.

Delphi studies are a useful way of collaborating with industry to break down theory practice gaps and assist students prepare for clinical practice. The collaboration enables expert opinion to be used to ensure that academic programs reflect current practice in industry. They have the potential to enable international experts to work together to provide answers to specific issues.

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## Keywords:

Delphi technique, Industry collaboration and Nursing scenario development

## References:

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## Abstract Summary:

Delphi studies have been used by researchers to ascertain expert consensus on specific issues. This presentation reports on the use of the Delphi Technique which used a collaboration between industry and academic staff to develop scenarios and answers for student assessments.

## Content Outline:

Introduction

1. Background to Delphi studies
2. Need for expert consensus in developing responses to clinical scenarios

## Body

### A. Process of undertaking Delphi study

1. Development of scenarios
2. Recruitment of panelists
3. Number of rounds to reach consensus

### B. Results of study

1. Realistic scenarios
2. Validated answers with rationales
3. Development of relationships with industry partners

### C. Value of collaboration

1. Merging theory with practice
  1. Current clinical knowledge
  2. Improve student outcomes.
  3. Strengthening of relationships with industry partners and educational institutions

## III. Conclusion

### A. Value of collaboration to nursing educational practice

First Primary Presenting Author

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**Author Summary:** Associate Professor Elisabeth Jacob is an experienced clinical nurse, educationalist and researcher. Her strong clinical links provide essential networks for her research areas of evidence based practice, nurse education, and nursing workforce. Elisabeth's desire is to link clinical practice with the theory taught to students. Her research is heavily applied, and she has a number of high quality papers and reports around nursing education, transition to practice, and various nursing workforce roles and responsibilities.

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**Author Summary:** Darren has over 30 year of clinical nursing experience, and has been a leader in emergency nursing in Australia for the past 20 years. He is a Fellow of the College of Emergency Nursing Australia and is well respected by his peers. He has published several articles on critical thinking and presented at international conference.