Interprofessional Education: Understanding The Roles of Nursing and Radiologic Science Students

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Session Objectives
The participants will be able to:
• Describe the process of developing IPE curricula for radiologic science students.
• Discuss practical ways to develop, implement and evaluate IPE sessions at your institution.
• Apply a communication technique using case scenarios.

IPE Definition
When students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes (WHO, 2010)
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Goals of IPE

- Improve communication among health providers (HP)
- Build collaboration
- Change negative behaviors
- Provide a deeper understanding and respect for each others discipline and role
- Improve patient care and safety

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Advantages of Interdisciplinary Team Care (Grant et al., 1995)

- For patients
  - Improves care by increasing coordination of services
  - Integrates health care for a wide range of problems and needs
  - Empowers patients as active partners in care
  - Can serve patients of diverse cultural backgrounds
  - Uses time more efficiently

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Advantages of Interdisciplinary Team Care (Grant et al., 1995)

- For health care professionals
  - Increases professional satisfaction
  - Enables the practitioner to learn new skills and approaches
  - Encourages innovation
  - Allows providers to focus on individual areas of expertise
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Advantages of Interdisciplinary Team Care
(Grant et al., 1995)

• For educators and students
  – Offers multiple health care approaches to study
  – Fosters appreciation and understanding of other disciplines
  – Models strategies for future practice
  – Promotes student participation and interprofessional learning
  – Challenges norms and values of each discipline

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Advantages of Interdisciplinary Team Care
(Grant et al., 1995)

• For the health care delivery system
  – Holds potential for more efficient delivery of care
  – Maximizes resources and facilities
  – Decreases burden on acute care facilities as a result of increased preventive care
  – Facilitates continuous quality improvement efforts

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Importance of IPE

• Addresses The Joint Commission’s 2008 national patient safety goal of handoff communication
  – “Improve the effectiveness of communication among caregivers”
• Improves collaboration and communication among HP in care of patient ensuring effective and safe care and reducing medical error.
Communication Tools

- SBAR
  - Situation, Background, Assessment, Recommendation
- ISBARQ
  - Introduce...Questions
- CUS
  - Concerned, Uncomfortable, Safety Issue
- STAR
  - Stop, Think, Act, Review

SBAR background

SBAR has been used in several other high risk industries successfully and has an evidence-based background.
- Used in nuclear submarines in US Navy and used in the airline industry.
- Following investigation of airline crashes in 1970s, the primary cause was determined to be a breakdown in communication between the pilots in the cockpit.
- Airline industry made a commitment to reduce airline accidents by developing a comprehensive safety program and SBAR is one component of this program.

SBAR

- S – Situation: What is happening at the present time?
- B – Background: What are the circumstances leading up to this situation?
- A – Assessment: What do I think the problem is?
- R – Recommendation: What should we do to correct the problem
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SBAR Introduction

- [http://www.youtube.com/watch?v=HAdkcC4pdMQ](http://www.youtube.com/watch?v=HAdkcC4pdMQ)
- [http://www.youtube.com/watch?v=sD1VYi0xzho](http://www.youtube.com/watch?v=sD1VYi0xzho)

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TeamSTEPPS

- [http://teamstepps.ahrq.gov](http://teamstepps.ahrq.gov)

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Interprofessional Curriculum

Development of interprofessional curricula is complex and time consuming. Additionally, there is little guidance in the literature on the process of planning, implementing and evaluating IPE classes/sessions.
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Where to Start?

- **Recruit** nursing and radiologic sciences faculty to develop two hour session on interprofessional discharge planning and home visiting
- **Schedule** planning sessions
- **Discuss** each other’s role
- **Develop** teaching plan
- **Develop** case scenarios

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Planning the Curriculum

- Identify faculty IPE champions/content experts to participate in a curricular workgroup
- Decide on a shared curricular topic
- Develop content the class/session together
- Identify a date and time
- Answer the following:
  - What are the goals of the session?
  - What are the learning objectives of the session?
  - What content and learning activities will be included?
  - What professions will be included
  - What outcomes to measure

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Objectives of the IPE Activity

- Provide students experience working as a team
- Compare and contrast roles of specific health professionals in health care environments
- Discuss responsibilities of specific health professionals in health care environments
  - nursing and radiologic sciences professionals
- Discuss benefits and challenges of IP care in home and hospital settings
IPE Learning Activities

- Learning activities:
  - Keep content brief and realistic.
  - Develop interactive activities (i.e. trigger videos, simulation, panel discussion).
  - Include small group discussion with the various disciplines.
  - Develop patient case scenarios as a faculty group. Ensure information is accurate for each discipline and each discipline is included in the scenario.
  - Come back as a large group for further discussion with an emphasis on student feedback.

Evaluating the Curriculum

- Evaluation
  - Plan your evaluation method based on the objectives of the session as well as process and satisfaction of the session.
  - May include pre and post tests, open ended questions, etc.
  - Include a question on whether students would like more combined IPE sessions and if so, what topics they would like included.

Evaluation

- Pre and post tests (CA, AN, DIS) items:
  - The quality of team interaction has not been shown to affect the outcomes of patient care and safety.
  - Structured communication methods facilitate communication among professionals.
  - Interprofessional classes are a waste of time.

- Session evaluation
  - What did you like best?
  - Examples of what could be included next time.
  - Two things you learned in this session.
The Teaching Plan

- Pre Evaluation
- PowerPoint introduction and overview
  - Short (1-2 mins.)
  - Video clip of home visit
  - 12 minutes
- Large group activity
  - Sample questions
  - Stimulate and guide students on experience
- Case scenarios
  - Small group activities
- Post Evaluation
- Session Evaluation
  - Lessons learned

The Session

- Faculty from Radiologic Science and Nursing facilitated the class session.
- Video excerpts (12 min) were shown representing the student professions in the class.
- Positive and negative communication examples were discussed related to the video.

The Experience

- Faculty members and students shared actual clinical examples of negative patient outcomes related to poor interprofessional communication.
- Students discussed case scenarios
  - Roles & responsibilities
  - Importance of communication
Nursing & Radiologic Sciences (2009)

- 110 nursing students & 10 radiologic science students
- 2 nursing and 1 rad. sci faculty
- 2 hour session
- Intro to IPE
- Video
  - Students report on their observations, thoughts, experience

Nursing & Radiologic Sciences (2009)

- Large Group Discussion
- 15-20 minute small group breakout to discuss case scenario’s
- Regroup
  - Students report what they learned about each other’s roles and responsibilities, communication and impact on patient care.

IPE Session (2011)

- Faculty
  - N= 3, Jefferson School of Nursing
  - N = 8, Jefferson School of Health Professions, Department of Radiologic Sciences
- Students
  - N= 86, FACT BSN students
  - N= 51, Radiologic students (modalities: Radiation Therapy, Nuclear Medicine, MRI/CT, Ultrasound and Medical Dosimetry)
New addition to 2011 teaching plan

- Faculty presentations
  - MRI safety
  - Radiation Safety
  - Radiation Pharmaceuticals
  - Nurse’s role / Collaboration with radiologic technologists

Evaluation of Nursing/Rad Sci IPE session (2009)

What did you like best?
- Personal stories
- Learning about other profession

Pre/post tests - both student groups had a significant improvement on one item:
- Structured communication methods facilitate communication among professionals.

Qualitative Evaluation

- What did you like about this session?
  - Student / Faculty interaction
  - Faculty Presentations
  - Small Group Activity
  - Videos
- What would have improved the session?
  - Smaller groups for learning activity
  - Breaks
  - Increase Q & A / Discussion period
  - Shorter presentations
- List one “take away” message from the session.
  - Effective communication
  - Teamwork / Collaboration
  - Understanding the roles of nurses and rad sciences modalities
  - Safety
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**Discussion Questions**

- How do you initiate IPE exercise?
- What are the benefits and challenges of interprofessional education and its effect on the care and safety of the patient?
- What are the benefits of learning the roles and responsibilities of different HP?

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**Discussion Activity for Educators**

- What IPE curricula/classes/sessions have you developed at your home institution?
- What IPE activities were successful?
- What were some of the barriers/limitations in planning, implementing or evaluating the sessions?
- What communication tools have you used

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**Discussion Activity**

- What are potential IPE content topics that could be developed at your home institution?
- What academic professions/departments could potentially be involved?
- What would be the first step to initiate IPE sessions between/among academic departments?
- Would curriculum committees need to be involved?
- What are venues where you could brainstorm potential topics for IPE sessions?
- How can you get faculty on board?
- How can you get students on board?
- Could you get patient’s involved?
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Lessons Learned
• Include students when planning the session
• Orient the learner to the purpose and goal of the IPE exercise
• Articulate role and responsibility of each profession involved in IPE activity
• Mentor faculty
• Share results of IPE activity with other professionals ... internally & externally
• Promote IPE

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Lessons Learned
• Include “students teaching students” in the sessions as much as possible
  – Allow students to describe their educational experience and their roles either prior to the small
    group sessions or at the beginning of the small group sessions
  – Encourage students from the different disciplines to teach points that come up in the large group
    discussions
  – Have students communicate 1-2 things they learned about/from each other.

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Lessons Learned
• Student and faculty input and feedback is important in enhancing the educational experience
• Faculty must demonstrate passion and commitment to IPE
• IPE activity should be “real life”
• Continually recruit new faculty
• Do not stay in “professional silo’s.”
References