

Falls Risk Prevention Through Inter-Professional Collaboration

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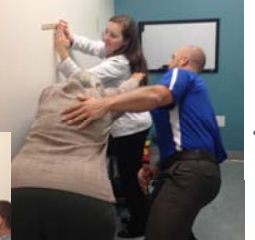
Objective

To elucidate the importance of inter-professional collaboration in reducing falls risk in the community through Medication Therapy Management (MTM) and Berg Balance Testing.

Methods

Starting in October of 2016, 10 students from the University at Buffalo School of Pharmacy collaborated with 6 students from the University at Buffalo School of Physical Therapy to assess and manage patients who were at risk of falling. The students met on 3 separate occasions.

- Session 1
 - Inter-professional exchange of capabilities by DPT and PharmD students
 - Orientation to tools used for the assessment of falls risk including:
 - Berg Balance Scale (BBS)
 - Medication Falls Risk Assessment Tool (MFRAT)
 - Medication Therapy Management (MTM)
 - 16 students with 3 faculty members
 - 5 teams each consisting of 2 PharmD students and 1 DPT student



- Session 2
 - Each patient (family members of student/faculty) underwent an MTM, MFRAT, and BBS assessment completed by one student of the corresponding discipline under faculty supervision.
 - Collaboration between students to make recommendations in the area of fall prevention
 - Supervising faculty reviewed recommendations.
 - 5 teams assessed 2 patients each



- Session 3
 - Located at a local senior living facility
 - 7 residents assessed
 - Recommendations were made for each patient based on specific patient factors.
 - Students educated patients on medications that increase the risk of falls and the three sensory inputs required for balance.
 - Upon completion of program, students completed the SPICE-R assessment.

Name: John G. Rubin		DOB: 04/19/48	Date: 10/11/2015
<input type="checkbox"/> I have fallen in the past year. <input type="checkbox"/> I use or have been advised to use a cane or walker to get around. <input type="checkbox"/> Sometimes I feel unsteady when I am walking. <input type="checkbox"/> I sometimes need help to hold on to things when walking at home. <input type="checkbox"/> I am nervous about falling. <input type="checkbox"/> I need to push myself with my hands to stand up from a chair. <input type="checkbox"/> I have trouble standing up on to a curb. <input type="checkbox"/> I often have to rush to the toilet. <input type="checkbox"/> I have lost some weight in my last... <input type="checkbox"/> I take medicines that sometimes makes me feel light-headed or weak from my usual... <input type="checkbox"/> I take medicines to help me sleep or improve my mood. <input type="checkbox"/> I often feel lost or disoriented.		Falls Risk Low Risk High Risk Very High Risk F 0.88	Gait 2.88 2.88 F 0.88 GPA
Scale 1 score for each YES answer. A score of 4 or more points indicates an increased risk for falls. Please discuss this with your doctor. YOUR SCORE: BERG BALANCE SCALE Your Score: <input type="checkbox"/> Low Fall Risk (36 - 50) <input type="checkbox"/> Medium Fall Risk (21 - 45) <input type="checkbox"/> High Fall Risk (0 - 20) This Berg Balance Scale (BBS) was developed to measure balance among older people with impairments in balance function by assessing the performance of functional tasks. It is a valid instrument used for evaluation of the effectiveness of interventions and the quantitative description of function in clinical practice and research.			

Results

A total of 6 physical therapy students and 10 pharmacy students attended the Falls Prevention Program. When surveyed, 1 of 6 physical therapy students and 3 of 10 pharmacy students reported never engaging in an inter-professional experience prior to this program. These students had the opportunity to learn more about each other's future professions and the importance of inter-professional collaboration in order to improve patient care and outcomes. Pharmacy students watched as physical therapy students performed the Berg Balance Test on participants, while physical therapy students observed pharmacy students perform Medication Therapy Management evaluations. Final counseling was done with participants after the physical therapy and pharmacy students discussed their findings and collaborated to make formal recommendations. These recommendations varied from educating patients on the importance of increasing their level of activity or exercise to encouraging participants to continue their current activity. It was also recommended that participants discuss their plan with their primary care providers. At the end of the program, students that participated were asked to complete the SPICE-R, Student Perceptions of Physician-Pharmacist Inter-professional Clinical Education, survey regarding their experience with the program. This survey was meant to measure the impact of inter-professional experiences on the students' education. The higher the score, the more positive the student felt the experience was. The average SPICE-R score prior to the program was 4.38 +/- 0.41, while the SPICE-R score after the program was 4.62 +/- 0.32. The most notable change in the SPICE-R scores was an increase in the understanding of the roles and responsibilities of fellow professions. There was no significant difference between physical therapy and pharmacy students SPICE-R scores.

Discussion

Falls risk is a multi-factorial health concept that is influenced by intrinsic and extrinsic factors such as age, gender, muscle strength, medication intake, and the external environment. The practice of inter-professional collaboration when assessing patients for a variety of complications allows for the best care to be afforded. The Medication Therapy Management that was provided through the University at Buffalo chapter of ASCP allowed patients to evaluate their falls risk associated with their medication intake. The Berg Balance test performed by the PT students allowed patients to evaluate their gait and muscle strength. Furthermore, the inter-professional collaboration between pharmacy and PT students allowed them to learn a more holistic approach to falls risk management. Inter-professional practice is beneficial to both the patient and health care professional. The increase in SPICE-R statistics at the end of the project quantitatively demonstrates that both the pharmacy and PT students developed a greater understanding of the roles and responsibilities of one another.

Conclusion

The inter-professional collaboration between pharmacy and physical therapy students helped provide insight on how effective it is for different areas of study to enhance patient care together. Both sets of students were able to use their respective areas of understanding to assess the participant; the pharmacy students completed an MTM to calculate a falls risk score, while the physical therapy students tested strength and balance. The utilization of these skills together allowed students to counsel on each participant's falls risk and recommend interventions. In addition to the knowledge gained by the students, the participants benefited greatly from these sessions. The collaboration between students provided care that was tailored to each participant's individual needs. Students were able to work closely with the participants to educate them on the prevention of falls and their specific falls risks.



References:

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2. Cameron K, Schneider E, Childress D, Gilchrist C. *National Council on Aging Falls Free® National Action Plan*. National Council on Aging;2015.