Creativity in pharmacology teaching enhances student learning and enriches the student experience

K. M. Rogers, M. Bennett. School of Nursing and Midwifery, The Queen's University of Belfast, Belfast, UNITED KINGDOM

Background and Aims Engaging with bioscience subjects is challenging for some nursing students because they lack confidence in their ability to study science. Consequently, many have difficulty applying the pharmacology knowledge that should underpin their professional practice, for safe and effective patient care^{1,2}. Recent evidence highlights variation in bioscience teaching and assessment across undergraduate nursing curricula³, particularly insufficient pharmacology content². To improve student engagement in bioscience subjects, nurse educators must develop innovative and creative approaches to enhance the teaching and learning of these subjects.

Given the links between art, science and nursing⁴, this project aims to explore the benefits and impact of engaging undergraduate nursing students in pharmacology through the artistic medium of felt.

Summary of work and outcomes 45 year two undergraduate nursing students have the opportunity to participate in a series of workshops designed to explore key pharmacology concepts through felt. The project is facilitated by university lecturers, in partnership with an artist from Arts Care, a unique arts and health charity in Northern Ireland. Felting engages all the senses and involves manually teasing out individual wool fibres, which are reconstructed to form intricate designs, before being finally bonded together using warm soapy water. Evaluation is based on individual pre-and post-workshop knowledge questionnaires, participants' self-reflection and post-workshop focus groups. Students report improvement in their essential pharmacology knowledge and generic study skills.

Discussion The creative process translated and transformed the students' learning and understanding of key pharmacology principles; while creating striking, memorable art works. The project is ongoing but analysis of initial student feedback revealed the project was associated with positive emotion, engagement, meaning, positive relationships, and accomplishment - factors which contribute to overall well-being⁵ and improved student experience.

Conclusion This paper reports on the positive impact a creative project has on the experience of year two nursing students: by enhancing their pharmacology knowledge and positively impacting on their approach to the professional nursing care of patients. This paper proposes that how we teach biosciences can enable students on any bioscience programme to flourish as individuals, enhancing both knowledge and overall well-being.

References ¹Rogers KMA (2014). *Health and Social Care Education* **3**:46-47 ²Manias E (2009). *International Journal of Nursing Studies* **46**:1-3 ³Taylor V et al. (2015). *Journal of Clinical Nursing* **24**:2797-2806 ⁴Jasmine T. (2009) *Nursing Clinics of North America* **44**:415-21 ⁵Seligman MEP (2011) Flourish: A New Understanding of Happiness and Well-Being and How To Achieve Them. Nicholas Brealey Publishing: London