Book of Abstracts

6 - 7 November 2023

10th All Ireland Pharmacy Healthcare Conference

Ballymascanlan House Hotel, Dundalk

Conference Agenda

8.30 – 10.00	**Coffee and registration**
10.00 – 10.15	**Welcome and Introduction** *Colin Adair, Postgraduate Pharmacy Dean, NICPLD* *Catriona Bradley, Executive Director, IIOP*
10.15 – 10.30	**Opening address** *Joanne Kissane, Registrar & Chief Officer, PSI*
10.30 – 11.15	**Keynote lecture** *Andrew Evans, Chief Pharmaceutical Officer, Wales*
11.15 -11.45	**Coffee and poster viewing**
11.40 -13.15	**Parallel sessions - Oral Presentations** *Education – The Oak Room* *Workforce - The Garden Room*
13.15 - 14.00	**LUNCH**
14.00 – 14.40	**Coffee and poster viewing**
14.40 – 16.15	**Parallel sessions - Oral Presentations** *Enhancing Practice – The Oak Room* *Policy – The Garden Room*
16.15 – 16.30	**Closing remarks** *Cathy Harrison, Chief Pharmaceutical Officer, Department of Health, Northern Ireland*

Presented By

NI Centre for Pharmacy Learning & Development

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Conference Key Note Address

Andrew Evans, Chief Pharmaceutical Officer for Wales

Andrew has been the Chief Pharmaceutical Officer for Wales since 2016. Prior to his appointment he was principal pharmacist in pharmaceutical public health at Public Health Wales NHS Trust and was previously a pharmaceutical adviser in the NHS in Wales and England, a postgraduate education tutor, GP practice and community pharmacist. He was made a fellow of the Royal Pharmaceutical Society in 2018 and was awarded an OBE for services to the UK's pandemic response in 2022. Andrew is a honorary lecturer at Cardiff University with research interests including how the expanding role of community pharmacists impacts on population health.

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Rydym yn croesawu gohebiaeth yn Gymraeg / We welcome correspondence in Welsh

Organising Committee

Colin Adair (NICPLD), Catriona Bradley (IIoP), Elaine Conyard (HPAI), Aaron Courtenay (Ulster University), Glenda Fleming (MOIC), Matthew Lynch (RCSI), Suzanne McCarthy (University College Cork), Ailbhe O'Mahoney (IIoP), Carole Parsons, (Queen's University Belfast), Sheila Ryder (Trinity College).

Conference Sponsors

Irish Pharmacy Union

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Opening Address

Joanne Kissane, Registrar & Chief Officer, PSI – The Pharmacy Regulator

Joanne Kissane is the Registrar and Chief Officer of the PSI, having commenced in the role in January 2023. Prior to joining the PSI, she was the Director and National Coordinator for APPEL, a joint office of the three Schools of Pharmacy in Ireland, which manages the student experiential learning placements for the integrated Masters degree programmes in pharmacy. She has worked in community pharmacy as a practising pharmacist, and she was the superintendent pharmacist for LloydsPharmacy for seven years, and subsequently held the role of Head of Operational Excellence for the organisation.

Joanne was a member of the PSI Council for seven years. She chaired several PSI committees during this time and served two years as PSI President.

Joanne is a graduate of pharmacy from Trinity College Dublin. She holds a Masters in Quality and Safety in Healthcare Management from the Royal College of Surgeons in Ireland and a Professional Certificate in Governance from the Institute of Public Administration.

Closing Address

Cathy Harrisson, Chief Pharmaceutical Officer for Northern Ireland

Professor Cathy Harrison is the Chief Pharmaceutical Officer for Northern Ireland, working at the Department of Health. In this role Cathy is the head of the pharmacy profession in Northern Ireland and the most senior professional advisor to the Minister of Health on pharmaceutical and medicines issues.

Cathy is a qualified pharmacist and undertook her pharmacy undergraduate degree at Liverpool John Moore's University and postgraduate degree at Queen's University, Belfast. After graduation in 1989 she worked in community pharmacy in England and Northern Ireland before joining the Department of Health in 2005 as Principal Pharmaceutical Officer. She was later promoted to Deputy Chief Pharmaceutical Officer before being appointed as Chief Pharmaceutical Officer in January 2020.

Cathy leads a wide-ranging work programme involving pharmacy and medicines policy and legislation. She led the Department of Health's response to EU transition and the pharmacy response to COVID-19 and HSC rebuilding. She also leads the implementation of a strategy to improve the safety and benefits of medicines titled 'The Medicines Optimisation Quality Framework (MOQF)', supported by a Medicines Optimisation Innovation Centre (MOIC). This involves collaborative working with stakeholders from academia, industry, community development and health and social care.

Cathy has an interest in the integration of multi-skilled pharmacy teams across health and social care sectors, combining professional and technical skills with redesigned services and new technologies.

Cathy is committed to realising pharmacy's greater contribution to better health outcomes for patients and more effective utilisation of health resources.

Cathy is honorary Professor of Practice at Queen's University Belfast.

In Memoriam

Sarah Fagan (March 1975 – July 2023)

We wish to remember, Sarah Fagan RIP, a colleague who was due to present her work at this years' All Ireland Pharmacy Conference. Sarah, a native of Dundalk, is sadly missed and fondly remembered for her immense wisdom and knowledge, her' can-do' approach, her kindness and ever-present smile. She was a positive influence to all who knew her, and a constant source of support.

Sarah completed her Pharmacy undergraduate degree in Aberdeen in 1998. She worked as a pharmacist in the HSE for 20 years. She worked as a Senior Pharmacist in Our Lady of Lourdes Hospital, Drogheda, and a Chief II Pharmacist in Our Lady's Hospital, Navan and in Louth County Hospital, Dundalk. She was keen to promote and progress the profession and was an active member of the Hospital Pharmacists Association of Ireland executive committee.

In 2020, she joined the newly formed team of Community Antimicrobial Pharmacists as the Community Antimicrobial Pharmacist for CHO 8 (Laois/Offaly, Longford/Westmeath, Louth/Meath). Here she made a significant impact engaging with the many different professions and personnel in a wide geographical area to spread the key messages around antimicrobial stewardship. In this role, she also led an expert advisory group for the National Antimicrobial Guidelines Working Group for www.antibitoicprescribing.ie.

Sarah sadly passed away in July 2023, whilst taking part in a triathlon in France, doing something she loved to do in her spare time.

May she rest in peace.

Suaimhneas síoraí uirthi.

Oral Presentations

Parallel Session 1: Education

Time: 11:40 – 13:15

Location: The Oak Room

Chair: Aaron Courtenay

Fiona O'Neill *11:45 – 12:00*	"A picture is worth a thousand words": Using creative resources when teaching foundation trainee pharmacists about pain management in palliative care.
Roisin O'Hare *12:00 – 12:15*	What's another peer? Exploring the use of Near Peer teaching of medication history taking between Second and fourth year Pharmacy undergraduates in Northern Ireland
Sarah Chambers *12:15 – 12:30*	Unleashing Potential: A Comprehensive Analysis of the Evolution of Irish Pharmacist Mentorship from Pilot to Annual Programme
Tao Zhang *12:30 – 12:45*	Empowering Pharmacy Technician Students: A Sustainable ePortfolio Model for Professional Development Training in Undergraduate Education
Heather Bell *12:45 – 13:00*	Standardised tools to support learners in their career development journey
Fiona Hughes *13:00 – 13:15*	Developing a Theoretical Framework for Experiential Learning and Entrustable Professional Activities in Pharmacy: A Northern Ireland Perspective

Oral Presentations

Parallel Session 2: Workforce

Time: 11:40 – 13:15

Location: The Garden Room

Chair: Glenda Fleming

Emma Jane Coyle *11:45 – 12:00*	iSIMPATHY (implementing Stimulating Innovation in the Management of Polypharmacy and Adherence THrough the Years) – A representation of Cross Border, Cross Country and Cross Sector Success
Niamh McMahon *12:00 – 12:15*	Pharmacists' Attitudes and Perspectives on Deprescribing Fall-Risk Increasing Drugs in Older Adults
Aisling Croke *12:15 – 12:30*	The effectiveness and cost of integrating pharmacists within general practice to optimise prescribing and health outcomes in primary care patients with polypharmacy: a systematic review
Catriona Bradley *12:30 – 12:45*	Burnout Amongst Irish Pharmacists: Impact of Psychological Safety, Psychological Capital and Job-crafting
Aisling O'Leary *12:45 – 13:00*	Factors influencing community pharmacist retention in Ireland – a qualitative study
Eimear Ni Sheachnasaigh *13:00 – 13:15*	A scoping review of the methods and processes used by regulatory bodies to determine pharmacists' readiness to practice.

Oral Presentations

Parallel Session 3: Enhancing Practice

Time: 14:40 – 16:15

Location: The Oak Room

Chair: Sheila Ryder

Michelle Murphy *14:45 – 15:00*	Improving patient safety through the establishment of a pharmacist-led blood monitoring clinic for Janus kinase inhibitors (JAKi) in rheumatology
Emer Moore *15:00 – 15:15*	What's bones got to do with it? Osteoporosis screening interventions and outcomes by a falls prevention team pharmacist
Ahmed Hassan Ali *15:15 – 15:30*	The Prevalence of Potentially Inappropriate Medications (PIMs) among Frail Older Participants of The Irish Longitudinal Study on Ageing (TILDA)
Joanne Brown *15:30 – 15:45*	Psychology training to support enhanced pharmacy skills
Marie Richardson *15:45 – 16:00*	Improving Post-Operative Analgesia & Associated Prescribing on the Orthopaedic Ward of OLOL Richardson M1, Mahoko G2, O'Brien H3, Bano F4.
Laura O'Loan *16:00 – 16:15*	Building capacity into a development pathway for advancing pharmacy practice

Oral Presentations

Parallel Session 4: Policy

Time: 14:40 – 16:15

Location: The Garden Room

Chair: Matthew Lynch

Mary Eva Regan *14:15 -15:00*	Improving Antimicrobial Use in HSE Older Persons Residential Care Facilities
Angela Carrington *15:00 – 15:15*	Transforming Medication Safety in Northern Ireland
Heather Coleman *15:15 – 15:30*	Antimicrobial Use and Antimicrobial Resistance in Northern Ireland
Chris Garland *15:30 – 15:45*	Patient satisfaction with community pharmacy COVID-19 vaccination in Northern Ireland
Claire Erki *15:45 – 16:00*	New Models of Prescribing in Home Treatment Team
Elmarie Cottrell *16:00 – 16:15*	Implementation of a National Hospital Medicines Management System

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Oral Presentation Abstracts - Education

"A picture is worth a thousand words": Using creative resources when teaching foundation trainee pharmacists about pain management in palliative care.

Tuesday, 7th November: Parallel Session 1: Education - Oral

Ms. Fiona O'Neill [1]

1. Belfast Health and Social Care Trust

Background

Creative resources and activities, used in education, have been shown to promote well-being and development of empathy, compassion, and higher order thinking skills[1-3]. The Northern Ireland regional workshop on pain in palliative care for Foundation Year Pharmacists provided the opportunity to explore and evaluate the use of creative resources. Total pain has been defined as the combination of four aspects: physical, social, spiritual and emotional pain[4]. Understanding this is integral to palliative care, and facilitates meeting GPhC PSNI Standards for the initial education and training of pharmacists interim learning outcomes 1.1, "Demonstrate empathy…", and 1.13, "Recognise the psychological, physiological and physical impact of prescribing decisions on people"[5].

Aim

To identify whether participants would identify the concept of Total Pain through reflection on visual art.

Method

Participants (n=8) were invited to view Munch's "The Scream" and reflect on the question "What does this picture make YOU think and feel about pain?". They reflected and made notes for one minute in silence, then discussed in pairs and finally with the group[6,7]. This activity took around 10 minutes at the start of the workshop. Sticky notes were kept for analysis.

The evaluation used the mean answers from sliding scales to identify how well the session met learning outcomes, usefulness when participants start work as a pharmacist, and usefulness of the creative resource activity.

Results

When asked, participants denied prior knowledge of the concept of Total Pain, yet their notes and conversation showed that had spontaneously described aspects of it with vivid and empathetic words: "can completely submerge you", "all-consuming", "hard for people suffering… and those watching…".

Evaluation results were positive: participants considered the session had met its objectives (9.9/10) and would be useful when starting work as a pharmacist (9.8/10). The creative resource activity was considered good use of time (4.8/5), and useful in introducing the concept of Total Pain (4.9/5), learning from others (5/5), and getting participants to think (5/5).

Conclusion

Creative resources can be useful tools in pharmacy education and further use should be explored.

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What's another peer? Exploring the use of Near Peer teaching of medication history taking between Second and fourth year Pharmacy undergraduates in Northern Ireland

Tuesday, 7th November: Parallel Session 1: Education - Oral

Ms. Catherine Carey [1], ***Prof. Roisin O'Hare*** [2], ***Dr. Sharon Haughey*** [3], ***Ms. Fiona Hughes*** [3], ***Mr. Niall O'Boyle*** [4]

1. *Final year pharmacy student, Queens University Belfast,* ***2.*** *Southern Health and Social Care Trust,* ***3.*** *Queens University Belfast,* ***4.*** *South Eastern Health and Social Care Trust*

Background

One goal of higher education is progressive independence of the learner and, when fostering independent decision making, may also incorporate elements of teaching[1]. Near Peer teaching (NPT) is known to develop pharmacy student teaching and feedback skills[2] and enhance the knowledge of both peer teachers and learners[3]. A previous evaluation in 2021-22 already indicated benefits for near peer teachers and this study sought to further determine the influence of NPT during hospital experiential placement on QUB MPharm students from the perspective of both peer teacher and learner, including their perceptions of the associated feedback.

Aims

To explore the opinions of second and final year MPharm students at QUB on their experiences of providing and receiving NPT on medication history (MHx) during their experiential hospital placement.

Method

All second year pharmacy students in Northern Ireland (NI) (n=189) participated in elearning and simulation training to learn how to undertake MHx. All second and fourth year students (n=293) across NI participated in workshops on peer teaching and used placement resources (figure 1). All fourth and second year students in QUB were invited to attend a focus group in January 2023. The data was transcribed verbatim and analysed using Reflexive Thematic Analysis[4] to generate codes. These codes were interpreted to elicit meaning and organised into themes and sub themes.

Ethical approval gained from the Faculty of Medicine, Health and Life Sciences, Queens University Belfast.

Results

Five main themes were identified from the analysis; Benefits, Challenges, Emotional Behaviour, Relationships and Feedback (figure 2).

Discussion

NPT improved confidence and heightened awareness of task assessment and the associated feedback. It fostered a sense of professionalism and facilitated role modelling. Both NP teachers and NP learners indicated that they learned from each other and/or consolidated existing knowledge and skills. Participants expressed that "closeness" or congruence in experience meant they could interact more freely with near peers than pharmacist supervisors, but they experienced anxiety about being perceived negatively by their peer. Trust was identified as integral to better feedback conversations; however, a perceived barrier was the brevity of time spent together in advance of the teaching episode to establish this. Educators should facilitate opportunities for NPT within MPharm programmes, specifically in the practice setting. However, preparation should include adequate opportunity to prepare and protected time for the near peer pairings to develop trust and rapport in advance of the teaching experience. This study is unique in that the experiences of both near peer pharmacy teachers and learners in the practice setting have been considered.

References

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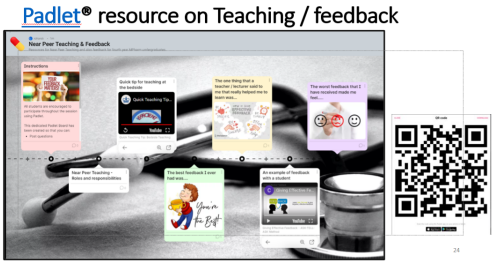

Figure 1 - padlet resource.png

Themes	Sub themes
Benefits	-Consolidated learning -Improved professionalism -Improved teaching/ feedback skills
Challenges	-Quality of teaching/ feedback -Difficulty providing feedback/teaching -NP learners of different knowledge levels
Emotional behaviour	-Increased confidence -Improved motivation -Tension -Trust
Relationships	-Reliability and rapport -Social and cognitive congruence
Feedback	-Balancing positive and negative feedback -Feedback preferences -Constructive

Figure 2 - themes.png

Unleashing Potential: A Comprehensive Analysis of the Evolution of Irish Pharmacist Mentorship from Pilot to Annual Programme

Tuesday, 7th November: Parallel Session 1: Education - Oral

Ms. Sarah Chambers [1], ***Ms. Katherine Morrow*** [2], ***Dr. Catriona Bradley*** [1], ***Dr. Rachael Clarke*** [3]

1. *Irish Institute of Pharmacy,* ***2.*** *Royal College of Surgeons Ireland,* ***3.*** *Kingstown College*

Background

For many pharmacists, pharmacy can be a solitary profession. Pharmacists often work by themselves, with little support on a day-to-day basis. The Irish Institute of Pharmacy (IIOP) believes that mentorship can address this profession-based isolation, as well as those necessitated by pandemics such as that seen during the Covid-19. Mentoring also aligns with the Institute's values of being a supportive and enabling organisation that creates synergies within the profession.

Objective/Aim

To design and deliver a pilot Mentoring Programme, which would help newly registered pharmacists with their Continuing Professional Development (CPD) and to empower them to foster reflective practice and establish professional networks. A successful pilot would also validate an evidence-based mentoring framework for a broader annual program while fostering mentorship skills within the profession.

Methodology

Following a rigorous planning and recruitment process, the IIOP began a three-month virtual program that consisted of with 32 volunteer pharmacists (16 mentors and 16 mentees), from various areas of the pharmacy profession in Ireland. Aided by a flexible programme structure designed to suite the lives of a busy pharmacists, mentoring pairs met virtually for 60 minutes every 3-4 weeks.

A dedicated IIOP mentoring team provided the pilot participants with orientation training, mentor-mentee matching based on preferences, experience, and diversity, and ongoing supports.

Evaluations of both mentees and mentors at pre, post and follow up stages, were conducted to gather data on several themes such as participant expectations, goals, mentorship understanding, and the mentor-mentee matching experience.

Results

Evaluation data gathered throughout the pilot stages indicated high satisfaction rates, with 100% of mentors and 91% of mentees expressing their satisfaction with the mentor-mentee matches.

Moreover, all mentors and mentees surveyed expressed a desire to engage in future mentoring initiatives. Mentees reported improvements in their confidence and competence with reflective practice, while mentors highlighted enhancements in their mentoring skills, such as goal setting, acknowledging strengths, and employing powerful questioning techniques. Participants also reported that mentoring provided energy and became a highly anticipated part of their week.

Building upon the success of the pilot, the IIOP initiated an expanded annual Mentoring Program, now in its second year, available to all Irish pharmacists. To advocate for mentoring within the profession, the IIOP established a group of 10 volunteer Mentoring Ambassadors. Additionally, the Mentoring CONNECT community serves as a platform for pharmacists interested in mentoring to connect, share experiences, and learn from one another. To date over 160 pharmacists have completed the training with over 100 pharmacists participating in a formal mentoring programme.

Conclusion

This study presents a comprehensive analysis of the evolution of Irish pharmacist mentorship, transitioning from a successful three-month pilot program to an annual mentoring initiative. The findings highlight the pos-

itive impact of mentorship on pharmacists' professional development, reflective practice, and fostering professional connections. The ongoing mentoring program and supportive initiatives established by the IIOP demonstrate the commitment to unleashing the potential of pharmacists through effective mentorship and collaboration.

Empowering Pharmacy Technician Students: A Sustainable ePortfolio Model for Professional Development Training in Undergraduate Education

Tuesday, 7th November: Parallel Session 1: Education - Oral

Dr. Tao Zhang [1], ***Dr. Seana Hogan*** [1], ***Ms. Mary Therese McGrath*** [1], ***Ms. Kathy Young*** [1], ***Dr. Denis O'Shea*** [1], ***Dr. Julie Dunne*** [1]

1. *School of Food Science and Environmental Health, Technological University Dublin, Grangegorman, Dublin 7, Ireland.*

Introduction

Employability is the ability to gain, maintain and secure new employment[1]. To build a successful career path, students should have the qualifications, appropriate transferable skillsets and the ability to demonstrate their knowledge and professional competencies in an appropriate manner. In 2013, Dublin Institute of Technology (DIT), now Technological University Dublin, launched 20 graduate attributes (GAs) under: "Enterprising", "Engaged", "Enquiry-based", "Expert" and "Effective". There is an emergent consensus that being reflective and developing reflective practice is crucial to becoming an effective healthcare professional, adding to and enhancing everyday professional values, knowledge and skills[2]. This research project was to investigate whether a better appreciation of specific GAs will support pharmacy technician students (TU654/DT425) to improve their employability and deepen their reflective practice, and whether it's scientifically and practically feasible to establish a sustainable ePortfolio model in the programme curriculum for professional development training.

Methodology

This project used a Participatory Action Research methodology[3]. The control-group (CG) and research-group (RG) involved were the final year TU654/DT425 students in the two consecutive years 2013/2014 (CG) & 2014/2015 (RG), respectively, where no incidents of students belonging to both groups. The RG was involved in the three phases of the research: Phase-I was to assess the initial level of confidence about the 20 GAs through student surveys; Phase-II was to identify, adopt and embed the appropriate GAs into the curriculum and extra-/co-curricular activities via of employer surveys. Phase-III was to evaluate the impact on the depth of students' critical reflection from the placement blog.

Results

Phase-I: the survey results (Figure-1, n=29) initiated a disputational discussion followed by the subsequent staff involvement to help the students to build basic and mutual understanding about GAs. Phase-II: the survey (n=48 hospital/community pharmacists and HR professionals) was developed in conjunction with the students' contribution, student-developed definitions of GAs. Seven, the most important, GAs were prioritised (Table-1). Phase-III: the breakdown of references to each GA made by CG/RG (Table-2a) and the most frequently discussed GAs (Table-2b) show an increase in reflection associated with GAs in the RG compared to the CG. More importantly, there is clear evidence of an increase in the variety of GAs being discussed explicitly by the RG, with the specifically prioritised attributes featuring most frequently. Communication and emotional intelligence skills are most frequently discussed by both groups[4]. Professional Development ePortfolio for Pharmacy Technicians modules (PDEP1006/PDEP2006) were developed and embedded with various students-engaged/-centred activities, including careers management workshops, reflective writing, ethical debate, integrated-case-study, personality identification & evaluation, community learning (e.g., CIRCLET, CERL), etc. A programme level ePortfolio has also been designed and developed.

Conclusion

Overall, the findings show that the students have been positively influenced by the project. ePortfolio is an appropriate, sustainable, and evidence-based (can even be high impact) learning and assessment model promoting student's engagement and enjoyment throughout the course of study and beyond as a life-long learners.

Developing a collective programme ePortfolio is a great approach to create a collaborative and reflective team culture for the programme and showcase the effectiveness of ePortfolio to students.

a.

Graduate Attribute	Control Group	Research Group
Communication	67	72
Emotionally Intelligence	50	50
Motivation	8	35
Work Related Learners	12	24
Innovator	0	9
Collaboration	6	6
Critical Thinking & Problem Resolving	0	6
Ethical	0	5
Team Work	4	5

b.

Graduate Attribute		Control Group	Research Group
Communication	Explicit	11	30
	Implicit	56	36
Emotionally Intelligence	Explicit	8	13
	Implicit	42	34
Motivation	Explicit	2	20
	Implicit	6	12
Work Related Learners	Explicit	7	18
	Implicit	5	7

Table 1. dit gas and tu654 prioritised gas.jpg

Enterprising	Engaged	Enquiry-based	Expert	Effective
Innovators	Global Citizens	Critical Thinkers	Disciplinary Knowledge	Strategic Thinkers
Leaders	Ethical	Problem Solvers	Reflective Practitioners	Active Team Players
Collaborative Workers	Motivated Self-Starters	Creators of New Knowledge	Work Based/Related Learners	Emotionally Intelligent
Entrepreneurs	Effective Communicators	Decision Makers	Digitally Literate	Resilient

Prioritised Graduate Attributes				
Active Team Players*	Effective Communicators*			
Collaborative Workers	Motivated Self-Starters	Emotionally Intelligent	Ethical	Work Based/Related Learners

*Top priority

Table 2. analysis of referenced graduate attributes references to graduates attributes by research vs control groups.jpg

Standardised tools to support learners in their career development journey

Tuesday, 7th November: Parallel Session 1: Education - Oral

Dr. Heather Bell [1], ***Dr. Laura O'Loan*** [1], ***Dr. Frances Lloyd*** [1], ***Prof. Colin Adair*** [1]

1. *Northern Ireland Centre for Pharmacy Learning and Development (NICPLD), Beechill House, 42 Beechill Road, Belfast, BT8 7RL*

Background

As the Pharmacy Post-graduate Deanery, NICPLD is responsible for the development of the pharmacy workforce in N. Ireland and delivers a range of programmes to support practitioners from all sectors of practice throughout their career journey. Thus, many pharmacists will engage in a number of different workforce development programmes throughout their career, beginning with pre-registration (foundation) training and culminating in advanced practice.

Methods

Whilst the level of competence required to be demonstrated within these programmes increases in complexity with career progression, all of the programmes require individuals to evidence a competency framework within the workplace setting under the mentorship of a more experienced practitioner, typically a pharmacist. NICPLD therefore needs to support and guide both trainees and mentors through each workforce development programme. To do so, NICPLD has adopted the use of standardised tools/strategies which has established consistency across the range of programmes making engagement and progression easier for both trainee and mentor.

Results

The standardised tools/strategies used across the workforce development programmes include:

Common infra-structure - all training takes place under the supervision of an appropriately trained mentor and in an environment supportive of trainee learning.

An online hub/dashboard – this is a central repository for all resources to support both trainees and mentors.

ePortfolio – enables the trainee to upload evidence and map it to the appropriate competences within their programme framework. Evidence can be assessed by the mentor, providing ongoing review and feedback.

Blended learning approach – to complement work-based training and facilitate access to learning, all programmes are supported by workshops, webinars and eLearning.

Discussion

This standardised approach across the workforce development programmes optimises trainee learning and facilitates learner transitioning between programmes, thus facilitating the training continuum. It also allows experienced practitioners to more effectively mentor trainees due to familiarity with the tools and strategies used consistently throughout the programmes.

Keywords: Work-based learning, workforce development, learning support tools

Developing a Theoretical Framework for Experiential Learning and Entrustable Professional Activities in Pharmacy: A Northern Ireland Perspective

Tuesday, 7th November: Parallel Session 1: Education - Oral

Ms. Fiona Hughes [1], ***Dr. Ahmed Abuelhana@ulster.ac.uk*** [2], ***Prof. Roisin O'Hare*** [3]

1. *Queens University Belfast,* ***2.*** *School of Pharmacy and Pharmaceutical Sciences, Ulster University,* ***3.*** *Southern Health and Social Care Trust*

Introduction

Significantly reformed GPhC standards for pharmacist education set out that trainees will now be prescriber ready at the point of registration [1]. One change is the requirement for longer periods of experiential learning (EL) placement which includes scope for demonstration of GPhC learning outcomes at the 'does' level of Miller's Pyramid [2] . In Northern Ireland (NI), 12 weeks of EL across all patient-facing sectors has been agreed. Consequently, a need is identified for an updated model of clinical education that meets regulatory and academic requirements, supports practice supervisors and facilitates trainee professional development and identity formation[3]. Many theories of professional learning emphasise facilitating participation in, and contribution to the activities of the setting, for learning, professional identity formation and fostering a sense of purpose and belonging[4,]. From this perspective, undertaking authentic activity during EL is advocated and completing activities based on academic convention rather than the practices of the workplace is presented as a barrier to learning. Frameworks of entrustable professional activities (EPA) are proposed to bridge educational theory and clinical practice[5.]

Framework Development and Application

EPAs are units of professional practice that reflect core activity that is specific to a professional regardless of sector or location of practice[6]. These will form the basis of providing evidence that trainees have demonstrated GPhC learning outcomes during EL in NI. Use of the EPA framework will continue during the Foundation training year, providing a scaffold such that the transition from undergraduate training into Year 5 is a continuum. EPAs developed for NI are underpinned by the existing evidence base but have been adapted to reflect the core skills of pharmacists practising here (Figures 1&2). The framework was developed in close consultation with pharmacists from all sectors and undergraduate and postgraduate learning, including the Foundation training year. Within the approach to EL, pharmacist practice supervisors will observe and feedback with trainees in relation to EPA performance. Development of the necessary clinical teaching skills is supported through 'Train the Trainer' events, facilitated by clinical education pharmacists and academics. It is anticipated that this approach to EL in NI will provide trainees with time to further their knowledge and skills within the practice setting while facilitating their learning through reflection, discussion and feedback centred on EPAs.

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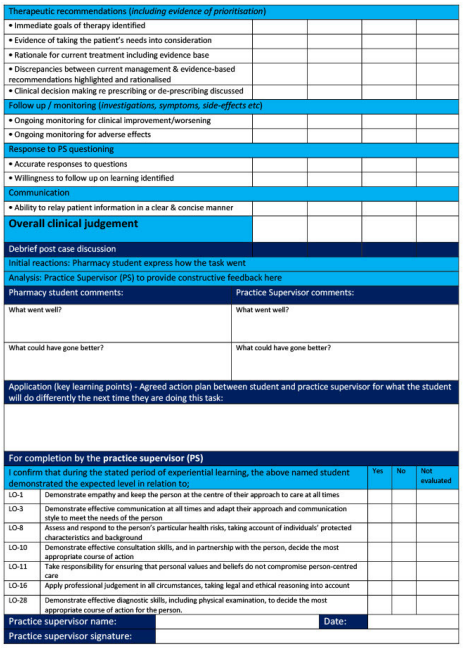

Therapeutic recommendations (*including evidence of prioritisation*)				
• Immediate goals of therapy identified				
• Evidence of taking the patient's needs into consideration				
• Rationale for current treatment including evidence base				
• Discrepancies between current management & evidence-based recommendations highlighted and rationalised				
• Clinical decision making re prescribing or de-prescribing discussed				
Follow up / monitoring (*investigations, symptoms, side-effects etc*)				
• Ongoing monitoring for clinical improvement/worsening				
• Ongoing monitoring for adverse effects				
Response to PS questioning				
• Accurate responses to questions				
• Willingness to follow up on learning identified				
Communication				
• Ability to relay patient information in a clear & concise manner				
Overall clinical judgement				

Debrief post case discussion	
Initial reactions: Pharmacy student express how the task went	
Analysis: Practice Supervisor (PS) to provide constructive feedback here	
Pharmacy student comments:	**Practice Supervisor comments:**
What went well?	What went well?
What could have gone better?	What could have gone better?

Application (key learning points) - Agreed action plan between student and practice supervisor for what the student will do differently the next time they are doing this task:

For completion by the **practice supervisor (PS)**				
I confirm that during the stated period of experiential learning, the above named student demonstrated the expected level in relation to;		Yes	No	Not evaluated
LO-1	Demonstrate empathy and keep the person at the centre of their approach to care at all times			
LO-3	Demonstrate effective communication at all times and adapt their approach and communication style to meet the needs of the person			
LO-8	Assess and respond to the person's particular health risks, taking account of individuals' protected characteristics and background			
LO-10	Demonstrate effective consultation skills, and in partnership with the person, decide the most appropriate course of action			
LO-11	Take responsibility for ensuring that personal values and beliefs do not compromise person-centred care			
LO-16	Apply professional judgement in all circumstances, taking legal and ethical reasoning into account			
LO-28	Demonstrate effective diagnostic skills, including physical examination, to decide the most appropriate course of action for the person.			

Practice supervisor name:		**Date:**	
Practice supervisor signature:			

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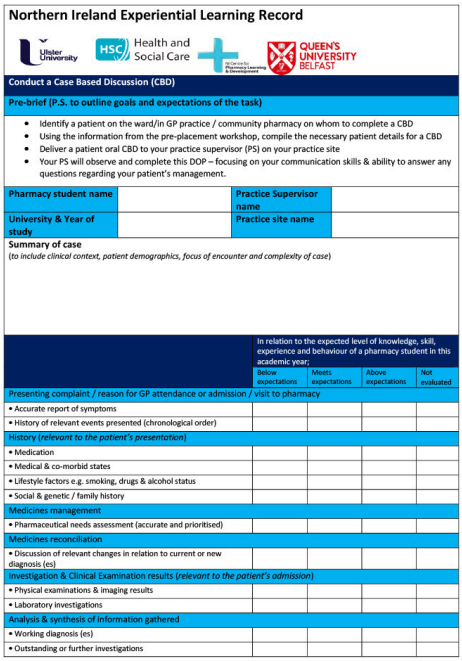

Northern Ireland Experiential Learning Record

Ulster University · HSC Health and Social Care · Centre for Pharmacy Learning & Development · Queen's University Belfast

Conduct a Case Based Discussion (CBD)

Pre-brief (P.S. to outline goals and expectations of the task)

- Identify a patient on the ward/in GP practice / community pharmacy on whom to complete a CBD
- Using the information from the pre-placement workshop, compile the necessary patient details for a CBD
- Deliver a patient oral CBD to your practice supervisor (PS) on your practice site
- Your PS will observe and complete this DOP – focusing on your communication skills & ability to answer any questions regarding your patient's management.

Pharmacy student name		**Practice Supervisor name**	
University & Year of study		**Practice site name**	

Summary of case
(*to include clinical context, patient demographics, focus of encounter and complexity of case*)

	In relation to the expected level of knowledge, skill, experience and behaviour of a pharmacy student in this academic year;			
	Below expectations	Meets expectations	Above expectations	Not evaluated
Presenting complaint / reason for GP attendance or admission / visit to pharmacy				
• Accurate report of symptoms				
• History of relevant events presented (chronological order)				
History (*relevant to the patient's presentation*)				
• Medication				
• Medical & co-morbid states				
• Lifestyle factors e.g. smoking, drugs & alcohol status				
• Social & genetic / family history				
Medicines management				
• Pharmaceutical needs assessment (accurate and prioritised)				
Medicines reconciliation				
• Discussion of relevant changes in relation to current or new diagnosis (es)				
Investigation & Clinical Examination results (*relevant to the patient's admission*)				
• Physical examinations & imaging results				
• Laboratory investigations				
Analysis & synthesis of information gathered				
• Working diagnosis (es)				
• Outstanding or further investigations				

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Oral Presentation Abstracts - Workforce

iSIMPATHY (implementing Stimulating Innovation in the Management of Polypharmacy and Adherence THrough the Years) – A representation of Cross Border, Cross Country and Cross Sector Success

Tuesday, 7th November: Parallel Session 2: Workforce - Oral

Ms. Emma Jane Coyle [1], ***Dr. Joanne Brown*** [2], ***Mx. iSIMPATHY Consortium*** [3]

1. *HSE,* ***2.*** *NHSCT,* ***3.*** *NHS/MOIC/HSE*

iSIMPATHY was a European project funded in the EU Interreg VA programme, managed by the Special EU Programme Body, that involved a partnership between HSE in Republic of Ireland (ROI), Scottish Government and MOIC in Northern Ireland (NI).[1]

iSIMPATHY pharmacists delivered holistic person-centred medicines reviews (MR), in primary (ROI and Scotland) and secondary care (NI and Scotland). These MRs focused on patient needs, as well as addressing clinical and safety considerations. iSIMPATHY adopted the Scottish 7 Step methodology, which facilitates shared decision making and improved understanding, in addition to optimising medicines to improve outcomes.[2]

The ultimate aim of iSIMPATHY was to enable multimorbid patients to live healthy and active lives. The project also aimed to create cohesive relationships, generate learning opportunities and develop polypharmacy guidance across the three participating countries.

Method

In February 2023, focus groups were arranged by the iSIMPATHY Project Management Team that brought iSIMPATHY project pharmacists (N=12) and iSIMPATHY National and Clinical leads (N=5) together. These focus groups concentrated on the key messages from the project, personal highlights and thoughts surrounding project legacy.

Participants were grouped into teams and asked 3 questions:

What is the most important benefit you brought to your patients?

What are you most proud of in iSIMPATHY?

What is your legacy following the project?

Qualitative responses were then analysed.

Results

Pharmacists and National Leads reported that iSIMPATHY MRs created an environment that encouraged shared decision making with patients. The time taken with patients allowed their voice to be heard, as well as an opportunity to develop the patient's knowledge and understanding around their health and medicines. The MR's did not only involve adding or removing medicines, rather, that the iSIMPATHY approach represented the holistic viewpoint and pharmacists acted as patient advocates.

iSIMPATHY allowed pharmacists to display their skillset, knowledge and expertise to benefit patients. Pharmacists detailed that they felt proud of how they made patients feel 'listened to' as a result of their MR.

There was unanimous agreement that the outcomes of iSIMPATHY should be utilised to influence policy change and that the iSIMPATHY model should be embedded into standard practice across the three countries.

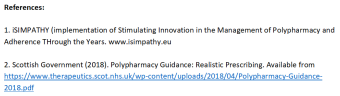
Discussion

The iSIMPATHY project was conducted successfully across the three countries achieving the project's overall patient aims. However, these focus groups demonstrated that there were many other outcomes and learning beyond those anticipated and those identified were collegiate across all areas. The project pharmacists identified that shared decision making was crucial to increase patient benefits and quality of life. The pharmacists also felt their knowledge and expertise had developed and delivered positive outcomes beyond those demonstrated by project metrics. All pharmacists were enthusiastic in their desire to embed their learning and positive

outcomes in not only their own practice but to influence policy change in their respective countries.

Conclusion

iSIMPATHY demonstrated that collaborative working across three countries and different sectors is a successful approach to provision of care. The project aims were achieved and others realised. Lasting professional relationships for future collaboration were created.



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Pharmacists' Attitudes and Perspectives on Deprescribing Fall-Risk Increasing Drugs in Older Adults

Tuesday, 7th November: Parallel Session 2: Workforce - Oral

Ms. Reham Kalim [1], Prof. Niamh McMahon [2], Prof. Sheila Ryder [1]

1. *School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2,,* ***2.*** *1- School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2.*

Background

Some medications can increase the risk of a person having a fall 1. Pharmacists play a role in medication review and deprescribing, including review and management of Fall Risk Increasing Drugs (FRIDs) 2. This research aimed to explore pharmacists' opinions on the barriers to and facilitators of deprescribing FRIDs in older adults in hospitals.

Method

Clinical pharmacists (CPs) working with older adults, based in Ireland, participated in online semi-structured interviews. Interviews were steered by an interview guide, based on the Theoretical Domains Framework (TDF) 3. Interviews were continued until data saturation was reached. The transcripts were coded deductively and inductively using NVivo 12. Barriers and facilitators, within the main TDF domains, were matched with possible behavioural change techniques, in order to identify potential future intervention strategies.

Results

Twelve senior CPs, with practice experience of up to 30 years, participated in the study. Median duration of interviews was 28.6 minutes. The main domains were: 'Environmental context and resources', 'Social influences', 'Knowledge', 'Emotion', 'Professional role and identity', 'Beliefs about capabilities' and 'Reinforcement'.

Barriers to deprescribing included: time intensive; doctors' reluctance to action some recommendations; presence of other care priorities during admission; gaining patients' buy-in requires effort and support, concerns about consequences for patients e.g. withdrawal symptoms, and challenges following up patients after discharge.

Facilitators included CPs' awareness of FRIDs classes and medication review tools, medication review being a core part of CPs' work, having the opportunity to review and monitor the impact of medication changes during an inpatient stay, having good relationships with the medical team, involving patients in decision-making, and triggers for medication review e.g. patients admitted with falls.

Conclusion

Work environment challenges and concerns about patient safety after discharge were considered significant barriers to deprescribing FRIDs in hospitals. Pharmacists felt that deprescribing FRIDs is challenging and that collaborative work with other healthcare professionals and patients may facilitate the implementation of the deprescribing process.

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The effectiveness and cost of integrating pharmacists within general practice to optimise prescribing and health outcomes in primary care patients with polypharmacy: a systematic review

Tuesday, 7th November: Parallel Session 2: Workforce - Oral

Mrs. Aisling Croke [1], ***Dr. Karen Cardwell*** [2], ***Dr. Barbara Clyne*** [1], ***Dr. Frank Moriarty*** [1], ***Dr. Laura McCullagh*** [3], ***Prof. Susan M. Smith*** [4]

1. *RCSI University of Medicine and Health Sciences,* ***2.*** *Health Information and Quality Authority,* ***3.*** *National Centre for Pharmacoeconomics and Trinity College Dublin,* ***4.*** *Trinity College Dublin*

Background

Polypharmacy and associated potentially inappropriate prescribing (PIP) place a considerable burden on patients and represent a challenge for general practitioners (GPs). Integration of pharmacists within general practice (herein 'pharmacist integration') may improve medications management and patient outcomes. This systematic review assessed the effectiveness and costs of pharmacist integration.

Methods

A systematic search of ten databases from inception to January 2021 was conducted. Studies that evaluated the effectiveness or cost of pharmacist integration were included. Eligible interventions were those that targeted medications optimisation compared to usual GP care without pharmacist integration (herein 'usual care'). Primary outcomes were PIP (as measured by PIP screening tools) and number of prescribed medications. Secondary outcomes included health-related quality of life, health service utilization, clinical outcomes, and costs. Randomised controlled trials (RCTs), non-RCTs, interrupted-time-series, controlled before-after trials and health-economic studies were included.

Screening and risk of bias using Cochrane EPOC criteria were conducted by two reviewers independently. A narrative synthesis and meta-analysis of outcomes where possible, were conducted; the certainty of evidence was assessed using the Grading of Recommendations, Assessment, Development and Evaluation approach.

Results

In total, 23 studies (28 full text articles) met the inclusion criteria. In ten of 11 studies, pharmacist integration probably reduced PIP in comparison to usual care (moderate certainty evidence). A meta-analysis of number of medications in seven studies reported a mean difference of -0.80 [-1.17, -0.43], which indicated pharmacist integration probably reduced number of medicines (moderate certainty evidence). It was uncertain whether pharmacist integration improved health-related quality of life because the certainty of evidence was very low. Twelve health-economic studies were included; three investigated cost effectiveness. The outcome measured differed across studies limiting comparisons and making it difficult to make conclusions on cost effectiveness.

Conclusions

Pharmacist integration probably reduced PIP and number of medications however, there was no clear effect on other patient outcomes; and while interventions in a small number of studies appeared to be cost-effective, further robust, well-designed cluster RCTs with economic evaluations are required to determine cost-effectiveness of pharmacist integration.

Factors influencing community pharmacist retention in Ireland – a qualitative study

Tuesday, 7th November: Parallel Session 2: Workforce - Oral

Dr. Matthew Lynch [1], ***Dr. Aisling O'Leary*** [1]

1. *Royal College of Surgeons*

Published evidence report multiple factors that affect retention of community pharmacists (CPs)(1–10). These centre on the unfavorable working conditions under which CPs practice such as having large and demanding workloads without getting adequate breaks, while tasked with a considerable duty of care to the patients that seek their advice and assistance on a daily basis. This in turn leads to stress and burnout which influences whether or not to remain in community practice. The extent to which this is mirrored in the Irish setting is limited to a recent survey from the Irish Pharmaceutical Union (IPU)(11).

Aim

This study sought to investigate specific factors influencing retention and attrition from community pharmacy in Ireland

Methods

One-to-one semi-structured interviews were conducted on pharmacists currently practising in community pharmacy or had recently left community practice. Study recruitment was undertaken using both convenience and purposive sampling. Participants were interviewed online and verbatim transcripts were generated from audio recordings. Qualitative content analysis was used to identify and explore emerging themes using abstraction to NVivo®. Ethical approval for the study was obtained from the Research Ethics Committee, RCSI (#REC202205017).

Results

A total of 23 interviews were conducted and there was consensus that data saturation was achieved. among the group with an even mix of gender represented. Sixteen interviewees have left community pharmacy to pursue other careers in a variety of pharmacist and non-pharmacist roles while two have retired. Of the remaining seven, five are still in community practice with three having changed to fulltime locum roles. A total of four former pharmacy owners were interviewed.

The overarching theme reported by interviewees as factors leading to departure from the community pharmacy setting was one of poor working conditions contributing to what they believed was an unsafe working environment in which to deliver optimal patient care. This workload was driven by an excessive administrative burden emanating from regulatory, reimbursement, and other non-clinical activities which impacted on career fulfillment. Interviewees identified little career progression options and an absence of supplementary remuneration benefits such as pension contributions, paid maternity leave and sick pay beyond the statutory minimum. While the workload for community pharmacists has expanded significantly in recent years, these have not been accompanied by the provision of additional resources leading to increased stress levels which negatively impact CP health and well-being. Furthermore there is the sense that community pharmacy is increasingly being practiced in a retail environment driven by corporate profit-seeking behaviour rather than focussed on safe and effective delivery of healthcare. This is leading many interviewees to feel undervalued and unappreciated by patients, prescribers and employers.

Discussion

The results of our study are consistent with the recent UK study conducted in 2022(12), and mandates a review of the conditions under which CPs practice in order to ensure that community pharmacy practice retains an adequate pharmacist workforce to deliver the existing range of pharmacy services, let alone facilitate the transition to a more primary care centric model of healthcare delivery.

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Burnout Amongst Irish Pharmacists: Impact of Psychological Safety, Psychological Capital and Job-crafting

Tuesday, 7th November: Parallel Session 2: Workforce - Oral

Dr. Catriona Bradley [1], ***Dr. Ciara Devine*** [2]

1. *Irish Institute of Pharmacy,* ***2.*** *Dublin Business School*

Background

This study measures burnout amongst Irish pharmacists and evaluates the impact of psychological capital, psychological safety and job crafting, as well as other demographic factors.

Methods

A cross-sectional descriptive, correlational and comparative design was used. Burnout was the dependent variable. Age, practice area, hours worked and type of employment were independent variables for the comparative analysis. Psychological Safety, Psychological Capital, and Job-Crafting were independent variables for the correlational analysis. An online questionnaire was sent by email to pharmacists on the register of Pharmaceutical Society of Ireland and a sample size of 868 was achieved (14.4% of effective population)

Results

The mean burnout score of the total sample was 54.93 (n=868, SD=19.16) with over 61% of respondents reporting moderate or high levels of burnout. Community pharmacists, those between the ages of 25 and 45 years, owners or supervising pharmacists and those working in organisations with fewer than 50 employees demonstrated the highest levels of burnout, with differences being statistically significant. There was no statistically significant difference in burnout scores between genders. Although burnout scores increased with the number of hours worked per week, this was not statistically significant.

Regression analysis indicated that Psychological Capital, Psychological Safety and Job Crafting each acted as significant predictors of burnout. Multiple regression analysis indicated that job-crafting did not have an effect independent of psychological capital and psychological safety.

The four subscales of Psychological Capital are Hope, Efficacy, Resilience and Optimism. Optimism and Hope were significant predictors of burnout, whilst Resilience and Efficacy were not.

Discussion

The levels of burnout reported in this study amongst Irish pharmacists are higher than the pooled prevalence of 53% reported in a recent systematic review of burnout in pharmacists[5.] With over 61% of pharmacists reporting moderate or high levels of burnout, this is an area that warrants further attention.

Pharmacists who experienced higher levels of psychological safety in the workplace were significantly less likely to experience burnout. Organisational and team leaders have an important role to play in creating a culture of psychological safety in the workplace.

Levels of resilience and efficacy were not related to burnout in this study, which suggests that focusing interventions in these areas is unlikely to prevent or improve burnout. However, the relationship between burnout and both hope and optimism was significant, and warrants further investigation at individual, organisational and professional level.

Whilst there was a significant difference in burnout scores between those working in community and

hospital pharmacy, there was no significant difference between psychological capital, psychological capital or job-crafting between these two populations, indicating that there are other factors driving the difference .

Conclusion

This study has identified high levels of burnout across Irish pharmacy and has identified cohorts that are at risk. It has identified that low psychological safety and low levels of hope and optimism are predictors of burnout and also indicates that there are additional factors contributing to burnout amongst community pharmacists. These findings can inform burnout interventions and provide a foundation for further research on burnout amongst pharmacists.

A scoping review of the methods and processes used by regulatory bodies to determine pharmacists' readiness to practice.

Tuesday, 7th November: Parallel Session 2: Workforce - Oral

Ms. Eimear Ni Sheachnasaigh [1], ***Prof. Cathal Cadogan*** [1], ***Prof. Judith Strawbridge*** [2], ***Dr. Laura Sahm*** [3], ***Prof. Cristin Ryan*** [1]

1. *Trinity College Dublin,* ***2.*** *RCSI University of Medicine and Health Sciences,* ***3.*** *School of Pharmacy, University College Cork*

Background and Objective

There is an expectation from government, regulatory bodies, patients, the public, and other healthcare professions that pharmacists are competent professionals who can practice independently. Regulation of the profession requires pharmacy graduates to register with a recognised regulatory body before being considered 'ready to practise' independently. The purpose of this scoping review was to examine the methods and processes used by national regulatory bodies to determine pharmacists' readiness to practice.

Method

A scoping review was conducted following the JBI guidelines for scoping reviews[1]. A search was conducted in three electronic databases (Embase, Scopus and CINAHL). For national regulators identified in the search, grey literature such as regulatory body websites were also searched. Data was selected based on inclusion and exclusion criteria pre-specified in the protocol (based on the PRISMA extension for scoping reviews (PRISMA -ScR)).[2] Source selection was performed by two reviewers, independently. Any disagreements were resolved by consensus/decision of a third reviewer.

Main outcome measures

A definition for the term 'ready to practise', assessments employed to determine readiness to practice, the competencies assessed and their development, and the role of the registrant post-registration were the outcome measures defined and supported data extraction.

Results

There were 1,959 database reference sources screened and 15 included, along with relevant data from the grey literature. None of the sources provided a definition for the term 'ready to practice'. Eleven countries were identified as holding a registration examination with format and curriculum varying. Written and oral exams, competency based written assessments, Objective Structured Clinical Examinations, and a combination of these were identified with written exam being the most popular (n=8). In all but one country, the regulator was responsible for delivery of the exam. The majority (n=7) confirmed the exam was mapped to a pre-defined set of competencies with only a few (n=4) explaining how these competencies were developed. Only 2 sources referred to the role of the registrant post-registration.

Conclusion

There is a paucity of research available on the methods and processes used by national regulators to determine pharmacists' readiness to practice. There is no pharmacy definition of being 'ready to practice'. Assessment methods vary widely, and no gold standard is apparent.

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Oral Presentation Abstracts - Enhancing Practice

Improving patient safety through the establishment of a pharmacist-led blood monitoring clinic for Janus kinase inhibitors (JAKi) in rheumatology

Tuesday, 7th November: Parallel Session 3: Enhancing Practice - Oral

Ms. Michelle Murphy [1]

1. *Craigavon Area Hospital, Southern Health & Social Care Trust*

Background

Janus kinase inhibitors (JAKi) are novel small molecule medications known to cause haematological abnormalities and elevations in hepatic transaminases, cholesterol and creatinine kinase. Blood monitoring is recommended and dose adjustments are advised if abnormalities arise. Recent warnings by the EMA and MHRA have highlighted the importance of monitoring these medications. A baseline audit (2020) demonstrated that hospital blood monitoring guidelines for JAKi drugs were not being followed. The rheumatology multidisciplinary team met and utilised Quality Improvement methodology including fish and driver diagrams to address this. This led to the creation of a pharmacist-led JAKi blood monitoring clinic.

Objectives

To establish a pharmacist-led rheumatology blood monitoring clinic for JAK inhibitors in order to:

-increase patient safety with increased compliance to blood monitoring

-save consultant/nurse time

-improve communication with primary care on the frequency of blood testing required

-increase patient understanding of the importance of blood monitoring with JAKi drugs

Methods

The clinic was established in March 2021. Patients commencing JAKi drugs are referred to the pharmacist clinic by the medical team. The pharmacist contacts the patient following delivery of their medication. The patient is counselled on their new medication and dates for blood checks are agreed. A letter is sent to the patient and their GP providing this information. The patient is booked into virtual telephone appointments and bloods are monitored every month for the first 3 months and every 3 months thereafter. Any abnormality in blood results is flagged early in the patient's treatment and if necessary, discussed with the consultant. Adjustments are made to the patient's dose if appropriate.

Results

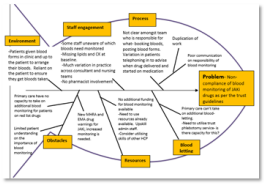
In order to evaluate the benefit of the pharmacist clinic a re-audit of compliance with blood monitoring (March 2021- September 2022) was carried out alongside a patient satisfaction postal survey (August 2022). A total of 58 patients were sampled in the re-audit, which found an increase in compliance in blood monitoring since the introduction of the pharmacist clinic. 98% of patients had their full blood count performed at 3 months compared to 56% in audit 1 and 95% of patients had their lipid profile completed at 3 months compared to 15% in audit 1 (Table 1). A patient satisfaction survey (N=62, response rate 48%) found that 28 (93%) patients either agreed or strongly agreed that they were more aware of the importance of attending for regular blood monitoring when prescribed JAKi therapy as a result of the clinic.

The pharmacy team made several significant interventions (self-graded Eadon grade 4 and 5). For example by improving medication adherence, detecting haematological abnormalities that required JAKi dose reduction, identifying patients suffering from infection requiring intervention

Conclusion

Introduction of the pharmacist clinic has increased patient safety by increasing compliance with blood monitoring as per hospital guidelines. The clinic has paved the way for improved communication with primary care

teams and has provided patients with extra support during their first months on treatment with their JAKi. It has also expanded the role of the rheumatology pharmacy team and saved nursing and medical time.



Jaki clinic fish diagram.png

Table 1: Comparison of audit results pre (Audit 1) and post (Audit 2) clinic establishment

	Audit 1	Audit 2
Number of patients	48	58
Number of patients with full blood count (FBC) monitored at weeks 4, 8 and 12	27 (56%)	57 (98%)
Number of patients liver function tests (LFTs) monitored at weeks 4, 8 and 12	26 (54%)	54 (93%)
Number of patients with lipid profile monitored at week 12	7 (15%)	55 (95%)
Responsibility for JAKi blood monitoring documented in patient clinic letters	20 (42%)	58 (100%)

Jaki clinic results table.png

What's bones got to do with it? Osteoporosis screening interventions and outcomes by a falls prevention team pharmacist

Tuesday, 7th November: Parallel Session 3: Enhancing Practice - Oral

Mrs. Emer Moore [1]

1. *hsc*

The impact of a fall and any fall-related injuries can have significant negative consequences for the independence and quality of life of the person affected[1]. The likelihood and severity of injury resulting from a fall can be related to bone health as a person with low bone mineral density will have an increased chance of fracture[2]. The estimated annual cost of fragility fractures to the NHS exceeds £4.7billion per annum[3] and hip fracture is a public health issue due to an ageing population[4]. NICE guidance suggests assessment of medication and osteoporosis risk as part of a multifactorial falls risk assessment a person should be offered following a fall[5]. The world guidelines for falls prevention state 'there is a close epidemiological and clinical relationship between falls and fragility fractures, explicit linkage is needed with clinicians and services that can assess bone health, identify osteoporosis and fracture risk and provide management for maintaining bone health'[1].

Pharmacists and Fracture Risk Assessments (FRA) are not a commonly featured combination, however, with the ever-expanding role of the pharmacy profession pushing traditional boundaries this study will review the FRA interventions carried out by the falls prevention team pharmacist.
The South Eastern HSC Trust (NI) multidisciplinary community falls prevention service and management team offer a multifactorial falls risk assessment to people aged over 65 years of age who have fallen or are at risk of falls. People who meet pharmacy-referral criteria are eligible for referral to the falls prevention team pharmacist who will carry out a person-centred Medicines Optimisation (MO) review and Fracture Risk Assessment (FRA).
Three main outcomes occur following FRA: lifestyle advice, referral for a Bone Density/DEXA scan or start bone-protective medicines. The falls prevention team pharmacist actions patient-specific outcomes including providing general bone health advice, referral (via consultant geriatrician) for a DEXA scan, referral to secondary care osteoporosis services and reviewing if people are suitable for bone protective medicines, prescribing as appropriate as an independent pharmacy prescriber.
The ability of the falls prevention team pharmacist to provide a FRA service is facilitated through support of consultant geriatricians

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The Prevalence of Potentially Inappropriate Medications (PIMs) among Frail Older Participants of The Irish Longitudinal Study on Ageing (TILDA)

Tuesday, 7th November: Parallel Session 3: Enhancing Practice - Oral

Mr. Ahmed Hassan Ali [1], ***Prof. Niamh McMahon*** [2], ***Dr. Frank Moriarty*** [3], ***Prof. Sheila Ryder*** [4]

1. *Trinity College Dublin,* ***2.*** *1- School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2. 2-St. James's Hospital, Dublin 8, Ireland,* ***3.*** *1- School of Pharmacy and Biomolecular Sciences, RCSI University of Medicine and Health Sciences. 2- The Irish Longitudinal Study on Ageing, Trinity College Dublin, Dublin, Ireland,* ***4.*** *School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2,*

Background

The OPTI-3S core list (criteria for optimising medicines by stopping, stepping down, or switching to safer alternatives) is a newly developed consensus-based potentially inappropriate medications (PIMs) list for hospitalised frail older adults. This study aimed to assess PIM prevalence among participants with polypharmacy and frailty, of The Irish Longitudinal Study on Ageing (TILDA), using OPTI-3S criteria and other published criteria.

Method

Frailty was assessed using the Clinical Frailty Scale (CFS) operationalised for TILDA Wave 3. PIMs were assessed based on subset statements of four explicit lists, namely the Screening Tool of Older Persons Prescriptions in Frail adults with limited life expectancy (STOPPFrail v2)[1], Poudel et al. algorithm[2], the Norwegian General Practice-Nursing Home criteria (NORGEP-NH)[3], and OPTI-3S. The proportions of participants with at least one PIM detected by any tool and by each tool were measured. The proportion of PIMs detected by each tool was also assessed. The relationship between PIM incidence and potential covariates (e.g. age, prescribed medications, level of frailty) was examined using Poisson regression.

Results

Fewer than one-tenth of all participants of the TILDA Wave 3 (n=583) received polypharmacy (i.e. using ≥5 regular medications) and were frail. Approximately half of all statements in the four PIM lists could be applied to the study cohort. 86.5% of the study cohort (n=504) had at least one PIM identified by any of the four tools. OPTI-3S identified at least one PIM in 62.6%, followed by Poudel's algorithm (53.9%) and NORGEP-NH (40.5%). OPTI-3S could identify at least one PIM in 97.8% of participants (n=44) with high frailty (CFS≥7), followed by STOPPFrail (n= 40, 88.9%). 34.8% of all prescribed medications were considered PIMs. The OPTI-3S list detected more PIMs than any other tool for all frailty levels (e.g. OPTI-3S, 78.4% vs STOPPFrail, 40.2% in CFS ≥ 7). Deprescribing all OPTI-3S-defined PIMs would reduce polypharmacy by 20.6% compared to NORGEP-NH (13.3%) and Poudel's algorithm (12.0%). Aspirin for primary cardiovascular prevention, benzodiazepines and z-drugs, antihypertensives, warfarin, non-steroidal anti-inflammatory drugs (NSAIDs), urological antimuscarinics, oral hypoglycaemics and antidepressants were the most frequently detected PIMs in the frail participants. The number of regular medications (particularly cardiovascular medications), anticholinergic burden, and taking specific medications (e.g. aspirin, NSAIDs, benzodiazepines, antidepressants) were significantly associated with a higher incidence of PIMs.

Conclusion

This is the first cross-sectional study to determine the prevalence of PIMs specifically in frail older participants in the third wave of TILDA. OPTI-3S is a useful PIM screening tool in community-dwelling frail older adults, pending further testing in the hospital setting.

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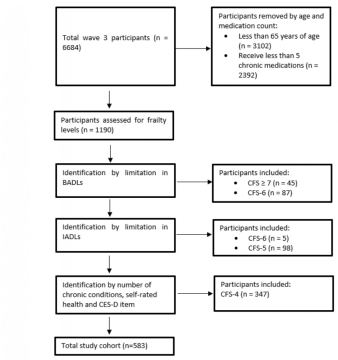

Figure 1 Flow chart for identification of the study participants.

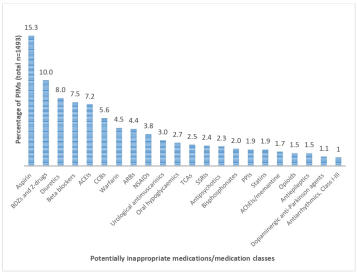

Figure 1 The most frequently encountered potential inappropriate medications and medication classes in the study cohort.

1.jpg

3.jpg

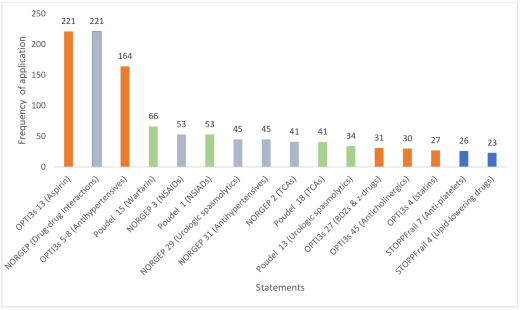

Figure 2 Most frequently applied PIMs statements.

2.jpg

Psychology training to support enhanced pharmacy skills

Tuesday, 7th November: Parallel Session 3: Enhancing Practice - Oral

Dr. Joanne Brown [1], ***Dr. Rebecca Houghton*** [2], ***Dr. Iain Jack*** [3], ***Ms. Erin McLean*** [2], ***Ms. Ciara McGread*** [1], ***Ms. Oonagh McKenna*** [1], ***Dr. Claire Scullin*** [4], ***Dr. glenda fleming*** [4], ***Prof. Michael Scott*** [4], ***Ms. Anita Hogg*** [4]

1. *Pharmacy Department Northern Health and Social Care Trust,* ***2.*** *Northern Health and Social Care Trust,* ***3.*** *School of Pharmacy and Pharmaceutical Sciences, Ulster University,* ***4.*** *Medicines Optimisation and Innovation Centre*

Introduction

Undertaking in depth medication reviews requires strong communication skills to elicit and impart information that is often complex. During the iSIMPATHY project[1] in Northern Ireland medication reviews were conducted with patients in an acute care setting. These reviews were patient-led, supported and facilitated by the pharmacist, rather than pharmacist-led. The role of psychology has been highlighted as important to see beyond the medicines, and even the patient, and to look at the whole person[2]. The Northern Ireland project pharmacists actively sought relevant training from the Clinical Health Psychology Service (CHPS) to support their role in medication reviews. Benefiting from this enhanced knowledge a polypharmacy workshop was prepared from this learning and jointly delivered by the project pharmacists and a Consultant Clinical Psychologist to final year students in Ulster University as part of their regular teaching.

Method

Key areas of training included mental health awareness/signposting, motivational interviewing and goal setting, adherence to treatment and collaborative communication skills. The impact of the training was explored by focus group, with a number of themes emerging following thematic analysis of transcripts.

Feedback from the student polypharmacy workshop was collected by evaluation questionnaire.

Results

Results showed that the pharmacists found the training by the Consultant Clinical Psychologist beneficial and the impacts were themed as shown in Table 1. Pharmacists commented on the personal impact the psychological training had, each agreed 'I couldn't go back to the way I was before. This will be my new way of thinking'.

Feedback from the undergraduate workshops (97% response rate) was positive with students reporting the psychology session to be particularly beneficial, rating the workshop as excellent (80%) or very good (20%). They commented on seeing the usefulness of seeing the psychologist's perspective.

Discussion

Psychological input to pharmacy training has shown to be beneficial and the skills developed will help improve patient care. It may be useful to consider further how this training could be developed and scaled. The enhanced skills developed by the project pharmacists during the training were incorporated into a well-received polypharmacy workshop co-produced and delivered with the Clinical Psychologist.

Conclusion

Psychological input to pharmacy training at undergraduate and postgraduate level proved beneficial and the project pharmacists noted the personal impact it had. The partnership between pharmacy staff and Clinical Health Psychology may serve as a model to influence future collaborative practice.

References:

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Table 1 Final themes and sub-themes generated by analysis

Theme	Sub-themes
Personal and Professional Development	'The skill of really listening' Approaching and Managing difficult conversations Acknowledging and Being kind to self
Engaging with Service Users	Changing the way we ask questions Shared responsibility
The future of Pharmacy and Psychology	Becoming ambassadors Implementation challenges

All ireland table.png

Improving Post-Operative Analgesia & Associated Prescribing on the Orthopaedic Ward of OLOL Richardson M1, Mahoko G2, O'Brien H3, Bano F4.

Tuesday, 7th November: Parallel Session 3: Enhancing Practice - Oral

Ms. Marie Richardson [1], ***Ms. Gwyneth Mahoko*** [2], ***Dr. Helen O'Brien*** [3], ***Dr. Fauzia Bano*** [2]

1. *Pharmacy Department, Our Lady Of Lourdes Hospital Drogheda,* ***2.*** *Anesthetics Our Lady of Lourdes Hospital Drogheda,* ***3.*** *Geriatric Medicine Our Lady of Lourdes Hospital Drogheda*

In January 2022 the HSE issued "GUIDANCE FOR OPIOID PRESCRIBING FOR ACUTE NONCANCER PAIN, POST-OPERATIVE PAIN AND POST-PROCEDURE PAIN"[1].
This document set out key recommendations:

1.Slow release opioids are not routinely recommended in this setting
2. Duration of (discharge) prescription of maximum 4 days prior to review

3. Appropriate disposal of opioid medications to prevent diversion and misuse
Guidance documents were developed by a multidisciplinary team comprising of: a senior pharmacist, pain management CNS, consultant ortho-geriatrician and a consultant anesthetist.

Three key documents were developed:

- Post-Operative Opioid Conversion Chart[2,3,4,5]
- Analgesia Prescribing Guideline[6,7,8,9,10]
- Opioid Patient Information Leaflet

These documents were presented to and approved by the local Drugs and Therapeutics Committee (OLOL).

Aim:
The aim of this project was to implement recommendations 1 & 3 of the HSE Guidelines to "improve quality and safety of opioid prescribing in the acute hospital setting and reduce harm from their use"[1] .

Methods:
A point prevalence baseline audit of post-operative prescribing was undertaken on the orthopaedic ward of OLOL on July 4th 2022 before the introduction of the guidelines. The audit measured compliance of prescribing at that time against ideal prescribing as outlined in the Orthopaedic Analgesia Guideline.
A2 posters of the guidance documents were printed and prominently displayed in key areas of the orthopaedic ward for ease of access.
The guidelines were introduced accompanied by intensive education including:

- Presentations of baseline audit results to key stakeholders
- Education on the guidelines at journal clubs and team meetings
- Regular Pop-up education sessions on the orthopaedic ward

Prescribing was reaudited using the same parameters in November 2022.

Results:

Based on the results of the baseline audit, the highest incidence of inappropriate prescribing was seen in the areas of: Opioids, Laxatives and NSAIDs. As a result, these three areas were targeted for improvement.
While improvements were seen in the prescribing of Opioids, Laxatives and of NSAID's, the prescribing of paracetamol and antiemetics disimproved between the audit and reaudit.
A comparison of results of the audit and reaudit is depicted in a table attached to this submission.

Conclusions:
Post-operative analgesia and associated prescribing can be improved with provision of clear, accessible, evidence based guidelines and information to prescribers and ward staff. A key learning point was that education provision has to be continuous with intensification at the time of team rotations.

References:
1:GUIDANCE FOR OPIOID PRESCRIBING FOR ACUTE NONCANCER PAIN, POSTOPERATIVE PAIN & POST-PROCEDURE PAIN HSE Jan 2022 https://msurgery.ie/wp-content/uploads/2022/02/Opioid-guidance-HSE-1.3-CDI-Final.pdf
2:Our Lady's Hospice Harold's Cross https://olh.ie/wpcontent/uploads/2019/01/Opioid-Conversion-Chart-2018.pdf
3:Renal Drug Database https://renaldrugdatabase.com/
4:Pharmacological Management of Cancer Pain in Adults, National Clinical Effectiveness Committee Nov 2015 https://www.gov.ie/en/collection/eec97d-pharmacological-management-of-cancer-pain-in-adults/
5:Mellar et al 92020)Tapering opioids: a comprehensive qualitative review http://apm.amegroups.com/article/view/34860/29324
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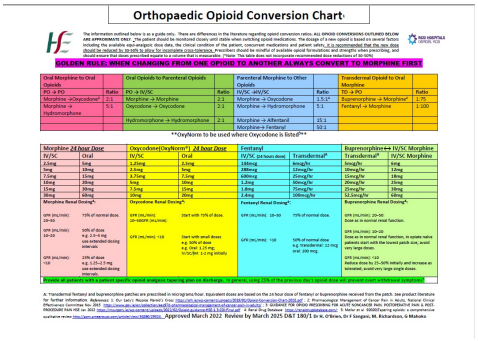
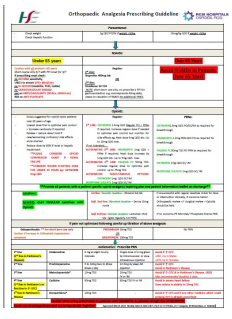
7. Controlled-release opioids cause harm and should be avoided in management of postoperative pain in opioid naïve patients British Journal of Anaesthesia Editorial October 19, 2018 https://doi.org/10.1016/j.bja.2018.09.005 https://bjanaesthesia.org/article/S0007-0912(18)30711-6/abstrac t
8. Management of Post-operative Nausea and Vomiting (PONV) Greater Glasgow and Clyde(GGC) NHS Medicines Adult Therapeutics Handbook November 2020 https://handbook.ggcmedicines.org.uk/guidelines/pain-post-operative-nausea-and-vomiting-and-palliative-care-symptoms/management-of-postoperative-nausea-and-vomiting-ponv/



Orthopaedic opioid conversion chart.jpg



Orthopaedic analgesia poster march 2022.jpg

Parameter:	July 2022	November 2022
No opioid naïve patients ≥65 years to be prescribed a long acting opioid	15%	0
Patients ≤4 days post-op to be prescribed a regular and PRN short acting opioid	65%	93%
All patients prescribed an opioid to be prescribed at least one regular laxative	73%	92%
Lactulose to be charted as regular not PRN	75%	91%
Avoid inappropriate NSAID's in patients ≥65 years old	75%	17%
Paracetamol to be dose adjusted for weight ≤50kg and impaired hepatic function	93%	74%
Anti-emetics to be prescribed taking into account of ↑QTc and Parkinson's disease	95%	91%

Results table audit and reaudit comparison.jpg

Building capacity into a development pathway for advancing pharmacy practice

Tuesday, 7th November: Parallel Session 3: Enhancing Practice - Oral

Dr. Laura O'Loan [1], ***Dr. Heather Bell*** [2], ***Dr. Frances Lloyd*** [2], ***Prof. Colin Adair*** [2]

1. *Northern Ireland Centre for Pharmacy Learning and Development (NICPLD), Beechill House, 42 Beechill Road, Belfast, BT8 7RL,* ***2.*** *Northern Ireland Centre for Learning and Development (NICPLD), Beechill House, 42 Beechill Road, Belfast, BT8 7RL*

Background

As patients' health needs become increasingly more complex, advanced pharmacist practitioners who can manage and prescribe medicines safely and effectively play an important role in their holistic treatment and care. Structured work-based learning together with effective mentorship and support are key components of a pharmacist's development pathway towards advanced practice.

Methods

A two-stage development pathway for hospital pharmacists has been established in Northern Ireland. Stage 1 is a Foundation Programme (FP) for newly qualified pharmacists; stage 2 is an Advanced Practice (AP) programme. Throughout both stages, pharmacists undertake work-based activities, supported by workshops, webinars and eLearning. One AP work-based activity is to mentor and support another learner. The aim of including this in the AP programme was to build capacity into the pathway. Their familiarity with the development pathway means that most AP pharmacists choose to mentor a FP pharmacist (rather than a trainee pharmacist or pharmacy technician).

Results

Stages 1 and 2 of the development pathway (FP and AP) were implemented in 2008 and 2010 respectively.

As of 31st May 2022, 445 of the 674 hospital pharmacists registered in Northern Ireland (66%) had embarked on the pathway.

334 (75% of those on the pathway) had completed stage 1 (FP); the remaining 111 (25%) were current FP students.

305 (91% of those that had completed stage 1) had progressed onto stage 2 (AP).

229 (75% of AP pharmacists) chose to mentor FP pharmacists (rather than trainees undertaking other learning programmes), thereby building capacity into the development pathway.

Discussion

A sustainable two-stage development pathway for advancing pharmacy practice has been established for hospital pharmacists in Northern Ireland. The pathway has recently been expanded to include general practice and community pharmacists. The inclusion of education work-based activities in both stages aims to build capacity across the whole workforce development pathway.

Keywords: Work-based learning, workforce development, advancing pharmacy practice

Oral Presentation Abstracts - Policy

Improving Antimicrobial Use in HSE Older Persons Residential Care Facilities

Tuesday, 7th November: Parallel Session 4: Policy - Oral

Ms. Mary Eva Regan [1], ***Ms. Mala Shah*** [1], ***Ms. Sarah Fagan*** [1], ***Ms. Aisling Clancy*** [1], ***Ms. shirley armitage*** [1], ***Ms. Patricia Sheehan*** [1], ***Mr. Callum Ryan*** [1], ***Ms. Catherine Mannion*** [1], ***Ms. Olivia Gallagher*** [1], ***Ms. Roisin Foran*** [1], ***Ms. Margaret Donnelly*** [1], ***Ms. Bernie Love*** [1]

1. *HSE*

Introduction

Antimicrobial use in Irish Older Persons Residential Care Facilities (OP RCFs) is higher than in other European countries. In 2020/21, an antimicrobial pharmacist (AMP) was appointed to each Community Healthcare Organisation (CHO) to monitor, develop and promote antimicrobial stewardship in community settings.

Aims

To establish baseline antibiotic use, develop antimicrobial stewardship tools for OP RCFs, promote best practice in relation to antimicrobial stewardship (AMS) and monitor trends in antimicrobial use in HSE OP RCFs.

Methods

A baseline point prevalence survey (PPS) of antimicrobial use was conducted across all HSE OP RCFs between October 2020 and August 2021. Following the survey, key national recommendations and AMS resources were developed in collaboration with the national Antimicrobial Resistance and Infection Control Programme. Feedback was provided to participating facilities by CHO AMPs with AMS support and education for nursing and medical staff. In September 2021, monthly monitoring of antibiotic use was established in HSE OP RCFs in collaboration with local managers.

Results & Discussion

The baseline PPS showed that 11.9% of residents were on a systemic antibiotic, with 6.3% on antibiotic prophylaxis. Urinary tract infection accounted for 51% of antibiotic prescriptions. Following the PPS, CHO AMPs developed an AMS toolkit for OP RCFs and engaged with nursing and medical staff to communicate PPS results, AMS resources and support implementation of AMS recommendations. Monthly self-reporting of antimicrobial use in HSE OP RCFs was commenced in September 2021, and showed a sustained decrease in antimicrobial use with 7.8% residents on an antibiotic in Quarter 4 2022, with 2.9% on antibiotic prophylaxis.

Conclusion

Newly appointed CHO AMPs have successfully promoted AMS across HSE OP RCFs. Following audit, feedback, education, development and promotion of antimicrobial stewardship resources, there was a sustained decrease in the proportion of residents on antibiotics used for treatment and prophylaxis of infection.

Transforming Medication Safety in Northern Ireland

Tuesday, 7th November: Parallel Session 4: Policy - Oral

Mrs. Angela Carrington [1], ***Dr. Brenda Bradley*** [1]

1. *strategic performance and planning group*

Background:

Unsafe medication practices and medication errors are a leading cause of injury and avoidable harm in health care systems globally. To address this requires system-wide recognition that medication safety is everyone's responsibility.

NI's response to the WHO 3rd Global Patient Safety Challenge 'Medication Without Harm' (1) recognises the need to build a social movement for change to tackle some of the known medication safety 'wicked problems' through strong collective leadership, increasing public engagement and developing new approaches to deliver transformational change. The Transforming Medication Safety in Northern Ireland (TMSNI) strategy outlines key aims and commitments within the 4 domains of the WHO Challenge (2), patients and public, Health and Social care workers, Systems and Practice and Medicines.

Aim:

To establish and implement a 5 year Programme to deliver the key aims and commitments of TMSNI

Objectives:

- To establish the supporting infrastructure to enable a successful programme
- To develop the TMSNI 5 year Programme implementation plan
- To deliver specific TMSNI Aims and Commitments for Year 1

Results to date:

- Programme infrastructure established (see organochart) and implementation plan developed.
- Increasing resilience of the TMSNI Programme Hub through effective team working, training needs and analysis and project management.
- Design, implementation and evaluation of the Medication Safety Campaign 'Know Check Ask'
- Medication Safety Research to understand the social determinants of medication safety; led by the Community Health Development Research Network.
- Pharmacy Schools Programme that uses a health literacy approach to equip primary school children with the skills to be medication safety wise.
- Establishment of a MHRA Yellow Card Centre in Northern Ireland which will help patients to report issues and concerns about their medication
- Scoping and design of an improvement programme to reduce the use of opioids in chronic non-cancer pain.
- Development of a targeted improvement programme to reduce the number of inappropriate omitted doses within our hospital setting.
- A webinar series targeted at community pharmacists on Human Factors and Insulin Safety
- Priority medication safety requirements incorporated in to the Build Programme for Encompass and risk identification and clinical decision support for GP systems.

Discussion:

TMSNI is an ambitious programme set out to reinvigorate our approach to medication safety in Northern Ireland. Success to date reflects the application of a whole systems integrated perspective, which utilises collective leadership in all areas, at all levels. A strong and effective TMSNI Programme Hub that drives the programme and is supported with strong leadership has supported the initial achievements.
The TMSNI programme will continue to develop and progress this collaborative approach to ensure that it delivers the sustained, system-wide transformation that is required to deliver on its key aims and commitments and rise to the Challenge of 'Medication Without Harm'.

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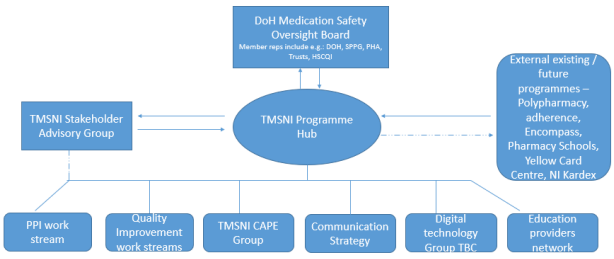

Tmsni organochart.png

Antimicrobial Use and Antimicrobial Resistance in Northern Ireland

Tuesday, 7th November: Parallel Session 4: Policy - Oral

Dr. Heather Coleman [1], ***Ms. Naomi Hamilton*** [1]

1. *School of Pharmacy and Pharmaceutical Sciences, Ulster University*

Introduction

The consumption of antibiotics for human use has increased drastically in recent years, causing antimicrobial resistance to be recognised as "one of the worst global health issues"[1,2]. The release of antibiotics into the environment from household, hospital and industrial wastewaters leads to serious effects on human and animal health[3]. Antibiotics for human use is higher in Northern Ireland than the rest of the UK, being 30% higher than in England[4]. However, there is a lack of information as to the prescribing patterns in the overall use of antibiotics in primary care and whether this is significant in terms of antimicrobial resistance. Research is limited regarding antimicrobial use and antimicrobial resistance (AMR) in Northern Ireland. Additionally, the effects of COVID-19 on antimicrobial prescribing patterns and AMR are unknown. Between the European Union and United States, AMR causes approximately 68,000 deaths annually.

Aim

This project aims to determine antibiotic prescribing patterns in Northern Ireland with a view to the link with antimicrobial resistance

Methods

An electronic survey was developed and distributed to eighty-five community pharmacists in Belfast. Yearly and monthly prescription data was gathered from the Business Services Organisation and COVID-19 statistics from Gov.uk[5]. All data was analysed on Microsoft Office Excel® to produce graphical information and statistical tests were performed using IBM® SPSS® Statistics 25.

Results

The overall response rate for the survey was 46%. The most common indication for antibiotics was upper respiratory tract infections (URTIs). Overprescribing of antibiotics was perceived as the leading cause of AMR, therefore 69% of pharmacists indicated increased General Practitioner (GP) compliance with guidelines would reduce AMR. A reduction was seen in all antibiotic use between July 2019 to July 2020. Pharmacists are in an ideal position to reduce AMR through patient education. All GP practices demonstrated inappropriate antibiotic use, especially for URTIs which suggests antibiotic appropriateness should be reviewed. Many patients avoided contact with GP's during COVID-19 which may have resulted in reduced antibiotic use. This research established amoxicillin as the most commonly prescribed antibiotic, which is contributing to increased AMR with its broad-spectrum activity and has recognised a decrease in antibiotic prescribing during COVID-19.

Conclusion

Based on the results found and a critical review of the literature, it was recommended that antimicrobial guidelines should be reviewed and improved, enhanced training should be provided to pharmacists and the antibiotic guardian campaign should be reenergised.

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Patient satisfaction with community pharmacy COVID-19 vaccination in Northern Ireland

Tuesday, 7th November: Parallel Session 4: Policy - Oral

Mr. Chris Garland [1], ***Dr. Simon Jacklin*** [2]

1. *Department of Health,* ***2.*** *Keele University*

Introduction

Northern Ireland's community pharmacies have contributed substantially to the COVID-19 response, with over 436,000 COVID-19 vaccines administered since March 2021. Community pharmacy has an established role in delivering influenza vaccination programmes. Research has found that community pharmacy vaccination can increase vaccine availability and uptake and services are highly valued by patients[1], and although European studies have demonstrated high satisfaction with community pharmacy COVID-19 vaccination services[2] further studies are required that are applicable to a UK context.

Aim

This evaluation aimed to measure user satisfaction with the HSC community pharmacy COVID-19 vaccination service in Northern Ireland, reasons why users chose community pharmacy for vaccination, and user attitudes towards service quality in three key quality domains of patient-centredness, professionalism, and privacy. The findings aimed to inform recommendations for service improvement for future vaccination campaigns.

Methods

A cross-sectoral survey of individuals accessing COVID-19 vaccination from 61 participating community pharmacies was carried out between 20th September 2022 and 3rd December 2022. Voluntary participation was offered to all individuals accessing COVID-19 vaccination from pharmacies purposively chosen as representative of the community pharmacy network. Respondent views on service quality and overall satisfaction were collected anonymously via a Microsoft Forms questionnaire.

The results were analysed for overall satisfaction and across three quality domains of patient-centredness, professionalism and privacy identified from the literature as mattering most to users of pharmacy services[3]. The results were reported using descriptive statistics including frequencies, percentages, skewness and measurements of central tendency. The findings informed the development of five key recommendations for future service improvement (Image 2).

Results

135 patients completed the online questionnaire. Overall patient satisfaction was extremely high, with 100% of respondents indicating they would recommend the service to friends and family and that they would return to a community pharmacy for COVID-19 vaccination. 96% of participants cited convenience, trust, ease of access and time spent at the pharmacy as reasons they chose community pharmacy for vaccination.

Respondents were very satisfied with the quality of the service provided across the three key quality domains of patient-centredness, professionalism and privacy. Over 95% of participants were very satisfied with the quality of the service, professionalism of the vaccinator and caring of the pharmacy team, however only 73.2% of respondents were very satisfied with the standard of the consultation room.

Discussion and conclusions

Overall satisfaction with community pharmacy COVID-19 vaccination in Northern Ireland is very high. Participants largely chose to access vaccination from community pharmacies for reasons of convenience, trust, ease of appointment and time spent at the pharmacy. Users are very satisfied with service quality in terms of patient-centredness, professionalism and privacy. Although generalisation is limited due to relatively small sample size, under-representation of some geographical areas and the potential for selection bias arising from voluntary participation and use of online questionnaires, this evaluation still provides a framework for continued

quality improvement of the service and a detailed perspective on user attitudes towards community pharmacy COVID-19 vaccination that has informed the development of recommendations for service improvement.

References

Please see Image 1.

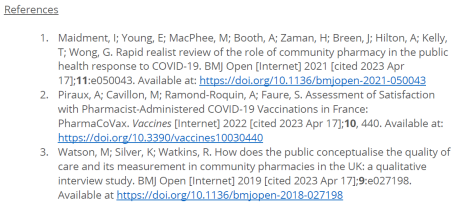

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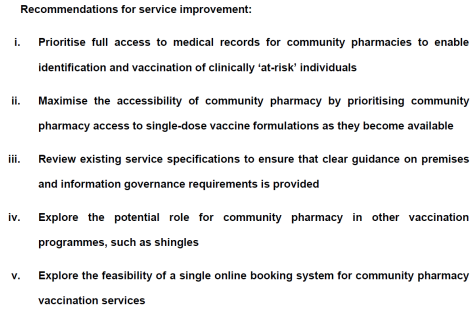
Image 1 - references.png



Recommendations for service improvement:

i. **Prioritise full access to medical records for community pharmacies to enable identification and vaccination of clinically 'at-risk' individuals**

ii. **Maximise the accessibility of community pharmacy by prioritising community pharmacy access to single-dose vaccine formulations as they become available**

iii. **Review existing service specifications to ensure that clear guidance on premises and information governance requirements is provided**

iv. **Explore the potential role for community pharmacy in other vaccination programmes, such as shingles**

v. **Explore the feasibility of a single online booking system for community pharmacy vaccination services**

Image 2 - recommendations for improvement.png

New Models of Prescribing in Home Treatment Team

Tuesday, 7th November: Parallel Session 4: Policy - Oral

Ms. Claire Erki [1]

1. Belfast Health and Social Care Trust

Author

Claire Erki, Interim Lead Mental Health Pharmacist, Belfast Health and Social Care Trust, Northern Ireland.

Introduction

Northern Ireland lacks a mechanism to allow many prescribers working at interfaces to prescribe directly to the patient. Home Treatment Team is one such interface with an average caseload of 55 patients at any given time in Belfast Trust. Regionally agreed simplified and clear prescribing and supply pathways are needed in Northern Ireland to enhance patient centred care, as outlined in the NI Medicines Optimisation Quality Framework 2016[1].

Aims & Objectives

To implement, test and evaluate the issuing of HS21 prescriptions by medical and non medical prescribers working at the interface between HTT and primary care.

Method/Design

A Task and Finish group was established to include a range of internal and external stakeholders, including HTT prescribers, GP, nursing leads and a service user consultant. The T&F group was chaired by the lead pharmacist for community mental health.

Process maps for accessing medication was completed at baseline and at the end of the pilot for comparison.

Consultants and senior trainee medical staff in HTT were added to the primary care register for prescribers and issued with HS21 prescription pads. Prescribers were able to prescribe a maximum of 7 days treatment where there was an urgent need for medication either the same day or next day, with instructions sent to the GP for ongoing management. Medicines prescribed were psychotropic medicines and medicines to alleviate side effects of psychotropic medicines. Prescriptions were handwritten and a copy retained in the patients clinical record.

Stakeholder feedback session and evaluation survey were completed, as well as a patient/carer feedback survey.

Results

The pilot ran May 2021-September 2021, 176 medicines were prescribed during this time. There was a 75-91% reduction in time taken for the entire process. 100% of carers/patients surveyed thought HTT prescribing should become a permanent service[2].

Discussion

This is the first pilot of its kind in NI and in mental health services across the region. There was a high level of satisfaction and was welcomed by patients and families which improved relationships between the patient and the HTT clinician. Stakeholders agreed that the HTT prescribing pathway provided better opportunities to access the right medicines at the right time from the right person. Timely changes to medication could be facilitated, reducing the time a patient may experience distressing symptoms. There was excellent collaboration of key stakeholders at each stage of the project.

Conclusions

Direct prescribing of hospital prescribers at the interface enhances service delivery and patient care. An electronic prescribing solution is required to fully implement the service. DOH have adopted the recommendations from the HTT report and the other NMOP pilots, advocating further role out of the model.

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Implementation of a National Hospital Medicines Management System

Tuesday, 7th November: Parallel Session 4: Policy - Oral

Mrs. Elmarie Cottrell [1]***, Mrs. Fionnuala King*** [1]

1. *HSE Acute Hospital Drugs Management Programme*

Hospital pharmacists have a key role, working with others, in ensuring continuous quality improvement for medicines use processes, including where information technology is utilised. The European Statements of Hospital Pharmacy, include a clear statement to health system managers that: "Hospital pharmacists must be involved in the design, specification of parameters and evaluation of ICT within the medicines processes. This will ensure that pharmacy services are integrated within the general Information and Communication Technology (ICT) framework of the hospital including electronic health (eHealth) and mobile health (mHealth) procedures."[1]
The Hospital Medicines Management System (HMMS) is a centrally-deployed, national ICT system to support the information and technology requirements of both acute and non-acute hospitals' pharmacy services in Ireland. The HMMS project is a collaborative pharmacy ICT project between the Acute Hospital Drug Management Program and eHealth. The system is an efficient and reliable technological solution that delivers a high level of interoperability and provides visibility of drug usage and costs from procurement to drug administration.
This national project involved the development of an open source national drug file incorporating over 12000 drug lines. The HMMS drug file supports standardisation of procurement and dispensing data nationally allowing for enhanced data analysis.
HMMS was deployed in the first Irish Hospital in May 2023 and will be implemented in a further five hospital pharmacy departments in 2023. Subsequent phases of HMMS will see its deployment across 75 Irish hospital pharmacy sites and make it the first national drug management system in Ireland. HMMS supports live stock management and enables effective and efficient drug procurement which is critical in the current international climate of drug shortages.
HMMS is also the first pharmacy software system in Ireland to offer interoperability with ezFMD providing hospitals with a one step process to comply with the Falsified Medicines Directive and electronically update stock levels to maximise pharmacy stock control.
Safe, reliable healthcare depends on access to, and the use of, information that is accurate, valid, reliable, timely, relevant, legible and complete. The current ICT infrastructure in Ireland's health and social care sector is highly fragmented with major gaps and silos of information which prevents the safe, effective, transfer of information[2].
HMMS is the first pharmacy software system in Ireland to support a single patient dispensing record through the incorporation of the Individual Health Identifier in the Patient Administration System interface. HMMS provides readily accessible, reliable patient data to inform medicines management in acute and non-acute hospitals and enhance patient safety and care.
HMMS will also become the platform to support electronic prescribing and electronic medicines administration when Irish hospitals are ready to adopt these solutions. The ultimate eHealth vision is to implement a closed loop medication management system.
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Poster Abstracts

A clinical audit to assess the impact of pharmaceutical care plans on the interventions that are required for Intensive Care Unit (ICU) patients at the time of discharge from hospital.

Poster

Mr. James Hyde [1], ***Dr. Catherine Shaw*** [2]

1. *Clinical Pharmacist, Northern Health and Social Care Trust,* ***2.*** *Lead Pharmacist for Foundation Training Year, School of Pharmacy, Queen's University Belfast*

Introduction

Patients who are admitted to the intensive care unit (ICU) may be at higher risk of having a medication error. Reasons for this include that the focus of critical care is to stabilise patients during an acute phase of illness, multiple transitions of care, many regular medicines being temporarily withheld (1-2) or new medicines not being reviewed and stopped (3-4). With transfer between care settings a key area of concern regarding medication issues, and many medication changes made in ICU, this audit studied the impact of care plans on the interventions that were required once patients left ICU, including interventions still required at discharge.

Aims and objectives

To assess the impact of care plans on the number and type of interventions required post-ICU, specifically those required on the day of discharge from hospital. To evaluate how care plans impact pharmacist confidence levels when reviewing patients.

Methodology

Data was collected retrospectively for 30 patients in each phase over 5 months each. Patients received a care plan to aid decisions on their medicines post-ICU (intervention phase). Data was collected retrospectively once they were discharged. Data collected included, the intervention made, the date this occurred, and grade. A questionnaire was sent out to clinical pharmacists prior to the intervention phase to assess confidence levels when reviewing ICU patients and re-sent post-intervention phase to assess impact.

Results

There was a significant reduction in the number of interventions required on the day of discharge when care plans were used with 15% of medicines requiring an intervention, compared to 24% in the baseline phase, however, types of interventions and grades observed were similar in both groups. Pharmacists demonstrated significant increase in confidence when using care plans, and independent prescribers were more inclined to utilise this skill when using them.

Conclusions

Care plans had a significant impact on pharmacists' confidence when reviewing ICU patients, the number of interventions required on the day of discharge but had limited impact altering the type and grade of intervention. Utilising pharmacy staff (including ICU pharmacists / ward technicians) may help to optimise medicines on the ward. The introduction of ePrescribing systems may provide benefits when transferring from ICU but does not negate the need for a formal handover process.

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improve medication safety and patient outcomes on transition from adult intensive care settings: a systematic review and meta-analysis. BMJ Qual Saf. 2022;31(8):609-22.

Example of ICU Care Plan

NHSCT ICU Medication Care Plan

This form is to help the MDT review patient's medications once they have been transferred from ICU to ward level care.
Please file in Medical Notes

Patient name: **PATIENT A**
Address: _____
Date of Birth: _____
HCN: _____
Or attach addressograph

Allergy Status

Allergen	Reaction
No Known Drug Allergies	N/A

Pre-admission medicines

Name of medication	Dose / Directions	Route	Medication Reconciliation (E.g. Continued / Held / Stopped)	Comments / Ongoing Plan
Atorvastatin	20mg OD	PO	Held	Not acutely important in ICU – can restart on ward
Naproxen	250mg BD - TDS	PO	Held	Trial without depending on pain levels
Omeprazole	20mg OD (whilst on NSAID)	PO	Held	Commenced clopidogrel. Switched to lansoprazole due to interaction between clopidogrel and omeprazole

Medicines started in ICU

Name of medication	Dose / Directions	Route	Indication	Intended duration / Plan for stopping
Paracetamol	1g 6hrly PRN	IV	Pain / fever	Review pain and continue on ward if required
Quetiapine	25mg BD	PO	Agitation (reaction to haloperidol)	Continue to wean on transfer to ward (with view of stopping before discharge)
Ondansetron	4mg 6hrly PRN	IV	Nausea	Monitor nausea and stop if appropriate
Ciprofloxacin	500mg BD	PO	Urosepsis	Oral step down from Teicoplanin / Aztreonam / Metronidazole 7 day course in total finishing on 12/08/22 as per microbiology advice
Enoxaparin	40mg OD	SC	VTE Prophylaxis	Weight: 78kg – Stop on discharge
Fortisip Extra	200ml TDS	PO	Nutrition	Dietitians to advise ongoing management within 48 hours of transfer from ICU
Lactulose	15ml BD	PO	Laxative	Monitor Bowel chart and switch to PRN / stop if appropriate
Lansoprazole	30mg	PO	Stress Ulcer Prophylaxis	If PPI still indicated, continue on lansoprazole due to interaction with clopidogrel
Melatonin	3mg OD	PO	Sedative	For inpatient use only Stop on discharge
Clopidogrel	75mg OD	OP	Cerebellar infarct	Intended as long term

Report prepared by: **James Hyde** **(Pharmacist)**

Example of icu care plan.png

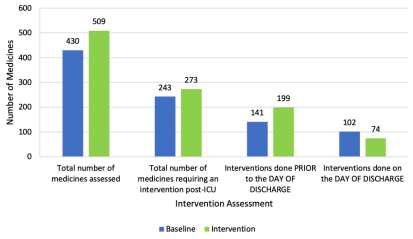

Figure 1: Graph depicting the number of medicines assessed, those requiring an intervention, including the number of interventions occurring on the day of discharge from hospital or before.

Figure 1 - interventions required on discharge.png

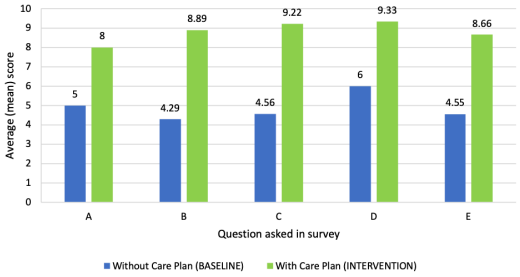

Figure 2: Average score for each question asked in each question from the baseline / post-intervention questionnaires.

Questions asked pharmacists to rank their level of confidence using a Likert scale from a score of 1 to 10 (1 = Not confident, 10 = Very confident)

A Generally, how confident are you when you are reviewing a patient who has been transferred out of ICU?

B How confident are you at discerning if a pre-admission medicine has been officially held / stopped in ICU or if it has been temporarily withheld and can be restarted on the ward?

C How confident are you at discerning if a medicine commenced in ICU is intended for long term use, or if it should be stopped (or weaned) prior to discharge from hospital?

D If you deemed it appropriate for a pre-admission medicine to be restarted post-ICU, how likely are you to prescribe this on the kardex yourself?

E If you deemed a medicine, which was commenced in ICU, to be no longer required, how likely are you to discontinue this on the kardex yourself?

Figure 2 - survey results.png

A multi-sector simulated experiential practice event for year 1 MPharm students in Northern Ireland (NI)

Poster

Prof. Roisin O'Hare [1], ***Mr. Niall O'Boyle*** [2], ***Ms. Melissa Smyth*** [3], ***Mr. Edward Lavery*** [4]

1. *Southern Health and Social Care Trust,* ***2.*** *South Eastern Health and Social Care Trust,* ***3.*** *Clinical Pharmacist, Northern Health and Social Care Trust,* ***4.*** *Clinical pharmacist, Western Health and Social Care Trust*

Background

Simulation-based education complements traditional teaching, improving students' knowledge, understanding, as well as supporting the development of students' teamwork, decision-making, and consultation skills[1,2], as well as supporting professional identity formation[3]. Year 1 students across both Schools of Pharmacy in Northern Ireland (NI) participated in a pre-placement workshop and a simulated multi-sector experiential event.

Objective/Aim

To evaluate Year 1 MPharm students' and participating staff' experiences of a simulated multi-sector Experiential Event designed to develop clinical and consultation skills.

Methods

The year 1 Experiential Event was delivered in both Universities in NI in March 2022. Staff (n=16) and students (n=222) were invited to complete a post-Event evaluation on Microsoft Forms to inform ongoing improvement of the Event. Ethical approval was not required as this formed part of the review of the module.

Results

Seventy-five percent of staff responded (n=12) with 42% (n=5) respondents believing that students were competent conducting medication history, counselling and simple prescribing decisions. Seventy-seven percent of students (171/222) responded; 85% (n=145) and 81% (n=139) respectively believed that the medication history and consultation checklists developed in the pre-placement workshop prepared them for "real" patient consultations. Students were confident in conducting BP and peak flow examinations (73%, n=125) and in prescribing medication (83%, n=142). Eighty-six percent (n=147) of respondents believed that the event had made them feel more like a pharmacist.

Conclusion

Year 1 respondents showed an appreciation for the experiential event, believing that it improved their clinical and consultation skills. The majority of student respondents believed that the event supported their professional identity formation. Staff respondents agreed that students developed core clinical skills but to a lesser extent than student participants, believing curriculum redesign will facilitate enhanced student engagement with the event. This event provides students with a first glimpse of their future clinical roles which they will continue to evolve during the MPharm.

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A Scoping Review of Practice Readiness in Healthcare Professions; Pharmacy, Nursing and Dentistry

Poster

Ms. Eimear Ni Sheachnasaigh [1], ***Prof. Cathal Cadogan*** [1], ***Mr. Stephen O'Connor*** [1], ***Mr. Patrick McDonnell*** [1], ***Mr. James Dunne*** [1], ***Ms. Sarah Mohammed*** [1], ***Ms. Roisin Curley*** [1], ***Ms. Aoife Gorman*** [1], ***Ms. Katie Kavanagh*** [1], ***Prof. Cristin Ryan*** [1]

1. *Trinity College Dublin*

Introduction

Today's healthcare professions' graduates begin their professional practice in fast-paced and high-pressured workplaces, often in under-resourced healthcare systems with overworked colleagues. Graduate preparedness for the workplace impacts on the healthcare team and has significant implications for patient safety. Newly qualified healthcare professionals must be practice-ready to 'hit the ground running'. It is no longer sufficient for newly qualified healthcare professionals to be qualified to practise, they must also be 'ready to practise'. This review focuses on the readiness or preparedness of healthcare professionals in pharmacy, nursing and dentistry who are entering the workforce as independent practitioners for the first time.

Methods

The databases Embase, MEDLINE, ERIC and CINAHL were searched with no language or date limitations applied, however, only studies published in English were included. Members of the review group independently screened records for inclusion. Screening and data extraction included piloting and discrepancies were resolved by consensus or by an independent reviewer. Data extraction focused on defining practice-readiness, attributes and characteristics associated with practice-readiness, factors influencing practice readiness, achieving and assessing practice readiness and the benefits for stakeholders of practice ready graduates. Students in their final year of undergraduate study and/or graduates no more than two years post-graduation were included in the review. Findings were mapped descriptively with data presented in tabular and diagrammatic format illustrating and summarising the review findings and describing how the results relate to the review question and objectives.

Results

Most studies included in the review were based on surveys or questionnaires of healthcare professions' students, their educators, and their clinical supervisors. Studies suggested that practice readiness is primarily influenced by the quality and robustness of the undergraduate programme and the clinical placements. Study results generally claimed that students and new graduates had a good level of practice readiness. It was highlighted that there are some aspects of practice that new graduates are not prepared for, including complex clinical procedures. In such cases, a lack of sufficient clinical experience was implicated. There was a general lack of consensus on a definition for the term practice readiness, but many studies cited a mix of clinical and 'soft' skills as being most important. In some cases, it was determined that practice readiness is achieved by completion of university education and success in national regulator examinations.

Conclusion

Working towards clarifying the concept of practice readiness can contribute to ensuring graduates are practice ready. Experiential learning in the clinical placement environment is important in contributing to practice ready healthcare professionals. The significance of this is highlighted across the three professions. Maximising the clinical hours in the undergraduate curriculum and the experiences gained by students on placement can contribute to graduation of practice-ready healthcare professionals. There appears to be a paucity of studies exploring how the practice readiness of healthcare graduates affects other stakeholders in the healthcare system and in particular, the patients' experience.

An audit of the management of drug-drug interactions associated with nirmatrelvir/ritonavir (Paxlovid™) at a tertiary Dublin Hospital

Poster

Ms. Sinead O'Mahony [1], ***Mr. Michael Coughlan*** [1], ***Ms. Eimear McManus*** [1], ***Mr. Paul Tighe*** [1]

1. *St. Vincent's University Hospital*

Introduction

Paxlovid™ (nirmatrelvir/ritonavir) is a novel therapeutic agent for Covid-19. Significant drug-drug interactions (DDIs) may occur with commonly prescribed medicines as ritonavir is a strong CYP3A4 inhibitor.

HSE Guidance states that patients' concomitant medicines should be reviewed, using a validated interaction checker, to identify and appropriately manage DDIs with Paxlovid™ (1,2).

Aims

The aim of this audit was to review the management of drug interactions with Paxlovid™ in SVUH from June to December 2022.

Methods

The healthcare records of patients prescribed Paxlovid™ during the audit period were reviewed.

The University of Liverpool Interaction checker was used to identify potential DDIs and to subsequently classify as either "do not co-administer (red)" or "potential interaction (amber)".

Prescribing decisions were analysed using Microsoft Excel.

Results

53 Paxlovid™ prescriptions were included.

Using the University of Liverpool interaction checker, a total of 72 "red" and "amber" potential DDIs were identified. 14 (19%) DDIs were classified as "red" and 58 (81%) were classified as "amber". Clinical pharmacists identified and intervened in 65/72 (91%) instances.

In 13/14 "red" DDIs, co-administration of Paxlovid™ and the interacting medicine didn't occur. The DDIs were managed as follows; stop or hold the interacting medicine (8), stop Paxlovid™ (2), alternative concomitant medicine prescribed (2), scheduling of interacting medicine allowed for administration of Paxlovid™ (1). With one "red" DDI, co-administration of one dose of Paxlovid™ with the contraindicated medicine occurred prior to clinical pharmacist intervention.

58/58 "amber" DDIs were reviewed for suitability of co-administration with Paxlovid™. The following interventions were made: dose adjustment (4), stop or hold the interacting medicine (24), stop Paxlovid™ (7), increased monitoring (17), alternative concomitant medicine prescribed (6).

Conclusion

This audit highlights the need for an ongoing comprehensive DDI review for all Paxlovid™ prescriptions and the value of clinical pharmacist input in safely managing these DDIs

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An evaluation of a medicines optimisation review targeted at reduction of falls and associated harm, conducted by a pharmacist independent prescriber, in older patients attending hospital due to a fall

Poster

Ms. Emma McDowell [1]

1. Lead Clinical Pharmacist, Northern Health and Social Care Trust

Background

Around a third of people aged over 65 have at least one fall per year[1]. NICE guidelines recommend that older people who have fallen in the last year should have their medicines reviewed and inappropriate medicines should be discontinued or modified[2].Involvement of a pharmacist in a comprehensive medicine review has been shown to improve the rate of reduction of falls-risk medicines[3], but no study to date has looked at a Pharmacist Independent Prescriber (PIP) undertaking falls prevention reviews in the acute setting.

Objectives

To undertake a structured medication review in patients who meet the criteria for a falls assessment, and demonstrate the benefits by reducing the use of Falls Risk Increasing Drugs (FRIDs) and medicines with an Anticholinergic Burden (ACB), and optimising bone protection medicines.

To quantify the medicines optimisation interventions which were implemented by a PIP and explore those that were not.

Design and setting

Analysis of data from an in-hospital prospective interventional implementation study in the medical wards of Causeway Hospital, Northern Ireland, utilising a single group with pre- and post-comparison. The population was older patients admitted to hospital due to a fall.

Intervention

Falls prevention focused medicines optimisation review carried out by a PIP. This was structured to identify FRIDs; medicines with an ACB; and assess FRAX score with review of bone protection medicines. A list of recommendations was then developed, discussed with patient and, where needed, the physician, and interventions to optimise medications made where appropriate.

Main results

Mean number of FRIDs reduced significantly ($p<0.001$) from 3.16 to 2.6 per patient, with 22.78% of total FRIDs being discontinued/amended. ACB score reduced significantly ($p<0.001$) from 3.2 to 2.4 per patient and 26.54% of total ACB score was reduced. Patients on appropriate bone protection increased from 50% to 96%. There were 21 patient refusals out of a total of 141 recommendations made.

Conclusion

PIPs can have a significant impact on medicine optimisation in relation to falls prevention in the acute setting, resulting in endpoints which are proven or theorised to reduce number of falls. Implementing the review with a structured form aided in straight-forward preparation and it is hoped to be feasible for more wide-spread use. More research is needed to prove that the interventions translate to reduced falls or fractures and whether medication changes are sustained post-discharge.

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An Evaluation of Patient Experience of a Rheumatology Etanercept Biosimilar Switch Programme.

Poster

Ms. Michelle McVerry [1]

1. *Belfast Health and Social Care Trust*

Introduction

The Belfast Health and Social Care Trust Rheumatology department commenced a biosimilar switch programme, switching patients from Etanercept (Enbrel®) to biosimilar (Benepali®). Patients attended a bespoke switch clinic providing education and training before proceeding with biosimilar switch.

Aims & Objectives

To evaluate patients' experience of the Etanercept biosimilar switch programme including understanding of, attitudes towards and satisfaction with the switch process.

Method

A service evaluation of patients invited to undergo biosimilar switch was undertaken. Ethical approval was not required. Patients' views were surveyed with a web-based questionnaire via text message/QR code or completed via telephone by an evaluator entering responses into the survey-tool.

Results

182/342 patients responded (53%). Most [171 (94%)] reported discussing biosimilars with a healthcare-professional, received written information [174 (96%)] and felt adequately informed [172 (95%)]. 140 (77%) thought the reason for switching was to save money and 83 (45%) understood biosimilars as "*A highly similar but not identical copy of a biologic medicine*". Most [118 (65%)] reported a shared decision-making process but 52 (28%) thought "*Rheumatology team alone decided*". Most [126 (69%)] had no reservations about biosimilars, but 53 (29%) were concerned about its effectiveness. Mean visual analogue score for confidence in the biosimilar was 7.51 (median 8, 1-10).

168 (92%) reported switching to biosimilar agent. 103/168 (61%) reported no problems afterwards. Switch-back rate was 13% (22/168). 95% (161/168) rated support provided afterwards as adequate or better. Mean visual analogue score for satisfaction was 7.84 (median 8, 1-10).

Discussion / Conclusions

The Etanercept biosimilar switch programme was successful with high switch rates, high levels of patient confidence and satisfaction. Recommendations for future include improving the process of shared decision-making during consultation to ensure fully informed patient consent.

An Evaluation of Pharmacy Students' Knowledge, Views and Attitudes Towards People living with HIV

Poster

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Background

People living with HIV (PLWH) are known to experience stigma associated with the infection[1]. Accordingly, it is important to ensure that pharmacy students have a sound knowledge on HIV and exhibit no negative attitudes towards PLWH. This is particularly important considering the most recent Standards for the Initial Education and Training of Pharmacists have a "greater emphasis on equality, diversity and inclusion to combat discrimination and deal with health inequalities" [2].

Aim

The aim of this study was to assess the knowledge and attitudes of Year 3 and Year 4 pharmacy students to HIV and to people living with HIV (PLWH).

Methods

Following ethical approval, an online questionnaire was distributed to Year 3 and Year 4 pharmacy students (*n*=173). This 29-item questionnaire assessed knowledge and attitudes to HIV and PLWH[1]. Furthermore, student views on the teaching of this subject were explored. Descriptive statistics were used to analyse the questionnaire data, and a content analysis was undertaken on the free text responses.

Results

A total of 121 students completed the questionnaire providing a response rate of 70%. The level of HIV knowledge among the students was high. Overall, the students' attitudes towards PLWH were encouragingly positive. However, some stigmatizing views towards PLWH were still observed among a small number of students. Students reported placements (e.g. in a HIV clinic) and small group workshops led by a patient would be the most beneficial teaching methods for delivery of HIV content.

Conclusion

This study has shown that whilst the majority of students participating in the study had high levels of HIV-related knowledge and overall positive attitudes towards PLWH, some misunderstandings and negative perceptions are still present among a minority of students. As we transform the MPharm curriculum, additional educational opportunities will address issues of HIV stigma.

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An Evaluation of the Views of Community Hospice Nurses of Having Specialist Palliative Care Pharmacist Input to Project ECHO – Extension of Community Healthcare Outcomes

Poster

Ms. Clare Lenaghan [1]

1. *Belfast Health and Social Care Trust*

Introduction

The Northern Ireland Hospice (NIH) employed Project ECHO (Extension of Community Healthcare Outcomes) as a means to educate and train their community palliative care nursing teams who often work in isolation across the region. The NIH specialist palliative care pharmacist (SPCP) delivered educational talks to the community hospice nurses (CHNs) and facilitated weekly medication question and answer sessions via video conferencing technology. An evaluation of this service was conducted to establish the impact of the SPCP and to inform future service developments.

Aims

To evaluate the views of CHNs of having SPCP input to Project ECHO by exploring the perceived advantages and disadvantages and to identify the pharmaceutical knowledge needs of the CHNs and understand the role of the SPCP in meeting these needs.

Method

An evaluation of the views of the CHNs of SPCP input to Project ECHO was undertaken. Mixed methods using both a focus group and questionnaire were employed and the results thematically analysed. Ethics approval was granted from Keele University and work place approval was granted from the NIH.

Results

Themes that emerged from the focus group included the positive aspects of having SPCP input to Project ECHO, the supportive role of the SPCP, the improved pharmaceutical information obtained by the CHNs in addition to the SPCP being an educational resource. The questionnaire had a 54.5% response (12/22 CHNs) of which 100% 'strongly agreed' that up to date knowledge about drugs used in palliative care is important. The CHNs perceived the SPCP equal to the consultant as being the most useful medication information resource available. CHNs highly valued the input of the SPCP at Project ECHO, with 92% of respondents 'agreeing/strongly agreeing' that the education sessions provided by the SPCP increased their knowledge of palliative care drugs. Confidence in liaising with other health care professionals about patients' drugs increased for 83% of the CHNs. A disadvantage noted by one respondent was that of limited new information.

Conclusion

The CHNs highly valued the role of the SPCP in Project ECHO, reporting several key advantages including access to stock information, education, support and pharmaceutical information. This evaluation demonstrates the SPCP as an important resource at Project ECHO and highlights the vital role of the pharmacist in meeting the pharmaceutical knowledge needs of CHNs.

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Assessing the appropriateness of the prescribing of anticoagulants for patients presenting on the ward

Poster

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Anticoagulants are a high-risk class of medication which have a high potential for adverse events (e.g increased risk of bleeding, stroke, pulmonary embolism, deep vein thrombosis etc.) to occur if prescribed incorrectly. As a result, it is of extreme importance to ensure that all anticoagulants are prescribed as per current clinical guidelines or Health and Social Care Trust policy to minimise the possibility of an adverse event occurring due to incorrect prescribing. In this instance, the audit occurred within the Northern Health and Social care Trust (NHSCT) Causeway site. Two areas of correct anticoagulant prescribing were audited; 1.) Those patients presenting as inpatients in hospital who were receiving treatment with a Direct acting Oral Anticoagulant (DOAC) and 2.) Patients who had undergone abdominal surgery and were receiving prophylactic treatment with a Low Molecular Weight Heparin (specifically Enoxaparin).

In order to audit the prescribing of these medications, patients who were admitted to hospital on a DOAC were audited at the medicines reconciliation stage of their patient journey, and the standard which the correct dose was measured against was a combination of the dose stated in each drugs summary of product characteristics (SPC), the National Institute for Health and Care Excellence (NICE) 'clinical care summary: oral anticoagulation', and the Northern Health and Social Care Trust (NHSCT) policy on the prescribing of oral anticoagulants. All three of these standards had the same definition of the correct dose, and as a result, there was no discrepancy in regards to the definition of the 'correct' dose.

The prescribing of prophylactic Enoxaparin was measured by auditing patients discharged from surgical wards who were prescribed prophylactic Enoxaparin following intra-abdominal surgery. The standard which this prescribing was measured against was a combination of the Northern Health and Social care Trust Policy and Clinical Guidance for the Prevention of VTE in Hospitalised Patients NHSCT/15/920 and NICE guideline NG89.

Of the 23 patients audited who were prescribed DOACs pre admission, 20 (87%) were prescribed their anticoagulant at the correct dose and 3 patients (13%) were prescribed an incorrect dose, and required intervention. The target standard for this audit was for all patients (100%) to be prescribed the correct dose of DOAC in comparison to their SPC, NICE CKS: Anticoagulation and NHSCT policy. Of the patients audited who had undergone abdominal surgery and were receiving prophylactic treatment with Enoxaparin, suitable VTE prophylaxis was prescribed at the correct dose for 92% of patients. . The target standard for this audit was for all patients (100%) to be prescribed the correct dose of Enoxaparin in comparison to NHSCT policy and NG89.

Assessing the Impact on the Discharge Process of a Band 5 Integrated Medicines Management (IMM) Pharmacy Technician Transcribing Pre-admission Medicines into the Electronic Discharge Summary in the Cardiology Ward, Craigavon Area Hospital

Poster

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Introduction

Ensuring patient safety while improving process efficiency at hospital discharge is a key area of focus worldwide[1]. IMM pharmacy technicians, have potential to positively impact on the discharge process through evolving their roles to transcribe[2]. Limited studies[3-4] have shown the benefits of pharmacy technicians transcribing discharge medicines, therefore this role warrants further research.

Objectives

- To evaluate the accuracy and efficiency of the discharge process when an IMM pharmacy technician transcribes pre-admission medicines into the electronic discharge summary ('intervention' - cohort 2) compared to doctors prescribing all medicines (baseline - cohort 1).
- To determine healthcare professional's perceptions of this 'intervention'.

Method

Data was collated and analysed for 60 patients per cohort; including medication error rates/types identified by pharmacist; average timeframes for discharge stages (doctor to write discharge and pharmacist to complete clinical check) and timeframe from when patient was 'medically fit' until discharge summary was sent to pharmacy.

In cohort 2; times were also recorded for the pharmacy technician to complete transcription of pre-admission medicines onto the discharge summary and for a pharmacist to accuracy check it.

A questionnaire determined healthcare professional's views of this 'intervention'.

Results

At baseline, the average medication error rate on discharge summaries was 21.8+/-19.7%. Medication omission was the most common error type (32%).

Following the 'intervention'; in cohort 2, the error rate significantly reduced (15.2+/-14.9%), with a decrease in errors relating to omission; incorrect route, form and 'other'. Incorrect reconciliation status errors increased, becoming the most common error type (41%). Errors relating to duplication, interaction; incorrect duration, drug, dose and frequency of administration also increased.

During cohort 2, the average time taken for doctors to write discharge summaries increased (23.7+/-15.4mins to 27+/-21.1mins), while clinical checking times were similar. There was a statistically significant time reduction from when the patient was 'medically fit' until the discharge was sent to pharmacy.

The pharmacy technician transcribing error rate was 1.29%. The average times taken to complete and accuracy check transcription were 10.8+/-7mins and 3.5+/-2.3mins respectively.

Healthcare professional's viewed this 'intervention' positively.

Conclusion

The accuracy of discharge summaries significantly improved when the pharmacy technician transcribed pre-admission medicines into the discharge summary, therefore enhancing patient safety. Doctors and pharmacists time did not reduce, however discharge summaries reached pharmacy quicker.

Healthcare professionals valued this ‘intervention’; expressing no concerns.

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Audit to assess the incidence of hypocalcaemia post initial and subsequent Prolia (Denosumab) injections in patients with chronic kidney disease (CKD)

Poster

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Introduction

Prolia (Denosumab) is a human monoclonal antibody, indicated for the treatment of osteoporosis. A side effect of Prolia is hypocalcaemia. Patients with osteoporosis with a history of CKD (eGFR<30ml/min), are at higher risk of hypocalcaemia post injection. This audit assessed the incidence of hypocalcaemia post initial and subsequent Prolia injections in rheumatology patients with eGFR<30ml/min and reviewing if treatment or hospital admission were required.

Aim/Objective

To identify patients initiated and established on Prolia injections with CKD in Northern Health and Social Care Trust (NHSCT) and comparing current monitoring of corrected calcium levels post Prolia injection against current Shared Care Guidelines.

Methodology

The database of current Prolia patients was analysed retrospectively. First dose patients and established patients were reviewed separately.

Results

25 Prolia patients identified to have a GFR<30ml/min.

Of these 25 patients, 9 had their first dose and 16 were patients established on Prolia injections.

22% of patients with a GFR<30ml/min prior to their first dose of Prolia, had their bone profile checked within 2 weeks post dose, and half of these patients had hypocalcaemia.

It was noted that another 2 of these 9 patients with a GFR<30ml/min prior to their first dose of Prolia, had their corrected calcium levels checked within 3 weeks of receiving their injection, and their corrected calcium levels were normal.

56% of patients with a GFR<30ml/min prior to their subsequent dose of Prolia, had their bone profile checked within 2 weeks post dose, and 22% of these patients had hypocalcaemia.

Patients with hypocalcaemia required oral supplements or repeat blood tests only.

None of the patients with hypocalcaemia required hospital admission.

Conclusion

Current standard recommended in Shared Care Guidelines for Prolia - 100% of patients initiated on Prolia, with an eGFR <30ml/min should have their corrected calcium level checked within 2 weeks post initial dose.

Between January 2021 and December 2022, 22% of NHSCT patients initiated on Prolia with CKD had their corrected calcium level checked within 2 weeks post initial dose of Prolia. Therefore, monitoring did not meet current standard recommended by Shared Care Guidelines. Potential barriers for patients getting repeat corrected calcium levels checked were identified, such as lack of appointment availability in GP surgeries for blood tests, and delays in GP receiving/reading outcome of Rheumatology clinic appointment, leading to missing 2 week target for repeat blood test.

Introducing a more formalised approach on how repeat corrected calcium levels are undertaken for patients with CKD who are initiated on Prolia was recommended. This could be achieved by providing appointments

for these patients at a hospital phlebotomy clinic within 2 weeks of Prolia administration. An action plan is currently in discussion to implement this change. Planned re-audit in 6-12months.

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Breaking new ground; a Yellow Card Centre for Northern Ireland

Poster

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Background

The Yellow Card (YC) scheme is one of the most important methods of pharmacovigilance in the UK but there is consistent under-reporting. This is particularly true for Northern Ireland (NI).

NI reporting of suspected adverse drug reactions (ADR) is lower than other geographies across the UK. NI also has the lowest rate of ADR reporting by members of the public in the UK. Yet medicines are the most common medical intervention in NI, with 70% of the population at any one time taking prescribed or over the counter medication[1].

Under reporting of ADRs is a significant safety and quality issue. It is estimated that 94% of ADRs are not reported[2]. Barriers to reporting include not recognising an ADR, not able to identify the causative drug, lack of knowledge on what or how to report and a lack of time to report[3.]

Yellow Card Centres

There are five YC centres (YCC) across the UK who work to raise the profile of the YC scheme through education and promotion. The centres have demonstrated a beneficial effect on ADR reporting.

A Yellow Card Centre for Northern Ireland

Between 2021-23 YC awareness activities were undertaken to demonstrate the potential benefit of a YCC for NI[3]:

- Development of YC education and training material
- Delivery of training to 468 healthcare staff and students over a total of 30 sessions
- Supported 8 local and nation medication safety campaigns e.g. world medication safety week
- Supported research; MSC thesis submitted and conference poster presentation

The NI YCC will operate as a virtual centre with a multidisciplinary team including a doctor, pharmacovigilance pharmacist and nurse; and will aim to:

- Increase and improve yellow card reporting
- Raise the profile of ADR's as a safety and quality issued to health professionals and the public
- Raise awareness of ADRS and YC through training and promotional activities
- Promote research into the understanding, causes, effects and avoidance of ADR's P

Change will be shown by the number of YC reports, reports from new reporter groups and education to health-care staff, students and patients.

Conclusion

A YCC for NI would help to improve the reporting culture of medication safety across health and social care in NI and contribute to the programme for transforming medication safety in NI (TMSNI) [1].

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Burnout, resilience and thriving among health sciences academicians: Findings from an international web-based survey

Poster

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Introduction

Burnout has the capability to exert an impact on the productivity and passion of health sciences academicians, who are committed to providing quality higher education within academic institutions. The present study aimed to investigate the status of burnout, resilience, and thriving among health sciences academicians from an international perspective. It also examined various sociodemographic and work-related factors that may impact these outcomes.

Methods

A cross-sectional study was conducted among health sciences academicians via a web-based survey from August 2022 to February 2023. The survey included valid tools to assess burnout, resilience, and thriving, as well as sociodemographic and work-related characteristics. Descriptive and inferential statistics were used when appropriate.

Results

A total of 505 participants belonging to more than ten countries were included, mostly female (63%) with a mean of 38.15±9.6 years of age. The majority were from pharmacy faculties (67.1%), 42.6% had more than ten years of working experience, 38.8% had no clinical-related work, and 13.7% were not involved in research. Overall, 55 (10.9%) respondents had high burnout, 69 (13.7%) were exhausted, and 32 (6.3%) were disengaged. Resilience and thriving score assessments were considered medium in 59.2% (n = 299) and 51.9% (n = 262), respectively. Age was significantly and negatively correlated with burnout scores ($r = -0.131$, $p = 0.003$) but positively correlated with resilience scores ($r = 0.178$, $p<0.001$). Females were more likely to be exhausted than males ($p = 0.014$), whereas males were more resilient than females ($p = 0.016$). Contract lecturers were less likely to be exhausted than permanent lecturers ($p = 0.028$). Instructors were more likely to be exhausted than lecturers ($p<0.001$) and assistant professors ($p = 0.043$). Instructors were less resilient than assistant professors ($p<0.001$) and associate professors ($p<0.001$). Regarding institution type, those working at a public university were more likely to be exhausted than those working at a private university ($p<0.001$). Participants with high resilience levels were less likely to experience burnout, exhaustion, and disengagement.

Conclusion

This study reported variable levels of burnout, resilience, and thriving among health sciences academicians, affected by different sociodemographic and work-related characteristics. Interventions to boost resilience and support thriving could decrease burnout risk, promote academic staff engagement, and potentially impact the quality of higher education in the health sciences.

Buvidal Regional Pathway for Northern Ireland

Poster

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Introduction/Background:
An increase in heroin use and subsequent high demand for treatment services, community pharmacies are nearing saturation for opioid supervision services for patients on buprenorphine. The Covid-19 pandemic exacerbated this issue highlighting the need for alternative forms of OST. Buvidal® is a long-acting injectable form of buprenorphine for the treatment of opioid dependence. It comes in two formulations: weekly or monthly subcutaneous injection. The availability and use of Buvidal® would help to reduce pressure on community pharmacy and provide an alternative treatment options to assist patients in their recovery journey.

Aims & Objectives:
Aim: To provide safe and consistent service for the administration of Buvidal® across NI.
Objectives:
The development of a regional pathway to provide a framework to:
Better support clinicians to initiate and use Buvidal® safely and effectively
To ensure adequate physical health checks are carried out at initiation
To improve documentation
To ensure equitable care for all patients prescribed Buvidal® across Northern Ireland

Method/Design:

- Mental Health Pharmacists from each trust in NI met to determine the feasibility of introducing Buvidal®.
- The group met with the DoH regarding the CD regulatory requirements in outpatient settings.
- The group met with HSCB to secure funding for Buvidal®
- The group developed a regional pathway and kardex to ensure consistency of prescribing across trusts.
- The pathway was shared with the addictions team across the trusts and prison service for agreement.
- Adjustments were made and the pathway was piloted in different regions.

Results:

- An agreed regional pathway for Buvidal® developed
- A regional kardex for Buvidal® was developed
- Funding was approved for each trust.
- A mixture of stock orders and individual patient prescriptions are used for the ordering of Buvidal® in trusts.
- An electronic care record alert was developed for all forms of OST
- Feedback was requested from those on Buvidal® and of those who responded 95% stated their life has improved on Buvidal® and would recommend it to a friend

Discussion:

Following initial reluctance for the need of a regional pathway and kardex it has now been established ensuring consistency across all trusts in regards to prescribing, baseline tests and advice a patient receives prior to the commencement of Buvidal.

Staff have feedback that the use of Buvidal® has been a positive service development and particularly beneficial for chaotic patients who struggled to go to the community pharmacy each day. They find the assessment page useful but the kardex can cumbersome at initiation and as such work is ongoing to streamline this.

Conclusions:

Buvidal is now prescribed across NI providing an alternative form of OST to patients.

The regional mental health pharmacist group played a strategic in developing this new service has exposed the addictions teams to the potential a pharmacist can play within their team resulting in the recruitment of addictions pharmacists in some trusts.

The initial number exceeding resulting in ongoing service expansion. Consideration is now been given to the administration of Buvidal® by community pharmacies in NI.

The OST alert now available on NIECR improves communication at interfaces

Care Home Medication issues - finding a solution

Poster

Ms. Stephanie Park [1], ***Mrs. Hilary McKee*** [1], ***Mrs. Caroline Johnston*** [1], ***Ms. Seana McKeegan*** [1]

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Introduction

Across inpatient HSC settings ward based medicines management pharmacy technicians support ward based multi-disciplinary teams and reduce the time required by nursing staff to spend on medication management[1]. To date there is no similar medicines management service in Care Homes in N.Ireland.

Aim

To explore the potential role and impact of a medicines management pharmacy technician and 'stock solution' on medicines management in a Care Home facility.

Objectives

To review the monthly medication ordering process within the Care Home to assess the potential impact of a medicines management pharmacy technician.

To audit the cost of pharmaceutical waste, with a particular focus on topical preparations.

To review and improve medicine related documentation i.e. Topical administration charts (T-MARs), kardexes, medicine administration record (MAR) charts, prescription directions.

To explore, set-up and evaluate a 'stock solution' for 'when required' (PRN) medications e.g. simple analgesia, antiemetics, laxatives.

Method

A private Care Home (Nursing) with a maximum of 30 nursing residents was identified for the pilot. A medicines management pharmacy technician liaised with senior Care Home nursing staff to review and understand the monthly medication ordering process. The pharmacy technician audited the Care Home's medication destruction records for 4 months and reviewed all the medication documentation i.e. T-MARs, kardexes and MAR charts. A 'PRN medication stock solution' and standard operating procedure (SOP) for use was devised and trialled for 2 months.

Results

The Care Home monthly medication ordering process took a minimum of 12 hours, if there were no discrepancies/queries. The pharmacy team carrying out this intervention perceived the medication ordering process could be completed by a medicines management pharmacy technician.

From medication destruction records the combined wastage of medications, controlled drugs and topical medications extrapolated to £11163.66 per year.

49 discrepancies between kardex and MAR were identified by the technician. An average of 2.33 discrepancies per resident. The discrepancies were evaluated as per Eadon[2]. 43 of the discrepancies (87.7%) were classed as Eadon grade 4 i.e. intervention is significant and results in an improvement in the standard of care. The remainder were Eadon graded 3. 5 discrepancies were found between the T-MAR and MAR/Kardex at review, an average of 0.2 discrepancies per resident. These 5 discrepancies were Eadon grade 3 - Intervention is significant but does not lead to an improvement in patient care.

Following stock solution trial nursing staff completed questionnaires. Questionnaire response rate was 71%. The majority of respondents were positive about the trial.

Conclusion(s).

The intervention demonstrates the time spent by Care Home nursing staff on medication ordering. It also highlights the amount of medication waste generated by Care Homes, and has shown that discrepancies in medication prescription and administration arise due to the range of documents used. Use of a Medicine Management

pharmacy technician, together with a ‘PRN medication stock solution’, similar to medicines management in a hospital ward would lead to reduction of waste, cost savings and an improved standard of care for Care Home residents.

Caught Short? Managing medication shortages in hospital pharmacy

Poster

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Introduction

Managing medication shortages and providing safe alternatives has been an integral part of hospital pharmacy. Over the past 15 years, the frequency and range of medication shortages has dramatically increased, taking significant amounts of pharmacy staff time & resources, replicated in hospital pharmacies across Ireland.

Aim: Describe SVUH approach to managing increasing number of medication shortages and quantify trend in workload on availability/supply of medicines over the past 15 years.

Methods

- Review Medicines Information data regarding shortages and availability in terms of number of enquiries received, time taken, percentage of total enquiries annually using MiDatabank
- Liaise/reflect with Pharmacy colleagues regarding managing medication shortages & identify internal and external stakeholders

Results

- Present findings from Midatabank on medication availability and supply. Medication shortages have dramatically risen from 8% of queries received (2008) to 25.3% (225hrs) of solely Medicines Information activity in 2022.
- Involvement with
  - internal stakeholders – medical, pharmacy and nursing staff who regularly use the medication which is unavailable. Standing agenda item at monthly Drugs & Therapeutics committee.
  - external stakeholders - liaison with HPRA, Acute Hospitals Drug Management Program, Manufacturers, Wholesalers, specialist medicines providers, colleagues in other hospitals
- Review of HPRA shortages list on regular basis
- Purchasing for safety – assessing packaging for readability and sound alike look alike drug concerns[1]
- Communication on shortages to all hospital staff via quarterly Pharmacy newsletter

Conclusion

The number of medication shortages and extent of medications involved has increasingly affected us locally and nationally. The introduction of the HPRA Shortages Framework is welcomed.[2] Front line users can be key in relation to alternative medication options. We all have our part in supply chain distribution to ensure the right patient received the correct medicine at an appropriate time.

Communication & information are essential to manage shortages. Networks between hospitals pharmacy departments can be helpful when dealing with national medication shortages

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Dalbavancin use in Southern Health and Social Care Trust 2021 – 2022

Poster

Mr. Peter McKee [1], ***Dr. Angel Boulos*** [1], ***Dr. Geradline Conlon-Bingham*** [1], ***Ms. Lisa Lennon*** [1], ***Mrs. Jessie McNally*** [1], ***Mrs. Orla McGivern*** [1], ***Mrs. Claire McMurray*** [1], ***Ms. Tiffany Ki*** [1], ***Mrs. Pauline Curran*** [1], ***Mrs. Susan Mayne*** [1], ***Dr. Alan Wu*** [1], ***Dr. Declan Crilley*** [1], ***Dr. Cara Mckeating*** [1], ***Dr. Claire Donnelly*** [1], ***Dr. Oystein Johansen*** [1], ***Dr. Sara Hedderwick*** [1]

1. *Southern Health and Social Care Trust*

Dalbavancin is a lipoglycopeptide with a half-life of 14.4 days. It has the same mechanism of action as vancomycin and is active against a wide spectrum of Gram-positive microorganisms, including MRSA. Its indications include acute bacterial skin and skin structure infections (ABSSSI) in adults; however, it is used off licence to treat osteomyelitis, endocarditis and bacteraemias.[1,2]

Benefits include avoiding daily administration; no therapeutic drug monitoring, speeding up discharges and only requiring administration once per week. However, it has a long half-life if a patient is allergic/intolerant to dalbavancin and it is expensive.

In the Southern Trust for the year April 2021 – March 2022 twelve patients, with an average age of 61, were treated with dalbavancin. Indications for use: Cellulitis, cellulitis with pre patellar bursitis, bacteraemia, septic arthritis +/- osteomyelitis, osteomyelitis, brodie abscess and acute osteomyelitis and bursitis.[3,4]

Reasons for using dalbavancin included a lack of District Nursing capacity, being unsuitable for outpatient parenteral antibiotic therapy (OPAT) services, changes in therapy mid OPAT treatment and to prevent admission to hospital.

Of the 12 patients treated with dalbavancin from April 21 – March 22 all were deemed to have been cured of the infection 6 months after the completion of treatment.

Nine patients had an aim attained (uncomplicated) 6 months after completion of treatment. Two patients had a treatment aim of indeterminate and one patient died.

Two Indeterminate outcomes

One patient treated for a bacteraemia was re-admitted within 6 months of treatment for a stab wound to the chest.

One patient treated for a bacteraemia was re-admitted within 6 months of treatment due to hypernatremia and AKI secondary to dehydration and lower respiratory tract infection.

One Death outcome

One patient passed away 3 months after treatment for a bacteraemia. Cause of death was pneumonia secondary to dementia.

Adverse events

No adverse event recorded for 2021 – 2022. However, in 2022 – 2023 Dalbavancin was used for twelve patients. One patient with osteomyelitis had urticarial rash with 1500 mg dalbavancin and was switched to Levofloxacin and Rifampicin to complete a 6-week course. Another patient with osteomyelitis received 1000mg dalbavancin experiencing vomiting and diarrhoea, which settled the next day. They received a second dose 7 days later with

antiemetic prescribed.

Summary

Dalbavancin appears to offer an effective, safe, and convenient treatment option for patients with gram-positive microorganisms, including MRSA.

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Determinants of Practice-Setting Choices Among Pharmacists: A Narrative Review of the Literature

Poster

Mr. Eoghan Lehane [1], ***Dr. Harriet Bennett-Lenane*** [1], ***Dr. Joseph O'Shea*** [1]

1. *School of Pharmacy, University College Cork*

Background:
Pharmacists' roles have experienced considerable transformation in recent years, with opportunities emerging in non-traditional settings that leverage their unique skills and expertise. These changes have sparked interest among stakeholders in the distribution of pharmacists across various practice-settings to ensure the sustainability of pharmacy services in Ireland. The Irish Pharmacy Union has highlighted concerns about patient-facing workforce capacity, while approximately one in five pharmacists have transitioned to a new primary practice-setting since their initial qualification[1]. In light of these trends, it is crucial to understand the factors influencing pharmacists' choice of practice-setting. This review aims to both identify and categorise factors which influence a pharmacist when choosing their preferred practice-setting.

Methods:
This narrative review was conducted through an extensive exploration of international literature to identify the key factors that underpin the choices pharmacists make regarding their practice-setting. The practice setting framework proposed by the Affiliation for Pharmacy Practice Experiential Learning (APPEL) was used, providing a pertinent classification system for the Irish context. This framework categorises practice-settings into community, hospital, industry, and role emerging practice (REP) settings. The factors identified were then classified using Herzberg's two-factor theory of job satisfaction, which differentiates between intrinsic and extrinsic motivators[2].

Results:
Five primary domains that influence practice-setting choice were identified: two based on Herzberg's intrinsic (nature of work, utilisation of expertise, development opportunities) and extrinsic (remuneration, benefits, flexibility) motivators, which are consciously considered by the pharmacist when choosing a practice setting. Three additional domains tied to socio-demographics (gender, ethnicity), pharmacy education (curriculum design, learning placements), and economic background (entrepreneurial intentions, labour market) which subtly, yet notably, influence practice-setting preferences on a more subconscious level. However, the relative weighting of these factors is challenging to determine due to their nuanced and interrelated nature. It was observed that intrinsic and extrinsic motivators might be more influential due to the conscious influence on decision-making, but it also poses a risk of underestimating the influence of socio-demographic, educational, and economic factors.

Research Impact:
Pharmacists' practice-setting choices are a complex interplay of various factors. It is essential to understand these determinants and their relative importance in influencing choices. Improved understanding of factors affecting practice-setting choice is of interest to pharmacy stakeholders wishing to safeguard the future of pharmacy services in Ireland. This understanding will help stakeholders discern the necessary improvements to make specific practice-settings more appealing, address workforce shortages, and align education and practice with the needs of a diversifying pharmacy workforce. Other research impacts include benefits to employers in developing recruitment and retention strategies, and the facilitation of informed practice-setting decisions by prospective pharmacists. This multi-faceted approach to understanding practice-setting choices offers a comprehensive framework for future research and policy development.

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Development and evaluation of an assessment rubric to enhance pharmacy student understanding and development of scientific writing skill

Poster

Dr. Deborah Lowry [1]

1. *School of Pharmacy and Pharmaceutical Sciences, Ulster University*

Objective

To evaluate the efficacy of a rubric co- designed and developed to support and improve pharmacy student understanding of how to appropriately structure and write a scientific report that effectively communicates the information.

Background

Scientific writing encourages students to develop and support an argument and communicate their findings in a clear and concise manner[1]. One hurdle that many instructors have to overcome in teaching effective scientific writing skills is clearly communicating to students what is expected in relation to the structure and content of a scientific report. Traditionally academics construct assessment rubrics however co-construction has the potential to enhance shared understanding of an assignments learning outcomes and offer students the opportunity to be active in their own learning by engaging with the rubric to self-assess the quality of their work before submission and improve their academic performance[2].

Design

Staff and student focus groups were utilised to elicit opinions and perspectives as to what to include in a scientific report rubric. The co-developed rubric was used to assess and provide feedback for a scientific report as part of coursework assessment for a level 5 MPharm module and marks were compared pre and post rubric. Following the report feedback staff and student questionnaires were used to gather opinions on the usefulness of the rubric and to collect thoughts on how to further improve.

Results/Conclusions

Consultation with staff and students on the rubric were overwhelmingly positive with students highlighting the rubric was 'self-explanatory' and staff stressing that 'critical analysis' and 'clarity' were important to include. Following use of the rubric the majority of students had less queries and all students agreed that the rubric clearly communicated the assignment requirements. Even though less than half of the students reported they did not self-assess 87% stated the mark received was in line with their expected mark highlighting that they were engaging with the rubric to self-assess even though they did not recognise they were. Surprisingly the rubric did not improve student performance however this may be due to external factors that could not be predicted therefore resulting in less time for students to focus on the report with the vast majority of students stating that the rubric had added to the learning experience. The marker reported that use of the rubric resulted in more effective marking and feedback that reduced variability between reports. The vast majority of staff and students indicated that benefits to students for co-construction of the rubric resulted in a greater understanding of what to include in the assignment.

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Development and Pilot of a Pharmacy Complexity Scoring Tool for Palliative Care patients

Poster

Ms. Jaquie Hanley [1]

1. *Northern Health and Social Care Trust*

Introduction

Medicine management in palliative care is often complex and Specialist Palliative Care (SPC) pharmacists have a vital role in supporting patients and the interdisciplinary team. A tool to score patient complexity, with a view to prioritising those likely to gain most benefit, may be useful.

Method

A weighted tool was developed which considered well established factors that can complicate medicines use including polypharmacy (scoring 1 (0-6 medicines), 2 (7-9) or 3 (≥10)) and continuous subcutaneous infusion (CSCI) scoring 2. The remaining factors were allocated a score of 1 if present; strong opioid, patient at the end of life, renal impairment, liver impairment, complex administration issues (e.g. swallow issues) and a score of 1 for each palliative care complication (e.g. major haemorrhage, seizures, hypercalcaemia).

The tool was piloted from November 2022 to February 2023 with palliative care inpatients in a large acute hospital. Data was collected on the complexity score for each patient, the time taken for review and details on interventions made.

Results

The tool was applied to forty patients. One patient was excluded from the analysis as insufficient data was recorded.

- Average patient age was 77
- 61.5% female
- 74.4% had cancer as their primary palliative condition.

The average complexity score for all patients was 5.9. The average number of interventions per patient was 6.7 and average time per review as 44 minutes.

- Number of interventions/patient increased with increasing complexity score.
- Score of 5 or less (46.2%, n=18) had an average of 6.1 interventions.
- Score of 6 or more (53.8%, n=21) had 7.3 interventions.
- The duration of review increased with increasing complexity score (37 minutes if score of 5 or less; 47 minutes if score of 6 or more).

Neither criteria for strong opioid prescriptions or renal impairment could be considered determinants of complexity. Six patients (15.3%) had significant liver impairment and eight (20.5%) had a significant palliative care complication, all of whom had scores of 6 or more. The average score in patients with liver impairment was 7.7. Patients with administration issues were more likely to have a score of 6 or more (47.6% v 5.6% in those with a score of 5 or less).

Conclusion

The novel tool identified complex palliative care patients and suggested that those with a score of 6 or more would benefit from SPC pharmacist review.

Criteria for liver impairment, complex medicines administration issues or a palliative care complication indicated a higher complexity score which was associated with increased interventions. Irrespective of other

criteria, patients who have any of these issues are most likely to benefit from SPC pharmacist input. The presence of strong opioid prescriptions and renal impairment were not strong indicators of complexity. Further investigation and application of the tool across multiple settings would be useful.

Development of a biologic prescribing pathway for adult plaque psoriasis in Northern Ireland

Poster

Mrs. Clara Monaghan [1], ***Mr. Richard Lennon*** [1], ***Dr. Rachel Mullen*** [2]

1. *Ulster Hospital Belfast,* ***2.*** *Liverpool John Moores University*

Psoriasis is a life-long chronic inflammatory skin condition affecting approximately 2% of the general population. [(1)] The choice of biologics for plaque psoriasis is growing which makes the choice challenging for dermatologists. This study aimed to produce an evidence based and cost-effective biologic prescribing pathway for plaque psoriasis, based on NICE guidelines that will help streamline and standardise prescribing in Northern Ireland. A semi-structured interview phase enabled the researcher to explore the perspectives and real-life experiences from medical and nursing staff on biologic prescribing within the five Trusts in Northern Ireland. Quantitative methods in the form of Delphi surveys were used to quantity the level of agreement between the experts on the contents of the biologic pathway for adult plaque psoriasis. [(2-4)] It was decided that a 70% consensus rate was the target for agreement. [(5-7)] Overall, the draft biologic pathway did not reach consensus, however, it could be revised to achieve regional feasibility within Northern Ireland based on the comments and suggestions obtained. Greater experience and research in this field is required to move away from the "trial and error" biologic prescribing to the optimal personalised therapy first time round. [(8-10)]

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Development of an Open Source Drug File for a National Hospital Medicines Management System

Poster

Mr. Shane Doyle [1], ***Mrs. Elmarie Cottrell*** [2], ***Mrs. Fionnuala King*** [1]

1. *HSE Acute Hospital Drugs Management Programme,* ***2.*** *HSE Acute Hospital Drug Management Program*

The Hospital Medicines Management System (HMMS) is a centrally deployed, national ICT system to support the information and technology requirements of both acute and non-acute hospitals' pharmacy services in Ireland. A requirement prior to implementation was the development of a drug file which would cater for both the Pharmacy Stock Control module of HMMS and ultimately the Electronic Prescribing and Medicines Administration (EPMA) element. It was required to enable all use cases involved in medicines management including; ordering, supply, dispensing including generic prescribing and administration among others.

Development of educational games to improve student engagement

Poster

Dr. Deborah Lowry [1]

1. *School of Pharmacy and Pharmaceutical Sciences, Ulster University*

Objective

To evaluate the efficacy of educational escape rooms co- designed and developed to support and improve pharmacy student understanding of drug delivery theories.

Background

Active learning puts students at the heart of their learning experience enabling them to become more engaged with their own learning building knowledge through their own experiences[1]. Staff-student partnerships have been shown to enhance educational practice and have students taking a more active role in decision-making[2]. To improve engagement of students with online modules a co-development project was conducted to develop educational escape rooms allowing students to be involved with the development of clues for a drug delivery module. Educational escape rooms are effective pedagogical tools used to develop students' knowledge and skills and have been positively received by students, increasing knowledge and serving as a platform for teamwork[3].

Design

This study involved third year MPharm students at Ulster University. Questionnaires and consultations were conducted to gather student opinions on online delivery and the use of educational games. Co-design sessions were conducted which involved students indicating parts of lectures they thought were important for understanding of the topics. Questions were developed by students which were then further developed by staff into clues and hints which would be suitable for an escape room requiring understanding of material and application of knowledge to progress.

Results/Conclusions

Educational games have been shown to improve learning by stimulating student interest and motivation through social interactions with educational content. By developing questions the students have shown they can identify the important parts of the lecture which could be used when completing the coursework. Ongoing development of questions/clues is continuing to ensure development of escape rooms that improve student understanding of complicated concepts and also to make them fun which should improve engagement with the lecture material.

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Development of intravenous iron patient record card

Poster

Ms. Susan Brosnan [1], ***Mr. Paul Tighe*** [1]

1. *Pharmacy Department, St Vincent's University Hospital, Dublin*

Authors

Susan Brosnan,Kellie Kearney, Paul Tighe

Introduction

Iron deficiency anaemia has been found to be common amongst patients with heart failure (HF). Some causes include increased loss, decreased intake or absorption (i.e. malnutrition, gut congestion) and/or impaired iron metabolism caused by the chronic inflammatory activation of HF. Randomised controlled trials have shown IV ferric carboxymaltose is safe and improves symptoms, exercise capacity and quality of life of patients with HF and iron deficiency. Ferric carboxymaltose mostly involves giving a second dose depending on a patient's weight and haemoglobin. HF patients require more frequent monitoring of iron stores and are likely to need repeat infusions. Heart failure patients at SVUH may receive their dose on the cardiology ward, the IV iron clinic or a general ward. As a result of this, it was becoming more difficult to keep track of doses administered and when doses were next due.

Aim

To develop an IV iron patient record card to help improve treatment of iron deficiency anaemia amongst HF patients in SVUH. Design the record card so that it would be suitable for patients to carry with them to all hospital visits and clinic appointments and to include relevant information on their treatment.

Methods

In liaison with the heart failure nurses and manufacturer of IV ferric carboxymaltose, an IV iron record card was developed. The card was developed so as to be suitable for the patient to carry with them and include relevant information such as dose given, date next dose due and subsequent doses given. The card is given to the patient on administration of a dose of IV iron and they are asked to keep it with them and bring it to hospital and clinic appointments.

Results

The record card is being given to patients routinely and it is hoped that second doses are being followed up more promptly.

Conclusion

The cards are in use about one month and feedback from HF nurses so far indicates it is helping to ensure the second dose is given more promptly and also to see when the last dose schedule was completed. Patients are also more encouraged to follow up on their second dose. Further data collection will be done over the next few months.

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Development of OPTI-3S (Criteria for Optimising Medicines by Stopping, Stepping Down, or Switching to Safer Alternatives) for Hospitalised Frail Older Adults

Poster

Mr. Ahmed Hassan Ali [1], ***Prof. Niamh McMahon*** [2], ***Prof. Sheila Ryder*** [3]

1. *School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2.,* ***2.*** *1- School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2. 2- St. James's Hospital, Dublin 8, Ireland,* ***3.*** *School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin 2,*

Introduction

Polypharmacy and potentially inappropriate medications (PIMs) are prevalent and associated with negative clinical outcomes in older adults[1]. No PIM criteria have been specifically developed for hospitalised frail older adults. The aim of this study was the development of the OPTI-3S core list via literature review and consensus development methods.

Methods

An extensive literature review was conducted in PubMed, CINAHL, EMBASE, CENTRAL, CDSR and Scopus to collate and draft the OPTI-3S preliminary statements. These preliminary statements first underwent further evaluation and a piloting study for rephrasing, splitting, and standardizing their presentation. The final preliminary statements were then split into core and full lists. Clinical Frailty Scale scores (4-9) were employed to identify the level(s) of frailty to which each statement applied. Both lists were circulated to a multidisciplinary panel of eleven practicing experts (i.e. five geriatricians, five pharmacists, and an advanced nurse practitioner) for content validation of the core statements via a three-round modified Delphi method. Participants were asked to rate their agreement with the core list statements using a 5-point Likert scale, with a predefined consensus definition (median and 75th percentile of ≤ 2 (i.e. strongly agree or agree)). Participants were also asked to indicate if any other statement from the full list, or of their own choice, needed to be included in the core list.

Results

The extensive literature review resulted in analysis of 1500 published articles and the drafting of 109 OPTI-3S preliminary statements. The piloting study yielded a final set of preliminary statements consisting of 29 core statements and 101 additional statements (total number = 130). Nine experts completed all three rounds of the Delphi study. 45 statements were accepted for inclusion in the final OPTI-3S core list (i.e. 17 in the first round, 25 in the second round, and three in the third round). The final core statements related to deprescribing or optimising medicines acting on the central nervous system in medical and surgical patients (n=7), genito-urinary medications (n=7), hypoglycaemics (n=7), antithrombotics (n=5), antihypertensives (n=5), statins (n=4), heart failure medications (n=2), perioperative analgesia (n=2), osteoporosis medications (n=3), proton-pump inhibitors (n=1), vitamins and supplements (n=1), and anticholinergics (n=1). Several statements also cover other relevant issues, such as potential prescribing omissions (n=2), inappropriate prescribing cascades (n=2), appropriate blood pressure and glycaemic targets/ goals (n=4). Half of the statements apply to all frail older adults (CFS ≥ 4), and the other half apply to adults with specific frailty levels, e.g. 7 statements for moderate frailty level or higher.

Conclusion

The OPTI-3S core list is the first literature-and consensus-based criteria specifically designed for hospitalised frail older people. It consists of 45 statements relating to the use of potentially inappropriate and also preferential medications in hospitalised frail older adults. It constitutes a valuable guide for clinicians to support prescribing optimisation in hospitalised frail older adults.

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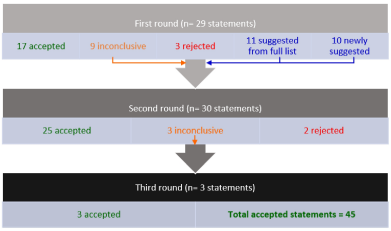

Figure 1 Flow chart of the three Delphi rounds.

1.jpg

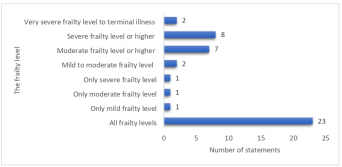

Figure 1 Distribution of statements across differing frailty levels

2.jpg

Development of the Role of a Specialist Mental Health Pharmacist within a Community Mental Health Team in Northern Ireland

Poster

Mr. Conor Doyle [1]

1. *Clinical Pharmacist, Northern Health and Social Care Trust*

There has been an increase in referrals to Community Mental Health Teams (CMHTs) over the past number of years in Northern Ireland. An Independent pharmacist prescriber could assist workload by providing medicines optimisation clinics. The aim of pharmacist-led clinics is to improve patient outcomes and adherence through the provision of, for example, medicine reviews and education.

A pharmacist worked as part of one team two days a week. Staff referred patients whom they felt may benefit from a medication review, to optimise medications; medication adjustments and switches; assistance with adherence or deciding on treatment options.

The pharmacist assisted optimising the medication of more than 150 patients within the first 12 months of the pilot. One hundred percent of both patients and staff felt that the service benefitted patients.

A Pharmacist can assist this service by increasing the capacity of reviews; optimising medication; monitoring and making physical health interventions. They are well placed to improve standards of care and patient safety regarding medicines optimisation.

Initial funding is progressing for a full-time CMHT Pharmacist for the Trust with the hope to expand further.

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Table 1

Staff feedback on pilot

- Pharmacist has exceptional knowledge and skills and his presence in clinics, MDT and for consultations has meant that we have seen gaps in patient management such as polypharmacy, and we have been able to act on these robustly.

-Pharmacist can review patient after initiation of medication and continue titration as planned from outpatients - much more efficient.

- Pharmacist has provided evidence based approaches and suggestions for the management of the difficulties experienced by our service users. He has actively been providing quality improvement, with a check in call for clients who have had significant changes in their treatment following medical review, in an effort to bridge the gap between their next medical appointment and to catch any issues early on.

- Pharmacist has also been involved with staff in assessing medication adherence issues, with the aim of providing education sessions to clients who struggle with this issue.

- Pharmacist has lead quality improvement drives in respect of the management of constipation for clients on clozapine and has supported prescribing staff to explore novel evidence based approaches to the management of hyperprolactinaemia caused by antipsychotic use.

- An additional clinic day would be helpful as the one day per week is filling up quickly

- I feel the service we are receiving at present is fantastic.

- I am aware that colleagues in other CMHT's have been very keen for their team to be considered for pharmacist support, and given the benefits for both service users and staff alike, in terms of quality of care, I feel roll out of this pilot would be an excellent use of resources.

- I think pharmacists supporting the CMHT have a number of roles to explore, such as active involvement in the monitoring of SMI clients, perinatal care for pregnant clients on psychotropic medications, assistance in the medication rationalisation particularly with respect to safe benzodiazepine reduction, supporting clients to adhere to their medications.

- A feature which has worked really well has been the creation of pharmacist clinic slots, which can be booked by CMHT staff if required, this has enabled members of the team to obtain medication reviews/adjustments in a more timely fashion, given the pressures on the outpatient clinic settings.

Table 1.jpg

Table 2
Types and numbers of advice notes sent to GPs in first 6 months

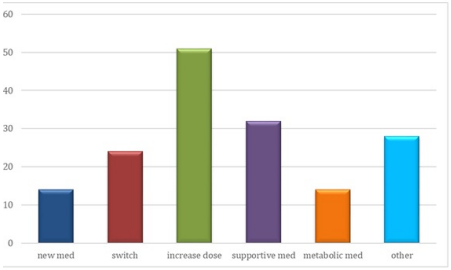

Table 2.jpg

Dispensary activity data; identifying trends and workforce planning

Poster

Ms. Annmarie Cahill [1], ***Ms. Deanna Roche*** [1], ***Mr. Martin McArdle*** [1], ***Mr. Andrew Blyth*** [1], ***Ms. Caroline Gallagher*** [1], ***Mr. Paul Tighe*** [1]

1. *St. Vincent's University Hospital*

Dispensary activity data; identifying trends and workforce planning

Annmarie Cahill, Deanna Roche, Martin McArdle, Andrew Blyth, Caroline Gallagher, Paul Tighe

Introduction:

St. Vincent's University Hospital pharmacy department moved from a basement location to a 4th floor new build which includes robotics in May 2021. Following the settling in phase after the move, the department wanted to identify activity levels for all aspects of dispensary activity and use this data to direct resources to appropriate areas. Some dispensary activity had changed following the move. Technicians now use tablet devices on wards to send picking tickets remotely to the robot, removing the need to re-enter medication orders on dispensary PCs. SVUH pharmacy want to ensure that all activities are value-adding.

Method:

A number of key activities were identified. Dispensary staff enter all relevant data on an Excel spreadsheet the following day where possible. Recorded data includes medications requisitioned by the Emergency department, Acute Medical Unit and general wards; stock lists supplied to non-ward areas which are not part of top-up rota e.g. Dermatology and radiology; all IV suite, controlled drug and TPN transactions, and medications dispensed Out of Hours (OOH). It was deemed too time consuming to record length of time spent dispensing individual requisitions or time spent resolving queries; however, we have recorded medications dispensed to patient name as separate data measures as it is known that these take longer than dispensing to a ward.

Results:

8 months of data has been recorded to date.

Discussion:

A technician has starting a medication management course this year, and dispensary activity data show the busiest wards where the presence of a technician might have the most impact in reducing calls, requisitions and queries to the dispensary.

MDA transactions were recorded to identify wards which may benefit from an extension of the current limited MDA delivery service. The MDA delivery service reduces calls to the department by nurses and ward attendants. TPN data provides information on stock rotation and re-use of returned bags. The OOH data combined with a 'Calls received by on-call pharmacists' log will help shape a new OOH pharmacy led service. While it is true that it 'takes time to save time', taking the time to record dispensary activity helps direct resource allocation to areas where activity is increasing.

Doctors' Attitudes and Perspectives on Deprescribing Fall-Risk Increasing Drugs in Older Adults

Poster

Ms. Reham Kalim [1], Prof. Sheila Ryder [1], Prof. Conal Cunningham [2], Prof. Niamh McMahon [3]

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Background

Some medicines are associated with falls in older adults. Deprescribing Fall-Risk Increasing Drugs (FRIDs) is a proposed fall preventive measure, as part of falls prevention programmes [1]. This study explored the barriers to and facilitators of doctors deprescribing FRIDs in hospitals.

Method

Doctors experienced in caring for older patients at a large teaching hospital were individually interviewed. All interviews were audio recorded and transcribed verbatim. Data collection and analyses were guided by the Theoretical Domains Framework (TDF) [2]. Coding was undertaken using NVivo 12. Barriers within the main TDF domains were matched with possible behavioural change techniques (BCTs) [3] to identify potential future intervention strategies.

Results

Doctors who participated in the study were mainly working in geriatric medicine (n=18). The median duration of the interviews was 16.2 minutes. Barriers and facilitators were identified in the following domains: 'Knowledge', 'Environmental context and resources', 'Social influences', 'Skills', 'Professional role and identity', and 'Emotion'. The main barriers included: limited time during inpatient stay, incomplete patient medical records, poor communication between care providers, difficulties following up patients after discharge, concerns about deprescribing consequences, reluctance to change medications initiated by other prescribers, and perceived patients' resistance to medication changes. Facilitators included: doctors' awareness of the importance of deprescribing FRIDs, the opportunity to monitor patients during their inpatient stay, the use of electronic medical records, believing that the whole medical team is responsible for deprescribing, support from other healthcare professionals, e.g. clinical pharmacists, and involving patients and their carers in the decision. To overcome some barriers, BCTs were proposed e.g. social support, prompts and cues for doctors, and information about health consequences for patients.

Conclusion

Doctors reported that deprescribing FRIDs in hospitals is challenging. Interventions based on the identified BCTs might enhance the implementation of deprescribing FRIDs in the hospital setting.

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Drug Allergy in Irish Acute Hospitals

Poster

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Background

Drug allergy reactions account for up to 20% of all adverse drug reactions and occur in up to 8% of the general population[1]. They range in severity from mild cutaneous reactions such as urticaria (hives) to severe reactions with multi-organ involvement and to life-threatening anaphylaxis. However, there is little published information on drug allergy in Ireland.

Aims

The National Incident Management System (NIMS) is hosted by the State Claims Agency (SCA) for the Health Service Executive (HSE) and other publicly funded health and social care organisations and is the primary source of national incident data for the Irish health system[2]. Using NIMS data, the study's aims were to quantify reported drug allergy in Irish acute hospitals, determine the most vulnerable stages of the medication use process and identify the most frequently implicated medications.

Methods

A search was conducted on the NIMS database for drug allergy incidents reported by Irish acute hospitals between 1st January 2016 and 31st December 2021. The data was analysed under various headings using predetermined fields on NIMS; these fields are completed at the time of incident reporting.

Results

There were 875 drug allergy incidents reported by Irish acute hospitals over the six-year period. Nursing and midwifery staff reported 65% of the incidents, with allied health professionals reporting a further 19.7%. Two-thirds (67.2%) of the incidents had a severity rating of moderate, signalling that medical treatment was required. Three-quarters (76.2%) of drug allergy incidents occurred at the administration stage of the medication use process. The most commonly implicated medication group was penicillins which accounted for 15.3% of all drug allergy incidents.

Conclusion

This study quantifies the problem of drug allergy, provides information on where in the medication use process drug allergy reactions occur and identifies the most commonly implicated medications in an Irish context. This information should assist the Irish healthcare system mitigate drug allergy risk and associated patient harm.

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Dynamic Purchasing System; a joint initiative by Pharmacy and Procurement

Poster

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Introduction

In Ireland, individual public hospital pharmacy departments are responsible for the procurement of medicines. Internal audit identified non-compliance with Procurement Legislation with regard to direct purchases of medicines in Irish public hospitals.[1] The subsequent legal advice confirmed that there was compliance issue in relation to the direct purchase of medicines with National Funding Regulations and EU Procurement Directives.[2,3] This legislation requires that formal tendering procedure should be used when procuring goods with a value in excess of €50,000. The HSE with multi-stakeholder involvement agreed the strategy recommending the Dynamic Purchasing System (DPS) as the preferred procurement process for medicines.[4] The National Pharmacy Procurement Support Team (NPPST) with HSE Procurement and Pharmacy professionals was established to facilitate the introduction of a DPS.

Aim

The aim is to establish and implement a DPS for medicines in Irish Public hospitals to facilitate compliance with Procurement Legislation, value spend on medicines for the taxpayer and supply chain sustainability.

Methodology

The NPPST with advice from pharmacy colleagues established a national DPS. The DPS has multiple suppliers available for hospital pharmacy department, or within a hospital group to run a DPS tender for medicines. Suppliers submit applications to access to the DPS though e-tenders platform. The NPPST qualify and appoint suppliers to the DPS. Qualified suppliers will have sight of all tenders advertised through the DPS.

Result

The involvement of the NPPST in managing DPS tenders on behalf of hospitals provides knowledge and experience, both the market place and procurement legislation. The NPPST supported 10 hospitals in 2022 with formal contracts for medicines. DPS tenders saw the arrival of many new biosimilar drugs to Ireland and this has provided cost saving opportunities for hospitals with savings of approximately 70% on pre-tender pricing when switching from the branded product to a biosimilar.

Conclusion

Implementation of formal contracts with Pharmaceutical suppliers has proved crucial in providing continuity of the supply chain whilst achieving significant cost savings. The NPPST are available to support pharmacy colleagues with DPS tenders for medicines. The involvement of the NPPST has proved significant in the rollout of this joint procedure.

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Embedding Digital Health into the MPharm Curriculum

Poster

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Introduction

Creating momentum and building capacity (the conference theme) within a reformed health service must be underpinned by robust digital technologies and a digitally competent workforce.[1] Indeed, the UK Standards for the initial education and training of pharmacists[2] demand that student pharmacists are able to demonstrate how digital technologies improve clinical outcomes and patient safety. The aim of the work outlined below was to embed digital health education into the MPharm degree programme at Queen's University Belfast.

Method

The current digital health education provision was comprehensively reviewed by the Director of Education (MPharm). Given the gaps identified, the Senior Lecturer (Digital Education) was subsequently tasked with leading the development of new teaching material and assessments, and ensuring these increased in complexity from Years 1 to 4. Having represented the School of Pharmacy at the All Ireland Digital Health Capability Advisory Council (in relation to a framework), he drew upon this insight in addition to seeking the expertise of various pharmacy practice staff (including a pharmacist independent prescriber). This approach, which was later presented to the MPharm delivery team for further discussion and feedback, ensured the transformation was contemporary and grounded in authenticity.

Results

Following the redesign, students will now be taught (and assessed) systematically on how digital technologies improve clinical outcomes, including the role that Artificial Intelligence (AI) plays. Teaching content includes: the use of a range of key digital diagnostic technologies related to clinical areas and body systems such as cardiovascular, diabetes and respiratory; remote monitoring; the use (and ethics) of DNA sequencing technology, genomics and bioinformatics; the use of digital approaches for connected health, adherence management and the management of clinically complex and multi-morbid patients (including the advantages and disadvantages of self-care medical devices). Students will be required to demonstrate application of knowledge, competence, and skills *via* objective structured clinical examinations, entrustable professional activities, and direct observation of practice. Our strategy has been discussed at the recent accreditation visit and gained the panel's approval. Having now purchased various pieces of digital health equipment, the plan will be implemented from September 2023 onwards

Conclusion

While the above approach is only currently being implemented in one institution, it is transferable to other MPharm programmes and should ensure future pharmacists can meaningfully contribute to the digital health transformation. It will be important to evaluate the various components to determine the short and longer-term impact. Other work could focus on ascertaining what training and support is available to the existing NI pharmacy workforce.

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Engaging first year students through co-design of module delivery

Poster

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Introduction

As cohorts become larger and more diverse, there is a need to comprehend how to engage students[1]. This can be done by encouraging the 'students as partners', placing them in a more active role, considering them as 'co-producers'[2]. Three dimensions of student engagement have been reported in the literature - behavioural engagement, emotional engagement and cognitive engagement[3]. Research has shown that it is the combination of the three dimensions for the student which is important and is something to be considered when co-designing with students and maximising engagement[4].

Aim

To co-partner with students through co-design of module delivery to enhance student engagement and overall experience.

Methods

This study involves a first year MPharm and MSci module in the School of Pharmacy and Pharmaceutical Sciences at Ulster University. Feedback from these students has shown that the topic of Biochemistry is a "dry" subject area and is long and laborious to learn. In this study, the academic partnered with first year and second year students with the aim to making the subject area more engaging. Consultations took place during class and also on an individual basis using a questionnaire as a guide.

Results

- 50% prefer a mix of learning, i.e. recorded lecture and active learning in class with quizzes, MCQ's, apps, etc.
- 44% of the class said they prefer the traditional style of teaching, i.e. lecture and listen.
- 6% of the class prefer out of class recorded lectures.
- 75% prefer to answer questions anonymously in class.
- 94% said that they "always" accessed material on Blackboard Learn VLE.
- 25% had used apps in or out of class - Nearpod (12.5%) or other (12.5%)
- The majority of the students who had used Nearpod did not like it (75%) as they were unsure how it worked and did not like being out of control of the slides.
- The other apps used (Anki, Kahoot and Google Classroom) received positive feedback.

Conclusion

- Traditional lectures in class and recorded with optional supplementary reading.
- Active learning activities in class such as quizzes/MCQs.
- Optional use of technology in class to ask/answer questions.
- All materials available on Blackboard learn.

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Establishing and developing a Foundation Training Year programme in Northern Ireland - a collaborative approach

Poster

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Keywords

trainee pharmacist, questionnaires, focus groups

Introduction

'Standards for the Initial Education and Training of pharmacists' were published by the GPhC in 2021[1]. At the same time, NICPLD became responsible for the development, delivery and quality management of the Foundation Training Year (FTY) programme in Northern Ireland (NI). The Pre-registration training programme, having previously been quality managed by the Pharmaceutical Society of N. Ireland.

The FTY primarily consists of work-based and formal learning. Within the workplace, trainee pharmacists are required to complete mandatory practice activities (MPAs). Evidence from completed MPAs is uploaded to the ePortfolio and mapped against the learning outcomes. Trainee pharmacists receive formative and summative feedback from their Educational Supervisor (ES). ESs must undergo annual accreditation training delivered by NICPLD to develop the necessary skills to mentor a trainee pharmacist.

Analysis of stakeholder experience enables NICPLD to assure a FTY programme that meets the standards set by the Regulators and supports service delivery whilst working collaboratively with stakeholders.

Aim

To ascertain stakeholder experience of the FTY programme to inform change for prospective cohorts.

Methods

Questionnaire and focus group methodologies were used to quality assure the FTY 22/23 programme. Trainee pharmacists and ESs were invited to submit a mid-programme questionnaire. From responses, topics for discussion at focus group sessions were identified. Focus groups were subsequently held with key stakeholders and policy makers including employers, ESs and trainee pharmacists to ascertain their experience of the programme.

Results

There were many positive aspects of the FTY programme highlighted by trainee pharmacists, including 'lots of resources for help…opportunity to learn on the job and develop new skills'. Meanwhile ESs provided encouraging feedback including 'all very relevant to professional practice…comprehensive learning programme'. Many stakeholders found the scaffolded support provided within the programme helpful in optimising trainee pharmacist development.

In relation to MPAs, 89% of trainee pharmacists found these highly relevant in preparing them for independent practice. One ES reported, 'The practice activities are useful in that they cover a range of important activities undertaken by pharmacists.'

In relation to the NICPLD ePortfolio, 89% of trainee pharmacists found this tool straightforward / simplistic to upload and map evidence.

Discussion / Conclusion

The views of key stakeholders and policy makers provided assurance on the quality of the programme and informed change for the incoming FTY cohort (23/24). Positive feedback on the scaffolded approach and structure provided by MPAs and the ePortfolio provides assurance on the effectiveness of these tools to support development and assessment of trainee pharmacists. As a result of feedback received, a number of changes have been

implemented to further support the development of trainee pharmacists.
Working closely in collaboration with our stakeholders allows us to build forward momentum as we navigate through this transition period and work towards the integration of independent prescribing into FTY in 25/26.

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Evaluation of the decisions made by clinical pharmacists when charting medication following medication reconciliation in a tertiary hospital.

Poster

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Introduction

Expanding the role of pharmacists in a prescribing capacity can increase health service efficiency and improve patient care.

Aim

This study aimed to review the acceptability of charting decisions made by pharmacists in a collaborative prescribing type model in an Irish hospital.

Methods

The study took place in an Acute Medical Unit of an Irish teaching hospital. Following medication reconciliation, authorised pharmacists could chart previously prescribed medicines that had been omitted on admission to hospital. They could also return prescriptions to pre-admission doses if appropriate. Pharmacists could decide to chart, decide not to chart, decide to discuss and implement the agreed decision, or decide to refer a charting decision to the medical team. Each charting decision was reviewed independently by two pharmacist reviewers and a selection by a consultant physician. Secondary outcomes were the classification of medications charted by pharmacists, and the number of charting decisions subsequently altered by the medical team.

Results

85 charting decisions were made over a 12-week period. Resolving discrepancies related to unintentionally omitted medicines accounted for 64/85 of the charting decisions made. Neither of the two independent pharmacist reviewers considered any charting decision to be unacceptable although in six cases one reviewer would have chosen a different charting option. The consultant physician considered each decision reviewed to be acceptable. Medicines were from a range of pharmacological classes and of the 45 medicines that a pharmacist chose to chart/stop, only one decision was subsequently altered by the medical team.

Conclusion

Pharmacists made safe and appropriate charting decisions. The introduction of a charting model was achievable in this setting and it is hoped the results can help contribute to future service development.

Evolving the Pharmacy Experiential Learning Placement Model in Ireland in line with emerging needs

Poster

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Evolving the Pharmacy Experiential Learning Placement Model in Ireland in line with emerging needs

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Introduction

Since 2015, pharmacy students in Ireland have been completing experiential learning placements as part of the five-year fully integrated pharmacy MPharm programme[1,2,3] APPEL (Affiliation for Pharmacy Practice Experiential Learning) is responsible for the facilitation and oversight of the experiential learning placements which operate within a governance framework to include student allocation and matching of placements, training of trainers and quality assurance of placements and trainers. APPEL has consistently sought feedback from pharmacists, students and other stakeholders throughout the last eight years, the results of which have been evaluated and implemented as appropriate.

Discussion

Participating stakeholders are formally surveyed after each experiential learning placement. Adhoc feedback is also actively invited. As a result of this feedback changes have been made to enhance the placement experience for students, trainers and stakeholders.

This included

- A dynamic quality assurance and quality improvement process
- Implementation of transparent placement standards for Trainers and Training Establishments to promote the educational experience of students.
- Implementation of new placement guidelines (in consultation with regulator) to allow for remote or partially remote placements
- Changes to the delivery formats of the accredited trainer training to cater for the different learning preferences of trainers,
- Introduction of online forums and clinics to encourage peer to peer trainer support and learnings between trainers
- Implementation of suite of policies and procedures and bi-annual review to ensure governance of placements

Conclusion

Delivery of experiential learning placement programme must be flexible and able to adapt to a changing healthcare environment and a changing and diverse student population. Ongoing evaluation of stakeholder feedback is an essential element to ensure the evolving needs continue to be met.

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Extension of the Pharmacy Discharge Follow-Up (DFU) Service to patients with a specific medication-related concern following an attendance at the Emergency Department (ED) or Direct Assessment Unit (DAU), Antrim Area Hospital

Poster

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Introduction

The DFU Service provides a comprehensive medication review via telephone to Antrim Area Hospital medical inpatients post-discharge and is well-established, with proven benefits[1]. In the unscheduled care settings of ED and DAU, non-admitted patients typically receive lesser pharmacy input due to time pressures and prioritisation of other patient groups, therefore it was considered that an application of the service focusing on specific medication-related concerns may be beneficial.

Aim

To identify if a focused version of the Pharmacy Discharge Follow-Up Service applied to non-admitted patients with at least one specific medication-related concern following an attendance at ED or DAU could demonstrate similar positive outcomes and effective use of DFU resources in comparison to the standard service.

Objectives

- To improve medication safety and benefit, measured by Eadon-graded interventions[2]
- To reduce unscheduled re-admissions and re-presentations to secondary care within 30 days
- To ensure patient satisfaction
- To ascertain effective use of resources by reviewing:
  - Cost-avoidance – generated from Eadon-graded Interventions (interpreted using the ScHARR model[3]) and reduction in length of stay upon re-admission.
  - Pharmacist time required

Method

A one-centre non-randomised cohort comparison with historic (Baseline Cohort) and concurrent comparators (DAU/ED Intervention Cohort and Standard Cohort), with ≥50 patients per cohort.

Results and Discussion

No significant statistical difference was found in Eadon-graded interventions between the concurrent comparators; however, interventions were lower in number and clinical significance within the DAU/ED Cohort. Less pharmacist time was also required for service delivery to the DAU/ED Cohort, generating a cost-avoidance of £6.08 per minute of pharmacist time spent, comparable to the Standard Cohort at £6.16/min. Deviations in re-admissions and re-presentations were not found to be statistically significant. Potential reduction in length of stay could not be analysed due to the small sample size of re-admissions. Patients positively reported satisfaction, with no statistical significant difference found when compared to the standard service.

Conclusion

While the service extension has not shown a significant impact on re-admission and re-presentation rates, there have been positive outcomes in improving medication safety (particularly regarding new oral anticoagulants)

and patient satisfaction, along with demonstrating comparable cost-effectiveness to the standard service, suggesting merit at a patient and service level.

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Health technology management – the future of safe and cost-effective prescribing?

Poster

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Introduction

Health technology management (HTM) has been described as 'measures put in place to enhance the safe, effective, and cost-effective use of medicines thereby controlling utilization and expenditure'[1]. Affordability is increasingly an issue for health systems, particularly with the introduction of high-cost medications for prevalent diseases.

Methods

This review aims to further describe HTM and the significant impact these measures have on cost-effective prescribing in Ireland. This review will cover a number of examples, including;

1. Reimbursement application systems (eg. Lidocaine medicated plaster (Versatis®))
2. 'Preferred' products (eg. Blood Glucose Test Strips (BGTS))
3. Best-value biological (BVB) medicines (eg. adalimumab and etanercept)
4. Managed access protocols (MAPs) for certain high-cost or high-budget impact medicines (eg. calcitonin gene-related peptide monoclonal antibodies (CGRP MABs))

Results

The HTM approach may be applied to new or already reimbursed medicines. The introduction of a reimbursement application system for Versatis® resulted in cost-savings of approximately €2.75 million per month*. Following an evaluation to identify preferred BGTS for adults with diabetes mellitus, the cost savings were substantial*. One year following the identification of BVBs for adalimumab and etanercept, the combined estimated savings and avoided costs were €22.7 million[2]. The CGRP MABs are available subject to a managed access protocol; this ensures reimbursement is confined to the patient cohort for whom cost-effectiveness has been demonstrated.

Conclusion

Healthcare payers, such as the Health Service Executive (HSE) are increasingly recognising the benefits of HTM. This review highlights the significant cost-savings that can be achieved through HTM.

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*Internal data and has not yet been published.

High Dose and Combination Antipsychotic Pathway

Poster

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Rational

To ensure regular medication review of those patients prescribed high dose and combination antipsychotics and robust physical health care monitoring across inpatient and community mental health services. This will replace the current inpatient only high dose and combination antipsychotic chart which solely focuses on physical health care monitoring.

Aim

To ensure 100% of inpatients in adult psychiatric units on high dose or combination antipsychotic are enrolled on the high dose antipsychotic care pathway

Methods

The methodology used was the model for improvement implementing changes using PDSA cycles. Changes made:

The development of a high dose and combination antipsychotic monitoring pathway.

Staff education regarding the pathway and the impact of high dose and combination antipsychotic prescribing on the patient

Measurements

A snapshot audit of 5 patients in the northern sector was carried out to determine a baseline measure. 40% had the chart commenced but none had it completed. An education session was carried out with medical staff who along with pharmacy staff would be expected to complete the pathway. Each team trialled the initial pathway on 2 patients, feedback was taken and the pathway was adjusted. The pathway was also piloted in a community mental health team to determine its feasibility of use in a community setting. Further adjustments were made.

Outcome

On reaudit it was determine 50% of patients in the inpatient unit had the pathway completed. The pathway has been shared across the Mental Health Directorate and Older Peoples Mental Health for use in all settings. It has been approved by the WHSCT Drug and Therapeutic Committee. A pilot project is being carried out in Community Mental Health Teams to determine adherence to physical health monitoring for this group of patients in the community.

Future plans

The development of a Regional High dose and Combination Antipsychotic Pathway for the imminent roll out of Encompass.

How can we make it better? - Exploring medication safety through an interprofessional immersive experience

Poster

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Introduction

Interprofessional medicines safety education has been in place in Queen's University Belfast (QUB) for 15 years. With the opening of the new KN Cheung SK Chin Intersim in QUB, we aimed to use the interprofessional simulation-based facility to develop medicine safety teaching further. The Department of Health's 'Transforming Medication Safety in Northern Ireland'[1]; Northern Ireland's response to the WHO 3rd Global Patient Safety Challenge ' Medication Without Harm'[2] acknowledges the need for Human Factors training within multidisciplinary training programmes. As an interprofessional team we harnessed the opportunity to use the immersive technology of the InterSim and the SEIPS[3] (Safety Engineering Initiative for Patient Safety) approach to medicines safety to facilitate learning. SEIPS is a Human Factors framework based on the Donabedian Model[4] of evaluating quality of care by considering, Structures, Process and Outcomes to support analysis of work systems.

Method

With a patient representative, educators, practitioners and members of the NI Medicines Safety team we co-authored and recorded an immersive scenario for a patient with sepsis using 360 degree cameras in the InterSim. The scenario follows a patient and their care planning through the complexities of clinical practice and involves a medication safety incident. The immersive recordings and props from the scenarios were then used in interprofessional workshops with students to analyse the events using the SEIPS model. Our immersive workshop aimed to cover the following learning outcomes, so that students would be able to:

- Engage with peers including those from other healthcare professionals to work through an immersive medicines safety scenario from practice
- Take a systems analysis approach to a medicine safety scenario
- Recognise error producing conditions and error forming contexts
- Identify barriers and controls to reduce the chance of medication errors from occurring

A formal teaching evaluation was used to gain information on the student experience following the workshop.

Evaluation

Feedback was obtained from 26 students in total, 8 nursing and 18 pharmacy students. All students agreed (n=26) that the immersive videos and props were helpful and that the workshop was well organised and easy to follow. Over 95% (n=25) indicated that the learning outcomes had been met. In the free response comments, students recognised the importance of team communication and a systems based approach to medicines safety, such as SEIPS.

Discussion & Conclusion

This innovate approach to interprofessional medicines safety has received a positive response from students. The approach allows us to introduce full cohorts of students to key concepts in medicines safety and will be embedded in degree programmes from 23/24.

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IIOP COVID-19 Information Hub to support pharmacists during the COVID pandemic

Poster

Ms. Alicia O Dwyer [1], ***Mr. Frank Bourke*** [1], ***Dr. Catriona Bradley*** [1], ***Ms. Sarah Chambers*** [1]

1. *Irish Institute of Pharmacy*

Background

Throughout the COVID pandemic, it was important that pharmacists, as frontline healthcare professionals, had access to up-to-date and comprehensive information on COVID-19. The Registrar of the PSI (the pharmacy regulator) tasked the Irish Institute of Pharmacy (IIOP) with the development of a "single point" web-based repository, to contain relevant information to facilitate pharmacists operating and practising in the context of COVID-19. Such a repository would need to be available on the IIOP's website and be updated regularly in line with new and emerging information/guidance.

Objective/Aim

The development of the "IIOP COVID Hub" to serve as a repository of quality-assured, trustworthy, and contemporaneous information for pharmacists relating to COVID-19 and associated issues.

Methodology

The COVID Hub was developed in line with the processes outlined in the COVID Hub Quality Management Plan, including the required quality assurance and quality control steps. A COVID Hub working group was established to assist with the development of the Hub. This Working Group included pharmacist representatives from primary care, secondary care, the PSI and the HSE. The Hub infrastructure was custom-built and deployed using core Drupal modules and the H5P framework.

Results & Discussion

The COVID Hub was published on 1 July 2020, and covered six topic areas:

- Infection Prevention & Control
- Emergency Medicines & Vaccination Services
- Supply of Medicines
- Public Communications
- Mental Health & Wellbeing
- Return to Practice Resource

The COVID Hub working group met regularly to discuss and inform the ongoing development of the COVID Hub, taking into account the needs of the profession, the national healthcare system and the patient population. Ongoing content development was also informed by the Mental Health working group, subject matter experts, and stakeholders including the PSI and the HSE.

The COVID Hub was widely utilised by pharmacists throughout the COVID pandemic. Traffic to the Hub was tracked, via Google Analytics, to provide oversight of the number of visits to the various sections and subsections of the Hub. From rollout (July 2020) until the reconfiguration as the Resource Hub (January 2023), the COVID Hub had approx. 80,000 unique page views, with the following sections visited the most:

- "In Conversation with" webinar series
- Healthmail

- Vaccination statistics
- COVID-19 vaccinations
- Infection Prevention Control
- Mental Health & Wellbeing

Such visitor data was presented and discussed at each meeting of the COVID Hub working group. It provided useful insight into the information needs of pharmacists at that time, enabling the IIOP to focus their resources on those sections of the Hub that pharmacists accessed most regularly.

Conclusion

The COVID Hub, an open-access online resource, accessible from the IIOP homepage, served as an essential repository of up-to-date and comprehensive information for pharmacists during the COVID-19 pandemic from July 2020 until December 2022. A review of the COVID Hub in late 2022 resulted in the recommendation to transition the specific COVID Hub resource to a more general "Resource Hub", shifting focus to other "non-COVID" resources of relevance to pharmacists. This Resource Hub was published in February 2023, and continues to be available for pharmacists today.

IMPROVE waiting times for patients receiving cancer therapy by introducing a technician led out-patient pharmacy service

Poster

Ms. Amanda Sheerin [1]

1. *Western Health and Social Care Trust*

An increase in the number of patients receiving IV chemotherapy has resulted in extended waiting times for treatment prepared at Pharmacy and has lead to inefficient nursing time at the cancer therapy unit. This has added increased pressure and stress for patients, pharmacy and nursing staff due to long delays.

An audit was carried out from Monday to Friday over a 4 week period to evaluate the pharmacy chemo manufacture and dispensing service. Processing times were recorded for each step of the chemo manufacture process in order to establish areas of congestion and phone-calls/queries were also recorded. Once these areas were identified, it was important to look at how we could limit inefficient processes in our pharmacy service.

Some of the main areas identified as inefficent were the final checking process and delivery of chemotherapy from pharmacy to the cancer unit. The volume of calls/queries from cancer unit to pharmacy cause lots of distractions which in turn slows down the process of aseptic preparation.

A new pharmacy technician role was implemented to create a new technician-led service at the cancer therapy unit. The technician reviewed medication that could be moved/dispensed at the cancer unit.The pilot was initially trialled on a Thursday of each week. Data gathered before and after the pilot was compared to evaluate the service effectiveness.

The pilot was extremely successful and the service is now formalised. The technician led service is now operational Monday to Thursday and continues to develop and improve

Improving medicines management of inpatient Parkinson's disease patients by making pharmacy interventions

Poster

Mr. Mark Knipe [1]***, Ms. Elaine Conyard*** [2]***, Ms. Maria Donovan*** [3]

1. *Pharmacy Department, Our Lady Of Lourdes Hospital, Drogheda,* ***2.*** *Pharmacy Department, Our Lady Of Lourdes Hospital Drogheda,* ***3.*** *School of Pharmacy, University College Cork*

Introduction

Parkinson's disease (PD) patients require the timely administration of medications to control symptoms of low level brain dopamine, such as, stiffness, swallowing difficulties and tremors. Admission of PD patients to hospital can cause disruptions in patient's medication regimens resulting in delayed/missed doses. This can result in adverse effects, such as, the loss of symptom control and permanent reductions in patient baseline condition. Adequate medicines management of PD inpatients is required in order to reduce these adverse effects and to prevent delays in discharge. There is evidence to show that interventions, such as, staff education and priority medicines reconciliations can reduce the likelihood of medication errors and administration of contraindicated medicines in PD patients. The aim of this study was to quantify the impact of a pharmacist's involvement in optimising medicines management in this cohort.

Methods

Three interventions were implemented over a 1 month period. These were priority pharmacist medicines reconciliation, stock optimisation and education sessions for doctors and nurses. A 'baseline' audit was completed prior to interventions being implemented and measured patient demographics, delay in 1st dose following admission, medication errors (missed/delayed doses), pharmacist medicines reviews and time until completion and patient outcome (prevalence of falls, delirium, rigidity). The outcome of patients who were 'nil by mouth' was also assessed. A post-intervention audit identical to the 'baseline' audit was completed and both audits were compared and statistically analysed.

Results

The 'baseline' audit included 24 patients, 59 PD medicines and 1611 doses and the post-intervention audit included 30 patients, 58 PD medicines and 1840 doses. Medicines reconciliations of PD patients increased from 79% to 97% ($p=0.042$) and these were completed 38.7 hours ($p<0.001$) sooner after admission. A reduction in 1st dose delay was seen (13.5 vs 4.4 hours ($p<0.001$)), along with reductions in delayed (5% to 1% ($p=0.037$)) and missed doses (8% to 2% ($p<0.001$)). Omitted pre-admission PD medications were reduced from 16% to 2% ($p=0.011$). Doses missed due to stock unavailability was reduced following stock optimisation. Education of staff contributed to an increase in due times of PD medicines being included on drug charts from 44% to 97% ($p<0.001$). Contraindicated medicines were administered at reduced rates in the post-intervention audit. The length of admission of PD patients was shorter due to the combination of interventions (19 vs 15 days ($p=0.475$)). These improvements in PD patient care resulted in a reduced prevalence of falls, delirium episodes and rigidity. Patients were more likely to be able to interact with allied health professionals in the post-intervention audit (54% vs 0%). Improvements in the prescribing of non-oral PD medicines were seen in patients who became 'nil by mouth'.

Conclusion

This study has shown that the introduction of the pharmacist-led interventions, staff education, priority medicines reconciliation and stock optimisation, can improve PD inpatient outcomes, by reducing medication errors, decreasing the administration of contraindicated medicines and preventing delays in the administration of PD drugs. There is the possibility of cost-saving potential by reducing the length of admission of patients.

Introduction of a Cardiometabolic Pharmacist within the Outpatient Setting in Northern Ireland

Poster

Ms. Pauline Coleman [1], ***Dr. Sara Gardner*** [2], ***Mr. Barry Keenan*** [1], ***Prof. Michael Scott*** [2], ***Ms. Sarah Kelly*** [3], ***Mr. Kevin Joyce*** [3]

1. *Western Health and Social Care Trust,* ***2.*** *Medicines Optimisation and Innovation Centre,* ***3.*** *AstraZenica*

Background

Cardiometabolic disease (CMD) is a collection of common, but often preventable, chronic conditions that cause metabolic dysfunction characterized by insulin resistance and impaired glucose tolerance, dyslipidaemia, hypertension and intra-abdominal adiposity. Patients with CMD are at an increased risk of mortality when compared to those without CMD. CMD is driven by poor diet, smoking, lack of physical exercise and excess alcohol consumption. Treatment with sodium glucose cotransporter 2 inhibitor medication (SGLT2i) significantly reduces cardiovascular disease (CVD) events in patients with heart failure (HF) and those with diabetes who have a high risk of CVD. The use of SGLT2i medications is advocated across national and international guidelines as part of a CVD risk reduction strategy.

Materials/Methods

This project aimed to improve outcomes for patients with or at risk of CMD by increasing adherence to medicines that prevent and delay disease progression and to identify patients suitable for SGLT2i therapy in line with updated national and international guidelines. The project involved the addition of a cardiometabolic pharmacist within the Western Health and Social Care Trust (WHSCT) in Northern Ireland (NI) to conduct outpatient medication reviews within cardiology and diabetic patients.

Results

During the project 274 patients were reviewed by the pharmacist. Of these 274 patients it was determined that 98 (36%) were suitable for a telephone medication review with the cardiometabolic pharmacist to optimise therapy. Of the 98 patients invited to attend a medication review 75 (77%) attended (77%). Of these 75 patients who attended the medication review, 32 patients (43%) were initiated on SGLT2i therapy.

Conclusions

This project resulted in improved outcomes for patients with or at risk of CMD by optimising medicines that will prevent and delay disease progression and the project successfully identified patients suitable for therapy to prevent and delay disease progression. This project has been successful in developing the role of the pharmacist within CMD as we have shown that a clinical pharmacist can effectively identify patients with or at risk of CMD and initiate appropriate treatment to reduce risk in line with national and international guidelines.

Introduction To Prescribing Practice During Low-Fidelity Simulation Pharmacy Workshops – What Do FY0 Students Think?

Poster

Mrs. Claire Irwin [1], ***Ms. Sara Laird*** [2], ***Mr. Andrew Dawson*** [3], ***Mrs. Roisin Cassidy-Murphy*** [4], ***Mrs. Maria McConnell*** [5], ***Ms. Cathy Lavery*** [6], ***Dr. Neal Morgan*** [7]

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Introduction

Prescribing is a *"safety-critical task"*[1] which new doctors are expected to perform competently, but for which many feel ill prepared to undertake[1,2]. The FY0 assistantship programme provides final year medical students with an opportunity to practice prescribing skills within a clinical environment via the "purple pen" scheme[1]. Pharmacy workshops were commissioned to support prescribing preparation, incorporating use of low-fidelity simulation to enable prescribing practice in a "safe" environment[3].

Aims

- To develop low fidelity sessions to support safe prescribing for the FY0 assistantship programme.
- To evaluate and propose review to future prescribing education.

Method

Two low-fidelity simulation sessions (A and B) were developed based on common prescribing errors, feedback from previous teaching sessions and stakeholder review. Session A focused on medication history, prescribing for surgical and medical inpatients and preparing discharges, using part-task trainers[3] to simulate authentic documentation. Session B addressed complex aspects of prescribing including administration considerations of critical medicines when patients are nil by mouth, prescribing high risk medications such as opioids and gentamicin as well as the management of hypo and hyperkalaemia. Each session was facilitated by two pharmacists, and all sessions were delivered on the same day for three cohorts during March 2023. The sessions were evaluated using an evaluation form on Microsoft Forms. Quantitative results were analysed using descriptive statistics, and free text comments were analysed thematically. A debrief session was conducted with the pharmacist delivery team to enable timely reflection on the educational sessions.

Results

Thirty seven of the forty three student attendees provided feedback, representing an 86% response rate. 100% respondents rated the sessions as very good or good, 97% respondents felt the learning outcomes were achieved. 92% felt the material content was appropriate. Analysis of the best aspects of the sessions yielded 5 main themes ("simulation"; "facilitators"; "relevance"; "feedback" and "interaction"). Analysis of how the sessions could be improved yielded 6 main themes ("breaks"; "additional simulation"; "learning opportunities"; "material volume"; "structure" and "timing of teaching").

Discussion

Overall, the simulation sessions were well received. Respondents reported finding them beneficial in the development of prescribing skills and that the use of simulation enhanced the relevance of the teaching. Respondents

reported enjoying the interactive nature of the teaching and valued the feedback provided. The debrief session with pharmacist facilitators identified a need to streamline the case studies used, reviewing the time of year when sessions were delivered, perhaps earlier in the undergraduate medical course, and making these sessions multi-professional in-situ simulation, with a collaborative approach across both pharmacy and medical disciplines.

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Management of Skin Toxicities of Anti Neoplastic Drugs

Poster

Ms. Noelle Murphy [1], ***Ms. Niamh Bennett*** [1], ***Ms. Evelyn Garvey*** [1]

1. *Midlands Regional Hospital Tullamore*

Introduction

Skin and nail toxicities are a common side effect of anti neoplastic therapies, and can occur with both traditional cytotoxic drugs and newer immunotherapies, such as epidermal growth factor (EGFR) inhibitors. (1-3) Examples of these adverse effects include acneiform rash, xerosis, maculopapaular eruptions and palmar plantar erythrodysesthesia. (4) Skin toxicities are rarely life threatening, but can negatively impact upon quality of life, adherence to treatment and ability to continue with treatment. (1-4) Skin toxicities are managed according to severity, which is classified according to Common Terminology Criteria for Adverse Events. (5) In Midlands Regional Hospital Tullamore, pre-printed prescriptions are used by oncology teams for management of treatment associated complications.

Aim

Evaluate the evidence base for the management of skin toxicities and modify local practice guidelines which align with best international practice.

Methods

A literature review was undertaken to determine the best available evidence to manage skin toxicities induced by anti-neoplastic drugs. Best practice was compared to local practice. The findings of the literature review were presented to the clinical oncology team, comprising of consultants, pharmacists, clinical specialist nurses and prescribers.

Results

Following multi disciplinary collaboration, consensus was reached. It was identified which pre-printed prescriptions needed to be created, modified or removed. Pre printed prescriptions were removed for products which had been discontinued, were unlicensed with licensed alternatives available or which did not have a substantial evidence base to support their use. Pre printed prescriptions were modified to include alternatives where supply issues/availability through community drugs schemes may have been a barrier to accessing treatment for patients.

Due to medicine shortages, alternative options to some treatments were included on pre-printed prescriptions. A prescriber's guide for the management of skin toxicities was developed, as was a skin care information leaflet for all patients commencing treatment with anti neoplastic drugs. A specific patient information leaflet for patients treated with EGFR inhibitors was developed. Tailored education sessions on the updates to practice were delivered to clinical pharmacists and nurses working on the oncology day ward.

Conclusion

Anti neoplastic drugs can cause a variety of skin toxicities. It is important to ensure patients receive timely, safe and evidence based care to manage skin reactions and prevent them from progressing, as this could lead to reduction in quality of life, hospitalisation or compromise their ability to continue with treatment. Interprofessional collaboration is a key to making meaningful impact on practice.

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Medication Safety Newsletter Survey

Poster

Mr. Daryl Connolly [1]***, Mrs. Angela Carrington*** [2]***, Ms. Sharon O'Donnell*** [3]***, Ms. Anna Lappin*** [4]***, Mr. Matthew Wilson*** [5]***, Mrs. Maria McConnell*** [6]***, Ms. Caitlin Bradley*** [7]

1. *Medication Safety Pharmacist, WHSCT,* ***2.*** *strategic performance and planning group,* ***3.*** *Medication Safety Pharmacist, BHSCT,* ***4.*** *Medication Safety Pharmacist, NHSCT,* ***5.*** *South Eastern Trust, NI,* ***6.*** *Lead Medication Safety Pharmacist, Southern Health and Social Care Trust, 7. Medication Safety Administration Officer*

The Northern Ireland Medicines Safety Team produce two regional newsletters - 'Medication Safety Today' was first issued in November 2002 and issue 71 went out in March 2023, the newsletter focuses on general safety messages. 'Medsafe' issue one was issued August 2013 and issue 30 in April 2023 - the focus is on one or two key topics that have or have the potential to cause significant harm.
The purpose of this survey was to determine how the multidisciplinary teams across the five hospital Trusts engage with newsletters, how accessible it is, is the learning useful and how could they be improved.
The responses are currently being analysed and will be included in final poster.

Medicines Supply Chain Continuity in Irish Public Hospitals

Poster

Ms. Maeve Hynes [1], ***Mrs. Fionnuala King*** [2]

1. *HSE Acute Hospitals Drug Management Programme,* ***2.*** *HSE Acute Hospital Drugs Management Programme*

Introduction

The World Health Organisation (WHO) defines medicines procurement as a complex process.[1] Together with the European Medicines Agency (EMA) and WHO recognise medicine shortages as a global problem.[2] Two publications were issued by EMA on good practices for the prevention of human medicinal product shortages for industry and for patient and healthcare professional organisations to improve medicines supply chain continuity. In Ireland, the Health Products Regulatory Authority (HPRA) medicines shortages framework aims to help avert potential shortages from occurring and to reduce the impact of shortages on patients by co-ordinating the management of potential or actual shortages as they arise.[3]

In recent years, hospital pharmacy department are managing an increase number of medicine shortages. The disruption of the medicine supply chain can cause serious problems for patients, health professionals and health systems. Hospital pharmacy departments are playing a key role in managing medicine shortages within hospitals. This can result in hospital pharmacy departments spending significant amounts of time managing medicines shortages and ensuring continuity of supply for patients.

Prevention is an essential part of shortage management with some hospitals undertaking procurement processes to establish contractual agreements for agreed volumes and minimum stock holdings to support supply chain continuity. This can provide a reasonable level of certainty so that there is a predictable environment for pharmaceutical industry to supply their products and prevent shortages. These agreements can include prevention and mitigation measures with an expectation that suppliers will source alternatives.

Aims

The aims are;

- To identify potential enablers to support supply chain continuity in Irish public hospitals.
- To explore the impact of contractual agreements with pharmaceutical industry to support supply chain continuity in Irish public hospitals.

Methods

A review of existing supports available to hospital pharmacy departments to assist in the management of medicines supply chain. A series of engagements with internal and external hospital pharmacy stakeholders undertaken to enhance understanding of the supply chain problems faced and potential enablers that could assist with managing supply disruptions.

Conclusion

Pharmacy teams need timely, accurate and concise information on medicines supply chain. Improved communication and transparency between hospital pharmacy departments and pharmaceutical suppliers can assist in minimising the impact of medicines supply disruptions. When a medicine is short, each pharmacy department is chasing the same medicine. The implementation of contractual agreements support supply chain continuity in Irish public hospitals.

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National Antimicrobial Point Prevalence Survey in Adult Inpatient Mental Health Facilities

Poster

Ms. Sarah Fagan [1], Ms. Mala Shah [1], Ms. Aisling Clancy [1], Ms. Mary Eva Regan [1], Ms. shirley armitage [1], Ms. Patricia Sheehan [1], Mr. Callum Ryan [1], Ms. Catherine Mannion [1], Ms. Olivia Gallagher [1], Ms. Roisin Foran [1], Ms. Margaret Donnelly [1], Mr. Colm Devine [1], Ms. Bernie Love [1]

1. *HSE*

Introduction

Antimicrobial use in mental health inpatient settings has not been extensively examined in Ireland. The Healthcare-Associated Infection and Antimicrobial Use in Long-Term Care Facilities (HALT study) 2016 found that Irish long-term care facilities for residents with psychiatric conditions had an antimicrobial prevalence rate of 7.7%, higher than European average of 4.9%[1]. National community antimicrobial prescribing guidelines are available at www.antibioticprescribing.ie. In addition, a preferred antibiotic initiative for community settings advocates prescribers to choose 'Green' (preferred) antibiotics over 'Red' (reserved) agents. Reserved agents are considered to have more adverse effects, drug interactions and potential for development of antimicrobial resistance. The patient safety implications of antimicrobial stewardship along with an aging population, and potential drug-drug interactions between many antimicrobials and psychotropic medications prompted a review of antimicrobial use practices in mental health services.

Aims

To establish a baseline of antibiotic use, examine structures supporting good AMS practices and identify opportunities for improving the use of antimicrobials.

Methods

A sample of HSE adult inpatient mental health facilities (MHF) were surveyed by community antimicrobial pharmacists (AMPs) between November 2021 and January 2022. AMPs reviewed patients' medication charts for systemic antimicrobial prescriptions in the previous 30 days in addition to medical notes and laboratory results (where available). Adherence to HSE National community antimicrobial guidelines and the systems and structures in place to support antimicrobial stewardship were assessed.

Results

In total, 1003 patients in 51 MHFs were surveyed. At the time of survey, 6.3% (n=66) patients were on a systemic antimicrobial and 15% (n=153) had received a systemic antimicrobial within the previous 30 days. Prophylaxis accounted for 50% of antibiotic use (3.3% of all patients), with the most common indication being the prevention of urinary tract infection (UTI) (58%). Prophylaxis duration exceeded six months in 61% of prescriptions. The median duration of treatment courses was seven days. The proportion of 'Green' (preferred) antimicrobials versus 'Red' (reserved) antimicrobials was 58% versus 38%. Co-amoxiclav, a 'Red' agent was the most commonly prescribed antibiotic for treatment of infection (31%). Adherence with choice of antimicrobial agent as per national antimicrobial guidelines was 76%; adherence of dosing regimen was 75% and adherence with recommended duration was 46%. The main themes for non-adherence with choice of agent were use of unnecessarily broad spectrum agents, nitrofurantoin prescribed in renal impairment and inappropriate formulation of nitrofurantoin chosen. Dipstick urinalysis was performed routinely (on admission and/or at designated intervals) for persons asymptomatic of UTI in 53% (n=27) of MHFs.

Conclusion

The PPS established antimicrobial use practices in HSE MHF. Key areas identified for improvement were prophylaxis duration, routine use of dipsticks, improving knowledge of national guidelines, using 'preferred' antimicrobials and optimising duration of antimicrobial treatment.

Nomophobia- Exploring Pharmacy Students' Psychological Attachment to Smart Phones

Poster

Dr. Paul McCague [1]***, Ms. Niamh Carson*** [1]***, Mr. Liam Doherty*** [1]

1. *School of Pharmacy, Queen's University Belfast*

Background

Nomophobia comes from the abbreviation of the phrase "NO MObile PHOne phoBIA". It has been described as a psychological condition relating to the fear of not having a mobile phone. Overuse of smartphones leading to nomophobia can result in symptoms such as anxiety, depression, sleep disturbances, reduced attention span and difficulty concentrating[1]. In academia, excessive smartphone use can have a negative impact on academic performance[2]. The Nomophobia Questionnaire (NMP-Q) is a validated tool used to assess nomophobia[1].

Aim

The aim of this study was to assess the prevalence and severity of nomophobia amongst final year Pharmacy Students using the NMP-Q tool.

Methods

Following ethical approval, an online questionnaire was distributed to final year pharmacy students (n=87). This 20-item questionnaire was based on the NMP-Q. Descriptive statistics were used to analyse the questionnaire data, NMP-Q scores were calculated, and a content analysis was undertaken on the free text responses.

Results

A total of 67 students completed the questionnaire providing a response rate of 77%. All students (100%) reported owning a smartphone device with the most popular device being an Apple iPhone (83.6%). The overall mean nomophobia score was 79.82 which indicates 'moderate nomophobia'. The majority of students were classified as having 'moderate' nomophobia (62.7%), with 16.4% falling into the 'mild' range and 20.9% being classified as 'severe'. There was no statistically significant difference found regarding gender. Within the free text comments students described over reliance on mobile phones and links with social media.

Conclusion

This study has shown substantial levels of nomophobia in final year pharmacy students and their excessive reliance on mobile phones. Educators need to establish mechanisms to prevent, identify and manage nomophobia and its consequences. Further research will explore strategies to develop and implement such mechanisms.

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Oh boy, have we a gender problem within our MPharm degree programme!

Poster

Dr. Carole Parsons [1], ***Dr. Dan Corbett*** [1], ***Prof. Lezley-Anne Hanna*** [1]

1. *School of Pharmacy, Queen's University Belfast*

Introduction

The Standards for the initial education and training of pharmacists require that MPharm providers undertake annual analysis of protected characteristics data.[1] Our analyses performed in recent years have revealed that female MPharm students outperform males academically,[2] particularly in the proportion obtaining a first-class honours degree; between 2018 and 2022 the difference between percentage of firsts awarded to females and males has ranged from ~ 14 – 33%.[2] Females outnumber males on the course at every stage of the application process; in 2018/19, 27.6% of students entering the course were male and in 2022, this had reduced to 21.7%. The aim of this work was to prepare an action plan to address these issues for the MPharm degree programme at Queen's University Belfast.

Method

After a review of the wider literature to help understand why females perform better academically[3], an action plan was initially prepared by one of the School of Pharmacy Equality, Diversity and Inclusion (EDI) committee members who is also a racial equity champion. The plan had two strands, was SMART (specific, measurable, attainable, relevant, and time-based) and included who was responsible for each action point (by name or role). The first strand related to admissions and selection and the second related to progression through the course and academic performance. The plan evolved *via* discussions with the academic staff member who leads MPharm student recruitment and is our digital education and technologies expert. It was peer reviewed by the MPharm Director of Education and an external colleague.

Results

Six action points from the action plan have been provided in Table 1.

TABLE 1 HERE

Conclusion

The above actions are being implemented in one School of Pharmacy currently but should provide a useful starting point for other MPharm programme providers. Future research could focus on determining why males are less interested in studying pharmacy than was previously the case, and whether the difference in academic performance has an impact on their professional practice after graduation.

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Table 1. Key action points from the action plan, including the measure of success

Strand	Action points	Measure of success
1	Reach out to the Pharmacy Forum NI (NI pharmacy professional organisation) to recommend that campaigns such as PharmacyFutures NI are designed to encourage males to apply to study pharmacy	Campaigns with a greater male presence/focus Greater proportion of male applicants from 2024 onwards
1	Liaise with the University to recommend that recruitment campaigns encourage males to apply to the MPharm, including through having testimonials from male students and alumni, signposting to our interview guidance on the website, and through the Pathway Opportunity Programme	Campaigns and University marketing literature with a greater male focus Greater proportion of male applicants from 2024 onwards
2	Ensure the MPharm degree programme is academically challenging and that fundamental science is not simply being replaced with soft or clinical skills when revising the programme	Positive outcome from the accreditation panel in March 2023 for the learning outcomes that relate to science and application of science in practice (and for those relating to communication and clinical skills)
2	Develop a podcast series about preparing for written examinations that involves male students and staff	Podcast series developed Better male performance in written examinations in May 2023 (than previous years and/or in comparison to female students)
2	Ensure there is a diverse range of teaching and assessment approaches embedded in the curriculum	Better male engagement and academic performance in 2023-24 than previous years and/or in comparison to female students
2	Ask willing male students who have not progressed as planned and/or academic conduct investigations to record a message of their key learning points and reflections	Relevant messages recorded by male students Fewer progression issues and academic offences involving male students

Table 1 parsons corbett hanna edi males .png

PAMS-net - Creating a Community of Practice

Poster

Ms. Ailbhe O'Mahoney [1], ***Ms. Sarah Chambers*** [1], ***Dr. Catriona Bradley*** [1]

1. *Irish Institute of Pharmacy*

Background

During COVID-19 the IIOP added new learning delivery models to their CPD provision as a rapid and flexible way to reach the pharmacy profession. There was an appetite for connection between colleagues to share up to date information and practice experience. This led to the development of a community of Practice – the Pharmacist Antimicrobial Stewardship Network (PAMS-net), a collaboration between the HSE AMRIC team and IIOP.

Objective

To create a dedicated forum page on the IIOP website for pharmacists to discuss and collaborate on Antimicrobial Stewardship (AMS). The aim of the page is to share knowledge and experience on AMS within and across sectors, foster innovation, and provide continuous professional development for pharmacists with an interest in AMS.

Methodology

Prior to the creation of a forum page on the IIOP website, desk research was carried out in relation to the establishment of communities of practice and criteria for success.[1] Challenges to be considered included: diversity of experience and knowledge of members; maintenance of an accurate, current information resource; user engagement; and moderation of the forum.

Guidelines were established to set the boundaries and expectations for participation from the outset. Participants must agree to terms of use before joining. Designated individuals were appointed to review the forum and respond to queries. A launch plan was devised using resources and guidelines created by AMRIC to establish a rhythm of posting.

Results & Discussion

The site, a discussion forum and resource page hosted on the IIOP website, was launched in August 2022. Over 220 pharmacists with diverse practice areas have enrolled in PAMS-net. Over 130 posts have been created. In a post-webinar survey, 82% of members reported that joining PAMS-net impacted their practice positively.

In advance of the launch of PAMS-net a six week plan was prepared to establish a continuous rhythm of posting. This was made possible by the volume of resources and guidelines created by AMRIC as part of its role in the national agenda to support AMS.

Designating individuals to review the forum and respond to queries was essential to support engagement. This guaranteed that posts were responded to, set a collegial tone, and encouraged others to participate in the discussion, and thereby ensure the sustainability of the group.

Conclusion

Training and development is evolving, and increasingly, training delivery should be guided by the needs and learning preferences of the learners. Peer discussions can be a form of CPD[2], participation in a forum such as the PAMS-net is yet another way to engage in CPD. In a dynamic environment, it is important to harness CPD opportunities to support pharmacists. Providing a forum for the purpose of connecting pharmacists in specialised communities of practice is one such way.

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Personalised Pharmacy: Embedding Pharmacogenomics in the Curriculum

Poster

Mrs. Clare Murray [1], ***Dr. Niamh Buckley*** [1], ***Dr. Roberta Burden*** [1], ***Prof. Lezley-Anne Hanna*** [1]

1. *School of Pharmacy, Queen's University Belfast*

Introduction

The new Standards for the Initial Education and Training of Pharmacists, launched in 2021, place pharmacogenomics as a key component of undergraduate and foundation year training.[1] Students must demonstrate their understanding of genomics and how this is applied to drug delivery and patient care.[1] The scientific underpinning of the MPharm degree means that pharmacists are well placed to play a strategic role in the development of pharmacogenomics and the effective use of personalised medicines.[2] The aim of this work was to embed pharmacogenomics into the MPharm degree programme at Queen's University Belfast.

Method

As part of a curriculum redesign process, the Director of Education (MPharm) ascertained the current provision of pharmacogenomic teaching. Given highlighted gaps, a Reader in Personalised Medicines and Pharmacogenomics was tasked with developing new teaching materials and assessments of spiralling complexity. A task and finish group was convened, comprising pharmacists (including independent prescribers) and scientists with an interest in genomics and personalised medicines. One of the pharmacists participated in the NHS Health Education England Pharmacy Workforce Round Table gaining rich insight into how genomics links to medicines optimisation and patient centred care addressing national priorities.[3] The group linked expert perspectives to literature relevant to pharmacy practice, and applied pedagogical approaches to create a module which was later presented to the School Education committee for consideration. This iterative approach, employing diverse expertise, maintained novelty and relevance.

Results

Following successful approval as part of the School's reaccreditation process, the course material is ready for our 23/24 cohort of MPharm students. Students will learn the fundamental rules of inheritance and molecular biology, with increasing complexity. The focus will be on real-world applications of personalised medicine. Key therapeutic topics illustrating the use of precision and personalised medicine include Cystic Fibrosis, cancer, and diabetes. Students will develop key practice related skills founded on a clear appreciation of the ethical considerations necessary for care delivery. They will be exposed to authentic genomic resources that aid with clinical and ethical decision-making. Students will also act as independent prescribers, making treatment recommendations based on a patient's genetic history. Students' proficiency will be assessed using class tests, workshop submissions, group oral presentations and OSCEs.

Conclusion

Given that the outlined teaching will be delivered for the first time in September 2023, continual evaluation will be required to ensure that the knowledge and skills gained by the students meets present and future needs of the pharmacy workforce. Further work could involve our patient and qualified pharmacist stakeholders to understand their views on the expansion of the pharmacist's role in healthcare provision related to personalised medicines.

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Pharmaceutical care of breastfeeding women: exploring women's experiences of secondary care in Northern Ireland.

Poster

Mrs. Sarah Robinson [1]

1. *Southern Health and Social Care Trust*

Background

The need to take medication is cited as a common reason for discontinuing breastfeeding. Much of the existing literature centres on primary care settings, such as General Practice and community pharmacy.[1,2,3,4] Little is known about patients' experiences when they attend secondary care for treatment.

Objectives

1. Explore patients' experiences of receiving medication advice while breastfeeding in a secondary care setting Northern Ireland.
2. Evaluate patient satisfaction with the advice they receive from healthcare professionals about medication use in breastfeeding.
3. Investigate if women feel included in the decision-making process when prescribing decisions are made
4. Determine if medication use is a barrier to breastfeeding in Northern Ireland.

Design

A voluntary web-based questionnaire.

Setting

Northern Ireland

Participants

Women who have received medication advice or treatment from a secondary care setting in Northern Ireland whilst breastfeeding, between March 2019 and March 2022.

Results

A total of 70 women participated in the study. While only 23% had to stop breastfeeding temporarily and 6% stop permanently due to medication, women reported high levels of dissatisfaction with their experience and the advice they received from healthcare professionals regarding medication use in breastfeeding. None of the medications involved necessitated an interruption in breastfeeding. Study participants were highly motivated to continue breastfeeding and demonstrated a knowledge of breastfeeding that, in most cases, breastfeeding could continue. They frequently challenged the information they were given and utilised other sources of information.

Conclusions

Over half of study participants breastfed their baby for 1 year or more, compared to just 8% in the most recent published data from Northern Ireland.[5] Due to this unexpected demographic, this research project was unable to determine if the need for medication is a barrier to breastfeeding in Northern Ireland. However, the findings demonstrate that some women discontinue breastfeeding when not required. Participant's experiences echo those shown in the literature from other healthcare settings. Further research is required to show how medication use affects those who discontinue breastfeeding at shorter durations.

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Pharmacy Students' Experiences of Discrimination during Experiential Learning Placement - a quantitative survey

Poster

Ms. Ruth McCarthy [1], ***Mr. Patrick Cleary*** [1], ***Dr. Laura Sahm*** [1]

1. *School of Pharmacy, University College Cork*

Introduction:

Discrimination in the workplace is defined by the Irish Human Rights and Equality Commission as 'less favourable treatment' than another employee in a comparable setting (1). When pharmacy students undertake experiential learning placements (ELP), they become part of the workplace and therefore potential candidates for exposure to discrimination. This study aimed to assess the student learning experience on ELP in line with the values of Equality, Diversity and Inclusion (EDI) of University College Cork.

Aim:

This study investigated if pharmacy students experienced discrimination during ELP with a focus on EDI. The prevalence and types of discrimination encountered were also examined.

Methods:

A 20-item quantitative survey was created on MS forms relating to different areas of discrimination including age, gender, appearance, sexual identity, race/ethnic origin, or English language proficiency. Of the 20 items, 14 were binary with yes/no responses, 6 were demographics. A free text box for additional comments was included. This survey was emailed to 3rd, 4th, and 5th-year pharmacy students. All data obtained from the survey was entered into Microsoft Excel (IBM Corporation) for descriptive statistics which included percentages and frequencies. Further statistical analysis was undertaken using SPSS version 28 (2). Chi-squared tests were undertaken as appropriate and a $p \leq 0.05$ was considered statistically significant.

Results:

Of 201 students, 84 completed the survey (response rate=41.8%), 72.6% (n=61) were female, 27.4% (n=23) male, 83.3% (n=70) identified as heterosexual. 52.4% (n=44) of respondents were aged 21-22 years. 53.6% (n=45) were in 3rd year. Almost two in five (39.3%, n=33) reported experiencing at least one incident of discrimination while on ELP. A total of 7.1% (n=6) reported gender discrimination and discrimination based on appearance, of which 2 in 3 were female (66%, n=4). No student reported racial discrimination. Age discrimination had the highest incidence, with 19% (n=16) of students reporting experiences of discrimination based on age. A Chi-squared test of independence was performed to investigate the association between age and discrimination based on age. The results showed that there was no statistically significant association between these two variables, $X2 (4, N=84) = 2.5$, $p= 0.664$.

Conclusion:

Pharmacy students report experiencing discrimination on their ELP. Discrimination can have a negative impact on mental health; therefore, efforts are needed to reduce its prevalence. Students should receive awareness training and encouragement to report episodes of discrimination. Preceptors may also benefit from training in how to support students experiencing discrimination. Limitations of the study are the small sample size and single study site.

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Pharmacy Technician led Medicines Management within Care Homes Pilot

Poster

Ms. Lorraine Hyndman [1], ***Mrs. Carmel Darcy*** [1]

1. *Western Health and Social Care Trust*

Introduction

In any given Care Home, staff must order, receipt in, store, and administer hundreds of daily medicines. It is widely publicised that care homes are chronically understaffed and the fragility of the system was exposed by the pandemic.[1,2] The burden of medicines management not only reduces staff time to care for residents but each step generates additional challenges such as errors, discrepancies, unnecessary waste from over ordering[3] and duplication of effort; all of which potentially causes avoidable harm to the individuals and compromises care. The overarching aim of the pilot was to improve the quality of care and lives of older people in our care homes and reduce inappropriate medicines waste. The introduction of a pharmacy technician to carry out medicines management tasks in the pilot care home led to safer and more efficient ordering and use of medicines in the home.

Method

From Jan 2022 to Oct 2022 on one day a week, a pharmacy technician attended a 40-bedded care home facility ('the pilot home'), screened individual medicines administration record (MAR) charts, confirmed stock levels, administration usage, and intentional disposal to identify repeat medicine orders. Once orders were approved (by the nurse in charge/home manager) the technician logged in remotely to each respective GP system, synchronised quantities, standardised labelling, selected, and printed repeat prescriptions. The appropriate prescriber was notified for authorisation and the generated prescriptions forwarded to the named community pharmacy for dispensing.

Results

The addition of the Pharmacy technician redirected 21.25 hours per month of nursing time from the medication ordering process to direct resident care. They also reduced the number of telephone calls from the care home to GP's with queries/ requests about monthly repeat items. Average calls for 10 randomly selected residents in the care home in the six months before the pilot was 13.7 per month and this reduced to an average of 2.67 calls per month for the same 10 residents in the 6 months after the technician was in put in place.

Reduced cost (£) of medicines due to over ordering was demonstrated (61.46%) when comparing destruction records six months before and six months after the pharmacy technician took over the medicines ordering step .

Conclusion

A Pharmacy Technician responsible for medicines management based within a care home and working across the primary/secondary care interface improves the overall quality of the processes. This ultimately improves safety, and reduces waste and medication errors. Furthermore this reduces nurse workload and therefore their capacity to care increases which ultimately improves the lives of older people living within our care homes

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Preventing Medication Related Delays for Elective Orthopaedic Surgery Inpatients

Poster

Mr. Stephen Flanagan [1], ***Ms. Eileen Mulholland*** [1], ***Mrs. Orla Cassidy*** [1]

1. *Musgrave Park Hospital*

Restoring timely surgical services is a priority for the NI Executive, with over 24,700 patients in Northern Ireland waiting on elective trauma and orthopaedic surgery. Effective medicines management is an important aspect of the elective surgery patients hospital journey and optimization of this can help to reduce number of cancelled surgeries, improve patient flow, improve patient safety and create a more positive patient experience.

Through use of Quality Improvement (QI) methodology, we implemented a series of change ideas using PDSA cycles. These included the introduction of a pre-admission pharmacist phone-call, partial preparation of discharge prescription in advance of admission, counselling patient on medicines prior to admission, near patient dispensing and improved processing of controlled drugs.

Overall, we were able to demonstrate a 66% reduction in pharmacy admission process times, an 87% decrease in pharmacy discharge process times, an 88% decrease in clinical interventions and a positive impact on dispensary workload & targets. We also received positive feedback from ward staff and patients, expression of increased job satisfaction in the pharmacy team and increased staff engagement.

Professional Development ePortfolio: An Integrated Assessment Approach for Pharmacy Technician Students for Learning and Practice

Poster

Dr. Seana Hogan [1], ***Dr. Tao Zhang*** [1], ***Ms. Kathy Young*** [1], ***Ms. Mary Therese McGrath*** [1], ***Ms. Jill Barrett*** [2], ***Dr. Julie Dunne*** [1]

1. *School of Food Science and Environmental Health, Technological University Dublin, Grangegorman, Dublin 7, Ireland.,* ***2.*** *Career Development Centre, TU Dublin, Grangegorman Dublin 7 Ireland*

Employability can be considered as the ability to gain, maintain and secure new employment. To build a successful career, students should have the qualifications, appropriate transferable skillsets, and the ability to demonstrate their knowledge and professional competencies in an appropriate manner. In 2013, Dublin Institute of Technology (DIT), now Technological University Dublin (TU Dublin), launched 20 graduate attributes (GAs) under "Enterprising", "Engaged", "Enquiry-Based", "Expert" and "Effective". Seven GAs (Excellent Communicators, Active Team Players, Motivated Self-Starters, Collaborative Workers, Ethical, Emotionally Intelligent, Work Based/Related Learners) were prioritised by the Higher Certificate in Science in Pharmacy Technician Studies Programme Team (TU654/DT425) through a research project involved with internal and the external stakeholders. These prioritised GAs were integrated into the curriculum with the development of Professional Development ePortfolio modules (PDEP1006 & PDEP2006) and diverse activities & assessments were subsequently designed and implemented in order to enhance students learning experience and practice. The TU654 programme has been awarded: AHECS Employability Award (Research Informed Practice) 2023, The National Forum's Disciplinary Excellence in Learning, Teaching and Assessment (DELTA) Awards (2021-2024) and (2018-2021) & TU Dublin Le Chéile Award (2021). The overall aim of this contribution is to demonstrate that it is scientifically and practically feasible to establish an integrated ePortfolio approach to assess students' learning for specific learning outcomes and help them to develop and practise their employability skills across the diverse aspects within a programme. The aim is achieved by the following objectives:

- Designing dedicated modules (Professional Development e-Portfolio for Pharmacy Technicians) with the prioritised GAs being the focus of the learning, teaching and assessment strategy.
- Integrating high impact activities and diversified assessments (student-centred/driven, authentic, learning with communities, ethical debate, pharmacy related integrated case-study, work-placement reflective blogging, etc) to enhance their learning experience, though participation, documentation and reflection.
- Fostering digital literacy by facilitating the establishment and development of an ePortfolio for the pharmacy technician students throughout the two-year study to show-case and reflect on their learning journey and strengthen their professional employability skills.
- Embedding sustainable and innovative workshops as appropriate and necessary support, including personality identification and communication, handling conflict at workplace, resilience, career preparation and planning, etc.
- Developing a collective programme ePortfolio to create a collaborative and reflective team culture for the programme.

Key Message:

- Varied assessments can have more acceptance and engagement from students who are likely to support their academic progress. There is a strong case for adopting a more collaborative and integrated approach as an alternative to traditional assignment.

- Prioritisation of graduate attributes, assessment mapping & design and appropriate workshops/trainings are the key drivers to having an effective and contemporary assessment strategy.
- ePortfolio is an appropriate and evidence-based (can even be high impact) learning and assessment approach promoting student's engagement and enjoyment throughout the course of study and beyond as a life-long learners.

Fig. 1. pdep1006 pdep2006.png

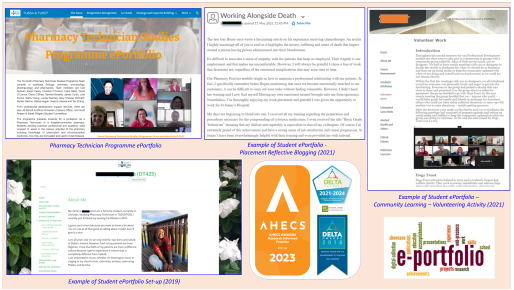

Fig. 2. examples of student eportfolio.png

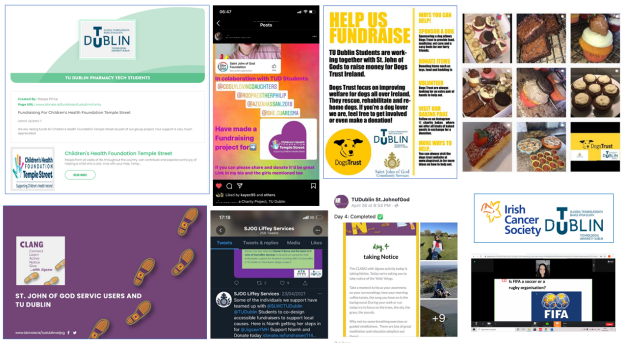

Fig. 3. circlet volunteering activities with four charities 2021.png

Queen's University Belfast (QUB) Final Year MPharm Students' Comprehension of Academic Misconduct in Simulated Situations

Poster

Ms. Johanne Barry [1], ***Ms. Dearbháile Gallagher*** [1], ***Dr. Paul McCague*** [1]

1. *School of Pharmacy, Queen's University Belfast*

Background:

Academic misconduct by pharmacy students can raise concern about their probity and invoke 'Fitness to Practise' investigations[1]. Previous studies within pharmacy and medical schools found that male students were more likely to plagiarise assignments than female students[2]. Moreover, males often had a more lenient perception towards academic misconduct behaviour[3].

Aims:

To determine final year QUB MPharm students' comprehension of academic misconduct in simulated situations.

Method:

Following ethical approval, a Microsoft Forms questionnaire was distributed to final year QUB MPharm students (n=69) exploring views and understanding of academic misconduct through evaluating scenarios with varying degrees of ambiguity. The questionnaire gathered demographic data, whether they attended a Code of Conduct/Fitness to Practise Induction Event and their knowledge regarding academic misconduct and professional standards. The questionnaire also contained 12 academic misconduct scenarios in a format previously used in another study[4]. Responses were analysed for significance (p <0.05) by gender using the Chi Square Test.

Results:

The response rate was 41.1% (n=28). 46.4% (n=13) of respondents self-declared as male, 50% (n=14) as female and 3.6% (n=1) as non-binary. 100% (n=28) attended the Induction and reported awareness of QUB's academic offences procedures. Most students correctly identified academic misconduct, such as copying in exams, not referencing others' work and discussing OSCE contents within the 12 scenarios involving two fictional students. When students were presented with ethical dilemmas involving one student engaging in academic misconduct and another being aware, but not reporting this, a low proportion of students identified that it was wrong to not report this misconduct. Overall, there were no significant gender-based differences observed.

Conclusion:

Ensuring pharmacy graduates are prepared for practice is a fundamental role of educators. QUB final year MPharm students were aware of academic misconduct but were reluctant to report colleagues.

Refining the methodology for conducting virtual standard setting panels for the GPhC registration assessment

Poster

Mrs. Lisa Smith [1]

1. *General Pharmaceutical Council*

Background

Passing the registration assessment towards the end of the initial education and training for pharmacists is a pre-requisite for registration as a pharmacist in the UK. In 2016, modified Angoff methodology (Ricker 2006) was introduced to set the standard in the GPhC's Registration Assessment (GPhC). UK registered pharmacists were recruited, as subject matter experts (SMEs), and the GPhC held 5 to 7 face-to-face standard setting panels annually from 2016 to 2019.

In 2021, the assessment was delivered online, and the face-to-face panels were moved to virtual panels.

Aim

To transfer face-to-face panels and processes to virtual panels.

Design

In 2021, a total of 16 panels were held. Initially, the face-to-face process was replicated in the remote panels. Following each panel, feedback was collated. Reflections and suggestions were noted, and iterative changes implemented at the next panel.

In November 2021 an evaluation survey was sent to the SMEs to gauge their views on the 2021 panels as part of GPhC continuous improvement work. Ethical approval was not required.

Results

Iterative process changes made based on feedback included:

- reducing panel size from 10-12 SMEs to between 8-10
- providing a narrated presentation to replace calibration exercises
- providing questions in advance via a secure website, enabling SMEs to submit initial scores before the panel
- moving from full-day to half-day panels

In total, 31 responses to the evaluation survey were completed.

Table 1 evaluation survey results

Uploaded separately

Discussion

The ongoing reflections of SMEs and staff were actioned, introducing iterative changes to the process. The evaluation survey indicated satisfaction with remote panels. Remote panels deliver cost efficiencies in travel expenses as the SMEs are located across the UK, reduce the environmental impact, provide flexibility on timing (virtual evening panels are feasible and popular) and promote inclusivity. Remote panels allow pharmacists with a wide range of experience working in different sectors and in different parts of the UK to easily engage with the process.

Virtual panels have continued in 2022 and 2023 and will continue to be evaluated.

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	Excellent	Good	Satisfactory	Minor improvement needed	Significant improvement needed
Structure and timing of panels	75%	25%	0%	0%	0%
Having panels remotely	47%	50%	3%	0%	0%
Opportunity to contribute	78%	19%	3%	0%	0%
Facilitation of the panels	91%	9%	0%	0%	0%

Table 1 evaluation survey responses.png

Results from iSIMPATHY across the island of Ireland

Poster

Ms. Clare Kinahan [1], ***Mr. iSIMPATHY (implementing Stimulating Innovation in the Management of Polypharmacy and Adherence THrough the Years) consortium*** [2]

1. *hse,* ***2.*** *Medicines Optimisation and Innovation Centre*

Introduction

iSIMPATHY was a three-year European Union funded project across three different jurisdictions: the Republic of Ireland (ROI), Northern Ireland (NI) and Scotland. It aimed to optimise medicines use through the delivery of person-centred medicines reviews by trained pharmacists. Comparing the data for ROI and NI facilitates discussions on the differences between the jurisdictions and settings: GP practices (ROI) and hospital (NI).

Methods

Reviews were carried out for patients meeting the iSIMPATHY inclusion criteria. The 7 Steps medicines review framework (see image) was followed and recommendations were actioned, or presented to the patient's GP to action.

Pharmacist's submitted data for all patients consented to data collection. The Patient-Centred Medication Appropriateness Index (PC-MAI) was calculated for approximately 10% of patients.

Results:

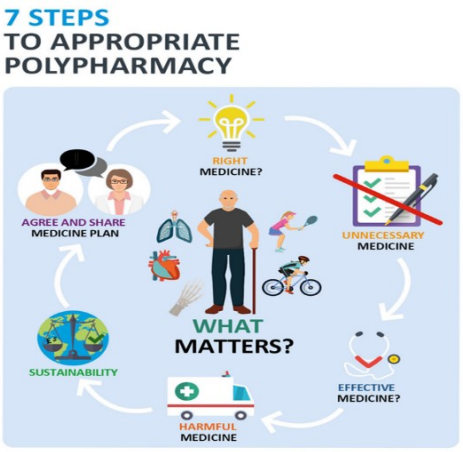
3281 iSIMPATHY reviews were delivered across the island of Ireland.

2529 patients were consented to data collection. See results table.

Discussion

iSIMPATHY patient demographics varied little between ROI and NI. ROI saw an overall decrease in the number of medications prescribed. NI reviews took place in hospital and the number of medications remained the same, despite the fact that hospital admission often results in an intensification of treatment.[1] Medicines optimisation does not necessarily lead to a reduction in the number of medications as polypharmacy is also a risk factor for under-prescribing of appropriate therapies.[2]

A higher number of interventions per review were performed in ROI, but a similar number of interventions deemed to improve patient care were performed in ROI and NI. Interventions performed in ROI that were deemed significant but not to lead to an improvement in patient care, included the removal of discontinued drugs from patients' repeat lists, the recording of comorbidities on clinical records and the establishing of agreement to enact a recommendation at a future date. The Northern Ireland Electronic Care Record (NIERC) and NI pharmacists being independent prescribers minimised the need for such interventions, improving efficiencies. The average time taken per review was 2.7 times longer in ROI than NI. Along with independent prescribing and the NI Electronic Care Record, the higher mean baseline PC-MAI of ROI patients also likely contributed to this difference. Patients with a baseline MAI ≥ 24 have been identified as most in need of medication review and follow up.[3] In NI general practice pharmacists already assist in medicines reconciliation and review for polypharmacy patients, facilitating reductions in inappropriate prescribing.[4] However, despite the lower baseline PC-MAI a dramatic 84% reduction was achieved by iSIMPATHY pharmacists in NI. Indeed the reported mean change in PC-MAI scores achieved in both jurisdictions (ROI: 16.09, NI: 10.46) are higher than the average mean changes in MAI reported elsewhere in the literature.[5] This is likely due to the use of the more person centred MAI tool and the holistic shared decision making approach that is integral to the iSIMPATHY intervention.



7 steps.jpg

Average	ROI	NI
Age (years)	75	71
Number of comorbidities	5.7	6.2
Number of drugs pre-review	12.2	12.0
Number of drugs post-review	11.0	12.0
Number of interventions per review	11.4	9.6
Number of interventions deemed to improve patient care	8.8	8.9
Time taken per review (minutes)	127.7	46.9
Baseline PC-MAI	25.39	12.39
Post review PC-MAI	9.3	1.93

Results table.png

References:

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References.png

Review of Post-Infusion Waiting Time at an Inflammatory Bowel Disease Biologics Clinic

Poster

Dr. Joanne Brown [1], ***Ms. Jackie Kearns*** [2], ***Dr. Catriona McKenna*** [2]

1. *NHS,* ***2.*** *Northern Health and Social Care Trust*

Introduction

Biologics therapy is a well-established treatment for patients with inflammatory bowel disease (IBD). Patients attended an IBD clinic for their infusion and waited for a defined time (2 hours for 1st to 5th and 1 hour thereafter). Previous research has suggested that this post-infusion waiting time may not be necessary[1,2].

Aims

To investigate the number of adverse reactions in the post-infusion monitoring time and ask patients' views on the impact this time has.

Method

A review was undertaken of all patients who attended the IBD infusion clinic in 2017, 2018 and 2019 to determine the number of patients who had suffered a reaction during the infusion or the post-infusion monitoring time in clinic. A questionnaire was given to patients attending the clinic over an 8 week period in June and July 2019 asking their views on the post-infusion monitoring time.

Results

Over 3 years there were 416 IBD clinics administering 2218 IV medications: 1880 infliximab, 309 vedolizumab and 21 first dose IVs of ustekinumab. Six patients had a reaction during the infusion and pre-medications were given on 54 occasions (hydrocortisone and/or chlorphenamine). No patient had a reaction during the post-infusion waiting time.

Patient questionnaires were completed by 91 patients (83% response), 69% were male and 31% female and 89% of patients attending clinics are of working or education age (aged 65 or less). Overall, 51% thought the waiting time was too long and 31% said it had an impact on their work; being late for work (n=13), having to take a full day off (n=6), being self-employed (n=3) and effect on other work commitments (n=1), while some also listed issues with childcare (3%), education (1%) and general life (6%).

Discussion

Over the last three years no patient suffered an adverse reaction during the post-infusion monitoring time from the 2218 doses administered at IBD clinics in Antrim Area Hospital. Patients were asked their opinion on the monitoring time and some expressed the impact this had on their work and education with half of patients feeling that the waiting time was too long. All patients have access to a helpline staffed by IBD nurses.

Conclusion

This study has shown that patients did not had an adverse reaction to their biologic therapy during the post-infusion monitoring period. Patients expressed their desire to see this time reduced. The results of this study provided reassurance to shorten post-infusion waiting times when services were modified during the Covid pandemic and this has continued since.

References

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Safe Pharmacy: An initiative to increase access to domestic abuse services via community pharmacy

Poster

Ms. Tara Kelly [1], ***Ms. Joyce Mulpeter*** [1]

1. *IPU*

Background information

One in four women in Ireland who have been in a relationship have been abused by a current or former partner[1]. National strategy[2] aims to ensure that victims/survivors of domestic violence have immediate access to the safety, support and advocacy they need.

Purpose

The Safe Pharmacy Initiative aimed to help those experiencing domestic abuse and coercive control to access information, contact details and a safe, private space in their local community pharmacy to contact specialist support services in their locality.

Method

The Safe Pharmacy Initiative was developed as follows:

- Creation of a strategic collaboration between the Irish Pharmacy Union (Irish representative body for community pharmacy), An Garda Síochána (the Irish police service), the Health Service Executive (HSE) and Safe Ireland (an Irish government funded charity committed to creating safety for women and children);
- Collaboration between the four national stakeholder groups on a shared vision and common goal;
- Development of a pathway for access to local supports through community pharmacy;
- Training of key staff through online webinars, information leaflets and articles published in a national pharmacy journal;
- Design of an easy to recognise logo that could be placed in the pharmacy window to identify the pharmacy as a Safe Pharmacy; and
- Implementation of public awareness campaign which included press briefings, creation of a promotional video, development of a public facing webpage, radio and press interviews.

Results

- 57% of all community pharmacies across the 26 counties of Ireland signed up to the initiative;
- All who signed up to the initiative registered as a Safe Pharmacy and nominated a Safe Pharmacy Champion;
- The Safe Pharmacy materials (poster/logo) were displayed in the pharmacy windows;
- Articles published in the national pharmacy journal were circulated to readership of 16,000 including community pharmacists and their teams, Senior Department of Health and HSE stakeholders, regulatory bodies, politicians and health journalists; and
- The public awareness campaign received a high volume of traction across traditional news media as well as across all key social media platforms:
  - 47 mentions in news articles
  - 17 mentions on radio channels
  - 78,257 Twitter views, 1,064 likes, 479 retweets, 35 comments

- 30,523 Facebook views, 135 likes, 235 shares, 20 comments
- 25,200 Instagram views, 277 likes, 4 comments

Conclusions

Safe Pharmacy has increased visibility of the issue of domestic abuse and coercive control in communities throughout Ireland. The requirement of participating pharmacies to register, appoint a champion and complete training created a standard. The governance structure facilitated inclusion of all pharmacies, domestic violence services and Garda stations throughout the country. This ensured transparency, accountability, responsiveness and participation. The simple model facilitated replication in communities nationwide. Future work will focus on further upskilling of community pharmacy staff through implementation of an expanded, accredited training programme.

Service improvement evaluation:

Poster

Mrs. Claire Curry [1]

1. *Clinical Pharmacist, Northern Health and Social Care Trust*

Title

Service improvement evaluation to determine the impact of the pharmacist independent prescriber on medication optimisation, following the implementation of an inpatient medication review at ward level.

Objectives

To determine the number and type of interventions made by ward pharmacists at baseline and following an inpatient review by the prescribing pharmacist.

To determine the time taken for ward pharmacists to complete interventions at baseline and following an inpatient review by the prescribing pharmacist.

To determine the impact of the prescribing pharmacist on medicines optimisation and the time take to generate the discharge prescription.

Design

This study involved developing a data collection form to capture data at baseline and following intervention to determine the impact of an inpatient medication review on medicines optimisation.

Setting and Participants

Data collection took place on wards AMU and B2 in Antrim Area Hospital (AAH) in the Northern Health and Social Care Trust (NHSCT) in 2022. Patients aged 18 years and above who were being treated as an inpatient in AMU or B2 between Monday to Friday 09.00 to 17.00 20th September 2022 to 30th September 2022 were included. Participants had to be registered with a General Practitioner (GP) in Northern Ireland (NI) and consent was granted to access Northern Ireland Electronic Care Record (NIECR).

Main Results

Median time taken to complete an inpatient medication review reduced from 10 minutes at baseline to 7 minutes during the intervention data collection phase, showing statistical significance. Mean number of medications each patient was taking at baseline inpatient review increased from 8.4 to 11.1 during the intervention inpatient review stage of the investigation, showing no statistical significance. The median time for the ward pharmacist to generate a discharge prescription reduced from 21 minutes at baseline to 19 minutes at intervention, which showed no significant difference. The mean number of medications a patient was prescribed at discharge reduced from 13.7 at baseline to 11.7 during the intervention stage, this was deemed to have no statistical significance. Most pharmacist interventions were made in terms of patient safety, and the least number of interventions were made for compliance/concordance reasons. With regards to Eadon score it was seen that a greater number of interventions made during the inpatient stay reduces the number of interventions required at the discharge stage. With regards to Northern Ireland Clinical Pharmacy standards (2013) wards AMU and B2 are meeting the target time of 28 minutes for medicines reconciliation and are excelling at meeting the medicines reconciliation at discharge time of 35 minutes, at baseline discharges were completed on average of 21 minutes and at interventions 19 minutes. With regards to completing inpatient review the target is 5.23 minutes a day, at baseline this took 10 minutes and at intervention reduced to 7 minutes, therefore this target is not being met.

Conclusion

A prescribing pharmacist tasked with carrying out inpatient medication reviews shows that fewer pharmacist interventions are required at discharge, although this does not decrease the time taken to generate a discharge prescription by a statistically significant amount.

Slumber Reform: A better night's sleep behind bars

Poster

Ms. Jayne Magee [1]

1. *South Eastern Health and Social Care Trust*

Background

Patients in prison often complain of sleep problems. A survey was conducted over 2 weeks in Nov 2022 and over 60% GP triage forms cited issues with sleep. There are many reasons why people in prison struggle more with their sleep including environmental factors, past trauma and anxiety and drug dependence.

Prescribing in prison is in line with NICE guidelines, "sleeping medication is not routinely prescribed and if so it is limited to short courses" [(1).]

NICE CKS on Insomnia also recommend that "*good sleep hygiene should be established in all people with insomnia..to make people more aware of behavioural, environmental & temporal factors that may be detrimental or beneficial to sleep*". [(1)] It was felt that patients could benefit from a sleep hygiene course to help them understand their sleep better, to explore barriers and enablers to sleep and empower them to put into place positive and proactive non-pharmacological steps to improve their sleep.

Approach

A multidisciplinary group was formed including practice based pharmacist, Occupational Therapist for Mental Health, Lead Nurse and colleagues from "safer custody" in Northern Ireland Prison Service (NIPS). We met and discussed options, around recruitment of candidates, structure of course and types of practical support. It was decided to put posters up in the houses so patients could self-refer and also referrals could be made by healthcare staff. It was also agreed to run the course for 3 sessions over 4 weeks to allow time to explore the issues around sleep hygiene in depth. Male and female prisoners would have the same format but run separately. It was also agreed with NIPS that we could supply patients with a number of previously unavailable practical support tools to help patients. It was also important that the participants had opportunity to contribute to the discussion and feel involved in the outputs.

Week 1 – "How is your sleep?" - consisted of completion of a baselining questionnaire, discussion around what good sleep pattern looks like and giving sleep diaries to complete for the next 7 days.

Week 2 – "Digging-Deeper" – review of sleep diaries and a more in-depth discussion around what the barriers and enablers to good sleep hygiene are and what is within and outside our control. Also supplied with some non-pharmacological support tools and sleep diaries for further 2 weeks.

Week 3 – "Going Forward" - A review of sleep diaries, sharing what they had learned and what they had beneficial and how they could continue to implement their knowledge to continue to develop good sleep hygiene.

Results

Feedback from the participants was overwhelmingly positive with 75% participants citing they understood their sleep better as a result of the course and 100% had made lifestyle changes (smoking less and drinking fewer caffeinated drinks) to help aid their sleep.

Going forward there is now a waiting list for participation in the course from other prisoners and possibility of peer mentor role from previous participants.

References

- https://cks.nice.org.uk/topics/insomnia/

Specialist Haematology Pharmacist Prescribers - Delivering innovation within the cancer workforce

Poster

Mrs. Emma McCarthy [1], ***Mrs. Sandra Kilpatrick*** [1]

1. *Pharmacy Aseptic Department, Craigavon Area Hospital, Southern Trust*

Introduction

Treatment of haematology malignancies within Southern Trust relies on collaborative working and innovative approaches to the delivery of care. The combination of an aging population, expanding treatment options and improved survival has resulted in an exponential rise in patients within this speciality.[1] Increased demand on services is compounded by the shortage of consultant and trainee haematologists.

In 2017, it was recognised by the Department of Health[2] that the reliance on medical staff to prescribe every systemic anticancer treatment (SACT) cycle was not sustainable and suitably trained non-medical prescribers could utilised.

In May 2018, two pharmacist prescribers were appointed within haematology in ST.

This audit aims to review pharmacist led prescribing services in ST. Data will be used to evaluate the service, and help guide future development.

Objectives

- Collate figures on pharmacist clinics between 2019 and 2023
- Determine remit of pharmacist prescribing in haematology
- Explore patient and staff opinions of pharmacist led clinics

Method

1. Obtain funding approval data
2. Review pharmacist clinics between September 2022 and March 2023 to determine patient numbers, diagnosis and treatment.
3. Explore patient and staff experience of pharmacist prescribers.

Results

Timeline below outlines the development of the pharmacist led haematology service:

2018: Funding secured for two Band 8A pharmacists, with 0.2WTE each spent in clinic.

2019: First pharmacist clinic commenced, second pharmacist on maternity leave.

2020: Second pharmacist clinic commenced.

2022: Temporary funding secured, third pharmacist clinic commenced.

2023: Three pharmacist clinics per week ongoing.

Number of patients allocated to pharmacist led clinics per year is outlined below.

Year: Number of patients

2019: 160

2020: 320
2021: 449
2022: 715
2023: 1008 (extrapolated)

A review of pharmacist clinic activity between March 2022 and September 2023 showed that 559 prescriptions were written, covering 19 different regimens. Most common treatments prescribed were hydroxycarbamide (n=348) and lenalidomide (n=131). Pharmacists prescribed for patients across a range of haematological malignancies.
An audit of patient opinion of the service was completed in 2020, all feedback was positive, for example, “I am happy with the consultations, I think they are brilliant”.
An audit haematology staff opinion was completed in 2023[4]. Feedback was also positive.

Conclusion

Pharmacist Led Haematology clinics are an innovative use of pharmacist skills, and increase capacity within a service with ongoing medical staff shortages.
There has been a fivefold increase in pharmacist clinic activity from 2019 to 2023. Most prescribing is undertaken in areas of MPN and myeloma. Feedback from both patients and consultants is positive.

There is scope to diversify in the future, based on the evolving needs of the service. The provision of over 1000 clinic slots per year by pharmacists increases capacity within consultant led clinics.

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3. Kilpatrick S. SHSCT Audit of the Haematology Team Opinion of Pharmacist Prescribers in Haematology, May 2023.

Steps to ensure patient safety through Paxlovid® prescribing supports in the primary care setting in Ireland

Poster

Ms. Sarah Clarke [1], ***Mr. Stephen Doran*** [1], ***Dr. Amelia Smith*** [2], ***Ms. Grainne O'Malley*** [3], ***Dr. Mary Jo MacAvin*** [3], ***Prof. Michael Barry*** [2]

1. *HSE-Medicines Management Programme,* ***2.*** *HSE-Medicines Management Programme, Trinity College Dublin,* ***3.*** *National Medicines Information Centre*

Introduction:
Paxlovid®, which was initially granted a conditional marketing authorisation in January 2022, was granted a standard marketing authorisation in February 2023 by the European Commission for the treatment of COVID-19. In April 2022, Paxlovid® became available for use in Ireland in specific circumstances. Due to the significant and complex drug-drug interactions associated with Paxlovid® there are a number of additional steps required to safely prescribe this treatment. This review outlines the steps undertaken to support safe prescribing of Paxlovid® through collaborative working.
Methods:
We analysed the steps undertaken by several organisations to support the safe and effective use of Paxlovid® in the primary care setting in Ireland. We also evaluated the number of prescriptions notified to the HSE-Primary Care Reimbursement Service (PCRS) from community pharmacies and the number of Paxlovid® enquiries to the National Medicines Information Centre (NMIC).
Results:
Under the governance of the HSE Chief Clinical Officer (CCO):

- the HSE COVID-19 Therapeutics Advisory Group (TAG) provided clinical advice and recommendations on the use of existing and emerging COVID-19 therapeutics, publishing guidance in April and August 2022, on COVID-19 therapeutics including Paxlovid® and making recommendations on patient tiers eligible for treatment
- the HSE National COVID-19 Therapeutics Implementation Group (TIG) developed plans for the roll-out and implementation of COVID-19 therapeutics
- the HSE-Medicines Management Programme (MMP) were requested to undertake a stewardship role for Paxlovid® on behalf of the CCO and a number of MMP circulars were issued to GPs and pharmacists
- HSE stakeholders in collaboration with the Irish College of General Practitioners published a Paxlovid® summary document for GPs
- the NMIC established a new service to assist GPs with drug-drug interaction enquiries specific to the prescribing of Paxlovid® (including a weekend support service for the first 22 weeks of Paxlovid® availability). The NMIC and MMP developed a template to enable GPs to submit medication lists for a drug-drug interaction review, which they were encouraged to send also to community pharmacy for full medicines reconciliation.

Between 15/04/2022 and 18/04/2023, 3305 prescriptions for Paxlovid® which were dispensed in community pharmacies had been notified to the HSE-PCRS. During the same time period, the NMIC received 432 Paxlovid® enquiries, 402 of which related to drug-drug interactions, involving a total of 3,785 co-existing medicines.
Conclusion:
Paxlovid® is known to present a high risk for potential drug-drug interactions with commonly dispensed medicines, and a significant amount of work was required to ensure continued optimal prescriber knowledge

as this treatment became available for use in Ireland. Collaborations within the HSE and with external agencies allowed for timely dissemination of information to support safe and effective use of this treatment.

The completion of the Self Administration Risk Assessment (SARA) during the committal process in HMP Maghaberry

Poster

Ms. Jennifer McDowell [1]

1. *South Eastern Health and Social Care Trust*

Background

The SARA is a tool implemented within our custodial healthcare setting to assess, against various factors, whether a patient can safely self-administer their own medication, and to what capacity (for example, on either a daily, weekly or monthly basis), or if their medication must be administered directly by a Nurse or a Medicine Management Technician. The 'Medicine optimisation policy for Healthcare in Prisons' states that a SARA must be completed by a Primary Care Nurse for each new inmate within one week of committal to the custodial setting. However, we recommend this is completed during the initial committal interview, with the result documented on the patient's profile on EMISWeb. This allows us in Pharmacy, when completing the medication reconciliation, to label and dispense the medication in the appropriate packaging to correspond with the SARA result. For patients intended to be self-administration, a correctly completed copy of the SARA is to be present within the patient's medication administration record to allow Pharmacy Technicians to safely supply medications to the patient in a way which matches their risk assessment.

Problem

A baseline data collection showed discrepancies with the completion and documentation of the SARA result, with only 68% completed correctly in the first week of auditing. These discrepancies were leading to delayed doses to patients and increased workload for Pharmacy (an estimated four hours during the initial two week audit).

A staff satisfaction survey initially showed that 60% of nurses 'strongly disagree' or 'somewhat disagree' when asked if they received adequate training on how to complete a SARA.

A quality improvement project was commenced with the aim statement that 90% of SARA results for a new patient, intended to be self-administration, are to be correctly documented on EMISWeb and in the Kardex by the week commencing 1st May 2023.

Approach

Three PDSA cycles were implemented at fortnightly intervals. These interventions focussed on education, documentation and staff.

Results

From week 5 of the project, the aim had been achieved, reaching 100% in week 8. Time spent by Pharmacy Technicians getting SARA fixed or medication re-dispensed reduced from approximately four hours in first sample to zero. This greatly improved our non-cash releasing efficiency within the Pharmacy team and also ensured patients received their medication without delay and avoided omitted doses of medication. Avoidance of omitted doses is a Trust KPI so evidence of improvement on key performance indicators.

References

(Royal College of General Practitioners, 2019)

(Royal Pharmaceutical Society , 2017)

The use of social media to promote the engagement of the pharmacy profession with NICPLD's eLearning courses

Poster

Dr. Danielle Allen [1], ***Mr. Daniel Young*** [1], ***Dr. Kate McComiskey*** [1], ***Dr. Andrea Shirley*** [1], ***Dr. Frances Lloyd*** [1], ***Prof. Colin Adair*** [1], ***Dr. Heather Bell*** [1]

1. *Northern Ireland Centre for Learning and Development (NICPLD), Beechill House, 42 Beechill Road, Belfast, BT8 7RL*

Background

Annually, NICPLD provides over 3,500 hours of learning opportunities to the pharmacy profession through its live, eLearning and vocational training programmes. As social media use continues to grow, NICPLD is exploring how best to utilise its Facebook (~ 1,600 followers) and Twitter (~ 560 followers) platforms to promote and enhance course uptake. The purpose of this study was to evaluate the effectiveness of NICPLD's social media strategy in promoting eLearning courses to the pharmacy profession in Northern Ireland (NI).

Method

In early 2023, NICPLD developed a responsible social media strategy, mirroring principles from the UK government's Social Media Playbook (1). The posts were aimed at promoting the uptake of 10 eLearning courses, using a common design template to ensure consistency and highlighting important new content or significant clinical updates. For each of the 10 eLearning courses, the posts were published every evening for 1 week, via Facebook and Twitter, running for ~ 3 months. The number of Facebook reaches and Twitter impressions were analysed. The number of people subsequently completing the eLearning courses during this period was compared with the completions from the same period last year. Audience demographics from Facebook were also analysed and compared with the demographic breakdown of the pharmacy profession in NI, using data from the Pharmaceutical Society of NI (2). Statistical analysis was performed in R v4.3.1 (R Core Team 2023).

Results

The results indicated a significant increase in course uptake in 2023 compared to 2022 (T-test, t = -3.5, d.f. = 15.1, p-value = 0.003), with the majority of completions being pharmacists (Table 1, Figure 1). Figure 2 shows the audience demographics from Facebook, engagement was lower from the male audience and the under-25 age group.

Discussion

Whilst many factors ultimately influence the decision of pharmacy professionals to undertake eLearning courses, this small-scale study suggests that social media is a useful tool in engaging with pharmacy professionals and promoting the uptake of eLearning courses.

Conclusion

NICPLD will utilise the learning from this study to further develop our social media strategy, including adapting our approach to improve the engagement of males and the under-25 age group, examining the use of other social media platforms and utilising the concept of 'social listening' to gain a better understanding of the needs of our target audience and how we can better use social media to engage responsibly.

References

1. Government Digital Service. Social media playbook. 2023 [cited 2023 Jun 8]. Available from: https://www.gov.uk/guidance/social-media-playbook
2. Pharmaceutical Society of Northern Ireland (PSNI). Equality Monitoring Survey 2021 - 22. 2022 [cited 2023 Jun 9]. Available from: https://www.psni.org.uk/wp-content/uploads/2022/08/Data_All_220824.pdf

Table 1. Social media posts analytics

Course	Date created	Facebook reach	Twitter impressions	Course uptake 2022	Course uptake 2023
Diabetes: Classification and diagnosis	Jan 2023	570	196	67	128
Diabetes: Diabetes in pregnancy	Jan 2023	660	217	59	80
Diabetes: Diabetic emergencies	Feb 2023	856	269	69	125
Diabetes: Risk factors and prevention	Feb 2023	526	522	43	76
Diabetes: Glycaemic and metabolic monitoring	Feb 2023	622	347	47	81
Diabetes: Managing Type 2 Diabetes	Feb 2023	752	285	71	162
Diabetes: Managing Type 1 Diabetes	Mar 2023	632	198	87	180
Diabetes: Long-term complications	Mar 2023	801	125	84	144
Minor Ailments: CNS*	May 2023	1908	152	28	45
Minor Ailments: GI*				30	47
Minor Ailments: Infections and Infestations*				57	101
Respiratory: Asthma	May 2023	755	168	55	105

* Denotes 3 minor ailment courses promoted as a single social media post

Table 1.png

Figure 1. Boxplot showing the uptake for the 10 eLearning courses during the same period in 2022 and 2023

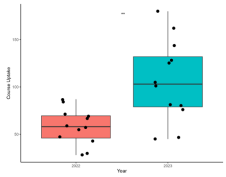

Figure 1.png

Figure 2. Demographics of the Facebook Audience

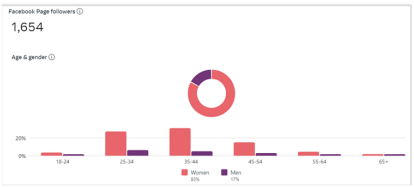

Figure 2.png

Trends in medication use after the onset of the COVID-19 pandemic in the Republic of Ireland: an interrupted time series study

Poster

Dr. Molly Mattsson [1]***, Ms. Jung Ah Hong*** [1]***, Dr. John Scott Frazer*** [2]***, Dr. Glenn Ross Frazer*** [3]***, Dr. Frank Moriarty*** [4]

1. *School of Pharmacy and Biomolecular Sciences, RCSI University of Medicine and Health Sciences, Dublin 2.,* ***2.*** *Somerville College, University of Oxford, Oxford,* ***3.*** *Unaffiliated,* ***4.*** *RCSI University of Medicine and Health Sciences*

Background

The COVID-19 pandemic had a substantial impact on a range of health services, particularly in primary care. Research from Ireland suggests while community pharmacies remained open, restrictions for in-person GP and healthcare appointments affected patients. Although there is evidence that the onset of the pandemic affected medicines utilisation internationally, it is unclear how prescribing in Ireland changed following March 2020.

Aim

The aim of this study was to evaluate how dispensing of medications in primary care in Ireland changed following the onset of the COVID-19 pandemic compared to expected trends.

Methods

This was an interrupted time series study, and the protocol was pre-registered. It used publicly available data from the Health Service Executive Primary Care Reimbursement Services for each month between January 2016 and July 2022. The data related to dispensing for patients on the General Medical Services (i.e. medical card) scheme, and included monthly number of dispensings for all therapeutic subgroups and commonly dispensed medications (based on the top 100 individual medications per month). Pre-pandemic data (2016 to November 2019) was used to forecast expected trends for each subgroup and medication with 99% prediction intervals. The Holt-Winters method was used, an approach which decomposes time series data into seasonal, trend, and irregular components. Three months of observed data unaffected by the pandemic (December 2019-February 2020) were compared to the forecast to validate accuracy of predictions. Observed data were compared to forecasts in March 2020 (as the first month of pandemic restrictions in Ireland) and over the remainder of the study period from March 2020 onwards.

Results

Forecasts performed well for the three month before March 2020. The overall number of dispensings was 7.6% (99%CI 2.5% to 13.2%) higher than forecast in March 2020. Most (31/77) therapeutic subgroups had dispensing significantly different from forecast in March 2020. Drugs for obstructive airway disease had the largest difference, with dispensing 26.2% (99%CI 19.5%-33.6%) higher than forecasted. Other subgroups with dispensing significantly higher than forecasted included minerals, analgesics, thyroid therapy, serum lipid-reducing agents and diuretics (see Figure 1). Dispensing was significantly lower than forecasted for other gynaecologicals (17.7% lower, 99%CI 6.3%-26.6%) and dressings (11.6%, 99%CI 9.4%-41.6%). Similarly, many individual medications had significantly higher dispensing in March 2020. Notably, dispensing of amoxicillin (with/without clavulanic acid) and oral prednisolone were lower than forecasted in the months following the onset of the pandemic, particularly during winter 2020/2021.

Discussion

There was a peak in dispensing for many long-term medications in March 2020 suggesting patients obtained additional supplies of their regular medicines as pandemic restrictions were introduced. Exceptions were dispensing of therapeutic subgroups including dressings and intrauterine devices, both linked to in-person healthcare consultations, illustrating the disruption to delivery of services at the onset of the pandemic. Lower than

expected dispensing of medications often used for respiratory infections, and attenuated seasonal peaks, may be partly attributed to pandemic countermeasures reducing transmission of infections generally. This study provides evidence to inform planning for medication demand and supply for future major health events.

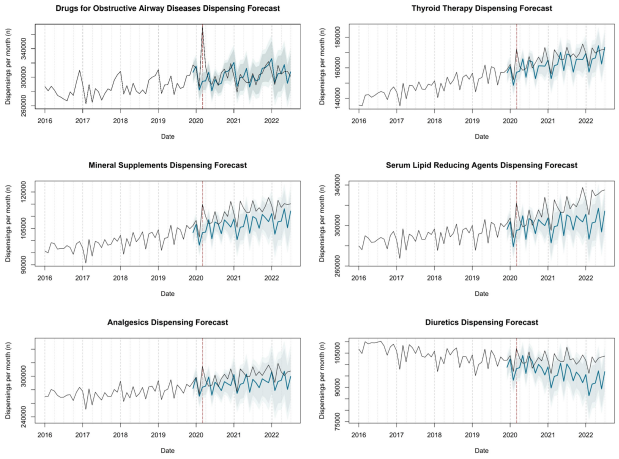

Figure 1.jpg

Two for the price of One: Audit of Anticholinergic use in Dementia and Antipsychotic Prescribing for Non-cognitive Symptoms of Dementia in St John's Hospital.

Poster

Ms. Carina O'Brien [1], ***Ms. Geraldine Creaton*** [1], ***Dr. Babar Abassi*** [1], ***Mr. James Farrell*** [1]

1. *St. John's Hospital*

Background

Dementia is a term to describe a progressive syndrome in which there is a decline in cognitive function believed to be that of beyond normal age related changes. Anticholinergic medications are a large and varied group of medications which have long been associated with a decline in cognition. Regular review for such medications is widely recommended in at-risk patient populations, such as those with dementia. Antipsychotics such as quetiapine are frequently used for the management of non-cognitive symptoms of dementia. Many antipsychotics including quetiapine, are known strong anticholinergics and also carry an increased risk of stroke when used in patients with dementia.

Aims/Objectives

- Evaluate the cumulative effects of anticholinergic use, known as *'anticholinergic burden'* by means of the 2012 Update to the Anticholinergic Cognitive Burden (ACB) score in patients with a confirmed diagnosis of dementia.
- To audit the prescribing of antipsychotic medications for the management of non-cognitive symptoms of dementia in line with the Department of Health National Clinical Guideline 21.

Standards

- NICE Guideline: Dementia: assessment, management and support for people living with dementia and their carers.
- National Clinical Guideline 21: Appropriate prescribing of psychotropic medication for non-cognitive symptoms in people with dementia.

Methodology

This audit was designed as a point prevalence style audit with all inpatients on the day of audit being screened.

- Inclusion criteria: all inpatients on the day of the audit with a confirmed diagnosis of dementia documented in the Universal Healthcare Records (UHCR).
- A minimum quota of 10 patients was required.
- Cumulative anticholinergic burden was calculated using the 2012 Update to the ACB Score.
- Further review was undertaken in the event that patients were prescribed an antipsychotic for the management of non-cognitive symptoms of dementia.

Results

A total of 63 patients were screened, of which, 15.8% (n=10) met inclusion criteria.

- 80% (n=8) did not have an aetiology stated, nor a severity as defined by the National Clinical Guideline 21.
- 50% (n=5) patients were actively receiving treatment for dementia, in which 2 cases of potentially under-optimised regimens were identified.
- 60% (n=6) were prescribed an anticholinergic medication. 4 of which were classified as having a high anticholinergic burden (ACB > 3). The highest cumulative score observed was an ACB of 5, which was observed in 2 patients. Of the contributing medications in these cases, each patient was prescribed one strong anticholinergic (ACB 3), which was subject to optimisation. Both patients with an ACB of 5 were on active treatment with an acetylcholinesterase inhibitor for dementia.
- 20% (n=2) of patients were prescribed an antipsychotic for the management of non-cognitive symptoms of dementia. Quetiapine was the agent of choice in both patients. Of these 2 patients one patient was newly initiated on quetiapine on admission to hospital.

Actions

The findings of this audit guided recommendations to be made in terms of documentation of dementia aetiology, medication review on admission with an emphasis on anticholinergics as well as a structured approach to prescribing antipsychotics in this population. A plan to re-audit following implementation of these recommendations is also in place.

Use of Live Automated Microbiology Pharmacy Surveillance System to achieve robust surveillance of restricted antimicrobials

Poster

Mrs. ann bateson [1]

1. *Pharmacy Department Northern Health and Social Care Trust*

Background

The NHSCT has an in-house dashboard which has been developed to capture details of restricted antimicrobials usage.

"LAMPS", our Live Automated Microbiology Pharmacy Surveillance system is used to achieve robust surveillance of restricted antimicrobials within NHSCT.

Pharmacy staff are provided with login and password details to access the "LAMPS "dashboard and provide the information as required. At the beginning of the COVID-19 pandemic it was necessary to adapt the antimicrobial stewardship programme of activities. Since then entries on to the dashboard have declined. Staff turnover has exacerbated this.

Aim

To increase the number of entries on our dashboard through training/updating SOPs

Method

The antimicrobial pharmacy technician receives daily reports on restricted antimicrobials issued from the main dispensary and then ascertains if the details have been inputted onto the dashboard.

An audit of the number of entries on to the dashboard and by whom was carried out over a 2 month period

Results

Data was collected over a 2 month period

MARCH 2023

06/03/2023 - 12/03/2023 66 out of 135 enteries were put on the dashboard by clinical staff

13/03/2023 - 19/03/2023 58 out of 126 entries were put on dashboard by clinical staff

20/03/2023- 26/03/2023 45 out of 134 entries were put on dashboard by clinical staff

27/03/2023 – 02/04/2023 49 out of 131 entries were put on dashboard by clinical staff

APRIL 2023

03/04/2023 – 09/04/2023 42 entries out of 153 entries were put on dashboard by clinical staff

10/04/2023-16/04/2023 45 entries out of 141 were put on dashboard by clinical staff

17/04/2023-23/04/2023 40 entries out of 163 were put on dashboard by clinical staff

24/04/2023 -30/04/2023 28 entries out of 165 were put on dashboard by clinical staff

This equates to less than 4% of clinical staff inputting details onto the dashboard.

The antimicrobial team can therefore only verify the appropriateness of the use of restricted antimicrobials in line with the Trust Antimicrobial Policy of this sample.

Conclusion

Log in details and passwords were set up for all new members of staff.

Training sessions set up in small groups.

Database of all staff who have been trained on the use of the dashboard.
Refresher training available for all staff to avail of.
Senior managers informed of “LAMPS” training dates to ensure staff attend

SOP updated with revised list of restricted antimicrobials

Senior managers asked to email the antimicrobial pharmacy technician when they have new members of staff

Using Digital Technology to Empower Clinical Pharmacists to Optimise Pharmaceutical Care.

Poster

Ms. Carol Johanssen [1]

1. *St. John's Hospital, Limerick*

Aim

Clinical Pharmacists in St. John's Hospital screen patients at admission and assign a Risk Score [1-4]. Patients with higher Risk Scores are prioritised for Medicines Reconciliation and reviewed more often. This project aimed to introduce a cloud-hosted application to support caseload and workflow of Clinical Pharmacists empowering them to provide safe, high quality and efficient pharmaceutical care.

The application would be underpinned by an analytics system to measure the performance of the Clinical Pharmacy service and for resource planning.

Methods

Vendors were approached. An agreement was reached with one vendor to enhance their prototype system, pilot and evaluate it over a nine-week period. After the pilot, the system was qualitatively evaluated through semi-structured interviews[5].

A quantitative analysis of the outputs of the system was also undertaken.

Outcomes / Results

Qualitative analysis

The following patient benefits were realised:

- Prioritisation of sickest patients for pharmacist review
- Provision of actionable information supporting better clinical decision making
- Supported task follow-up including patient education
- Improved continuity of care; facilitated handover
- Standardized the communication with patient's team

Quantitative analysis

See table 1

Clinical Pharmacists Interventions (Tasks)

- 596 interventions were associated with the pharmaceutical care of 238 patients
- Top 3 Intervention Categories
  - Medicines Reconciliation
  - Medicine Requiring Change
  - Antimicrobial Stewardship

Conclusion

The Clinical Pharmacy Application gave visibility to the pharmacists' work, which could be shared with Hospital Management and Regulators. It empowered pharmacists to deliver prioritised pharmaceutical care in a more efficient way. The business insights can be used for resource planning and quality assurance.

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1. Abuzour AS, Hoad-Reddick G, Shahid M, et al Patient prioritisation for hospital pharmacy services: current approaches in the UK European Journal of Hospital Pharmacy Published Online First: 01 December 2020. doi: 10.1136/ejhpharm-2020-002365
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Quantitative analysis

Medicines Reconciliation (MedRec) in Medical Patients	Measure
Number of patients with MedRec done	217
Patients with MedRec done %	89%
Average days to MedRec	1 day & 23 hours
Patients with Medicines Reconciliation within 24 hours of admission	60%

Table 1.png

Using existing clinical Informatics to capture Pharmacy Medicines Reconciliation Activity within the South West Acute Hospital, Western Health and Social Care Trust.

Poster

Mr. Barry Keenan [1]

1. *Western Health and Social Care Trust*

Background

Medicines reconciliation (MR) on admission to hospital involves collecting information about current medicines, checking for omissions, duplications and other discrepancies and then documenting and communicating any changes. Patients, family members or carers should be involved in this process. The NI medicines Optimisation framework sets a standard that all patients admitted to hospital should have a medicines reconciliation within 24 hours of admission[1]. With no information systems readily available to automatically gather this key safety metric for hospitals a manual process of calculating performance was operated.

Materials/Methods

This project aimed to create a real-time digital medicines reconciliation dashboard to assess performance. Members of the WHSCT Pharmacy, Information Services and Digital Services teams collaborated to develop an application that could capture and extract medicines reconciliation data from the FLOW Bed Management system (Access Group) across the SWAH site. The data capture method needed to be easily adopted as part of the Pharmacy duties at ward level with minimal operational overhead or training required. Qliksense, a digital data analytics platform, was used to consolidate this data in a graphical dashboard reporting format to allow rapid assessment of both passive and active performance against KPIs.

Results

The resulting dashboard provides detailed informatics including:

- Total numbers of patients with medicines reconciliation performed within 24 hours of admission
- Information down to patient level on those with no medicines reconciliation.
- Searchable time periods which provide data ranging from a single day to many months.
- Monthly collation tables
- Weekday vs weekend activity levels
- Medicines reconciliation linked to staff to help balance workload

Conclusions

The dashboard is a very useful management tool for determining medicines reconciliation performance against KPIs. It allows real-time decisions to be made about resource deployment to maximise the numbers of patients reviewed. Next steps include role out in Altnagelvin Hospital. The system can be used by any trust which uses FLOW and Qliksense systems and the project team are keen to collaborate with other sites to expand the use of this dashboard.

1. Northern Ireland Medicines Optimisation Quality Framework - March 2016 (health-ni.gov.uk)

Using opioids safely: evaluation of learning from medical assistantship teaching on safe use of opioids

Poster

Ms. Fiona O'Neill [1], Mr. Chris Black [2], Mrs. Katherine Watson [3], Dr. Despona Karakitsiou [4], Ms. Leonore Keenan [5]

1. *Belfast Health and Social Care Trust,* ***2.*** *Marie Curie Hospice Belfast and Pharmacy Department, Belfast City Hospital, BHSCT,* ***3.*** *NI Hospice and Pharmacy Department, Royal Victoria Hospital, BHSCT,* ***4.*** *Palliative Medicine, Belfast City Hospital, BHSCT,* ***5.*** *Acute Pain Team, BHSCT*

Background

Opioids are recognised as high risk medicines, associated with adverse effects and medication errors[1]. Newly qualified doctors are routinely required to prescribe opioids and have identified a lack of experience and knowledge[2,3]. Where opioid toxicity arises in patients on long-term opioids, e.g. in palliative care, naloxone must be used with great caution, to avoid complete reversal with pain, distress and risk of death[4]. Newly qualified doctors should be educated on this. To address these challenges, a multidisciplinary team, comprising palliative care pharmacists and doctors, and an acute pain nurse, delivered interactive lectures on safe use of opioids to 120 students on the Queen's University Belfast final year medical assistantship. Learning outcomes included identifying resources (including opioid conversion tables) and understanding processes that promote safe opioid prescribing, recognising risks and identifying adverse effects associated with opioids, management of opioid toxicity, and applying principles of safe opioid prescribing to patient cases.

Aim

To measure learning from and evaluate multidisciplinary teaching on safe use of opioids for students during the final year medical assistantship.

Method

Participants were invited to answer quiz questions before and after the sessions to measure learning, and to complete a short evaluation questionnaire. The quiz included questions on dosing, choice of opioid, opioid conversions, use of naloxone. Mentimeter was used to facilitate interaction during the lecture, the quizzes, and the evaluation.

Results

There was an improvement in correct answers to questions including choosing first line opioids in renal and hepatic impairment, calculating opioid conversions and managing opioid toxicity. The teaching was well received with 93% agreement that it met its objectives completely and 95% agreement that it would be of benefit when starting work as a doctor.

Conclusion

Multidisciplinary teaching led to an improvement in knowledge that may support newly qualified doctors to prescribe opioids safely.

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Using subject matter experts to maintain the validity of the GPhC registration assessment question bank

Poster

Mrs. Lisa Smith [1], ***Mrs. Nisha Surendranathan*** [1], ***Ms. Hannah Cross*** [1]

1. *General Pharmaceutical Council*

Background

Passing the registration assessment towards the end of the initial education and training for pharmacists is a pre-requisite for registration as a pharmacist in the UK. The assessment is high-stakes, sets the national standard and must be valid (American Educational Research Association 2014).

One strategy used to ensure that the assessment question bank remains valid is the review of older assessment questions to confirm these remain contemporary, accurate and suitable.

A process was developed in 2020 (Smith 2022) to facilitate this question review using subject matter experts (SMEs) working in patient facing practices. These SMEs are involved in setting the standard required to pass the registration assessment and are well informed about the registration assessment. In 2020 a total of 925 questions previously used in the registration assessment between 2016 and 2019 were reviewed by the SMEs and 94 of these were retired from the question bank. Reasons for retiring questions included changes in:

- clinical guidelines
- products available
- pharmacy practice

The process is now being used to review questions written between 2015 and 2019 that have not yet been used in the registration assessment.

Aim

Use an established process of question review to ensure material no longer suitable for the registration assessment is either retired from the question bank or updated.

Design

'Validity panels' to review used questions and assess their suitability for reuse are convened. Each panel has three SMEs and a pharmacist facilitator. On each panel is a SME from community pharmacy, hospital pharmacy and primary care. The panels are held virtually, and questions are shared via Microsoft Teams. The SMEs discuss each question and conclude if it is fit for purpose, requires amendment or should be retired.

In 2023, unused questions (568) will be reviewed in validity panels.

Results:

- Thus far in 2023, 144 questions have been reviewed in 5 panels
- 46 questions have been retired
- 98 questions required either further editing to ensure that the style and content was contemporaneous or required further review e.g., with specialist input
- The outcomes are summarised in **Image 1**

Discussion: Through this process, questions no longer suitable are identified, retired, or flagged for review or minor amendment. Some questions are retired due to fundamental flaws but other reasons for retiring are as previously observed.

The attrition rate in 2023 is higher than found previously in 2020. This is expected as these questions are unused. Some have been in the question bank since its inception in 2015.

Holding validity panels using SME's from the 3 main sectors of pharmacy practice is an effective way of ensuring the content of the GPhC registration assessment question bank remains valid and fit for purpose. This process could be easily adapted by other organisations to facilitate review of assessment material by patient facing practitioners.

References:

1. Standards for Educational and Psychological Testing. American Educational Research Association 2014
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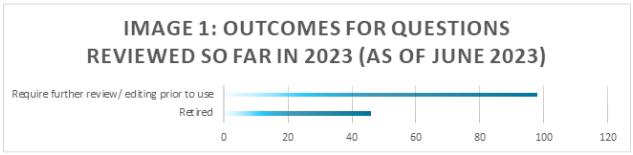


Image 1 outcomes for questions so far in 2023 as of june 2023 .png

Validation of a sporicidal bio-decontamination process for use in pharmaceutical isolators in an NHS aseptic manufacturing unit.

Poster

Mr. brian mcbride [1]

1. *QA Pharmacist WHSCT*

Background

Vaporised Hydrogen Peroxide (H_2O_2) is an accepted and widely used method of sporicidal bio decontamination in the facilities used in the manufacture of sterile pharmaceuticals.

It is a requirement under Annex 1 of The Rules Governing Medicinal Products in the European Union, Volume 4 EU Guidelines for Good Manufacturing Practice for Medicinal Products for Human and Veterinary Use that isolators used to manufacture sterile products be subjected to a bio-decontamination process which is automated, validated and controlled within defined cycle parameters.

Objectives

To validate a hydrogen peroxide bio decontamination system (Devea, Phileas Genius) with Geobacillus stearotheromophilus Biological Indicators (BI) for use in pharmaceutical isolators in a hospital aseptic dispensing unit against the criteria below:

1. The H_2O_2 solution used in the process is able to produce a H_2O_2 mist that is effective at achieving 6Log decontamination inside the isolator.
2. The preprogramed parameters in the process (volume of H_2O_2 liquid diffused per cycle, delay time between diffusion cycles and contact time) are sufficient for decontamination and that there is a suitable margin for safety from the point at which the cycle would be sub lethal.
3. There is diffusion of H_2O_2 mist throughout the isolator work zone to give assurance all internal surfaces of the critical work zone are in contact with the H_2O_2.

Method

An effective cycle for bio decontamination of the isolators with the Phileas Genius was developed. This identified the critical parameters required to achieve 6 Log decontamination in the Geobacillus stearothermophilus BI ie total volume of 7.5% H_2O_2 solution (recommended strength that is compatible with the equipment) to be diffused in the isolator and the dwell time during which it is in contact with its inner surfaces.

The decontamination process was validated by completing three successful proving runs in the isolator.

The Biological Indicators were positioned throughout the isolator including the transfer hatch. A volume of 60ml of 7.5% H_2O_2 solution was used to create the H_2O_2 mist, which was held inside the isolator for 3 hours. Some BI were only allowed 1 and 2 hour exposure to the H_2O_2 mist.

The BI were then transferred aseptically to Tryptone Soya Broth (TSB), incubated at 55^o and viewed after 7 days.

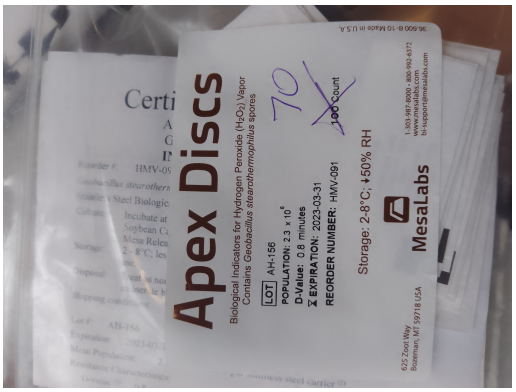
Results

After 7 days incubation all the TSB remained clear, indicating the process had achieved 6 Log decontamination of the BI throughout the isolator

Conclusion

The Devea Philleas Genius system is capable of achieving 6 Log decontamination in the pharmaceutical isolators and would be a suitable solution to meeting the requirements in Annex 1 of The Rules Governing Medicinal Products in the European Union.

Dsc 2125 syringes with and -.jpg



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Webinars: A Digital Lifeline for Pharmacists' Continuing Education and Professional Growth

Poster

Ms. Audrey Cunningham [1], ***Mr. Frank Bourke*** [1], ***Ms. Sarah Chambers*** [1], ***Dr. Catriona Bradley*** [1]

1. *Irish Institute of Pharmacy*

Background

The rapid advancement of digital technologies has paved the way for innovative approaches to education and professional development in various fields, including pharmacy. Webinars, as virtual learning platforms, have emerged as a valuable tool for pharmacists to enhance their knowledge and skills. This abstract explores the use of webinars as a means of continuing education and professional growth for pharmacists.

Methodology

An analysis of Irish Institute of Pharmacy's (IIOP) webinar data (May 2020 to May 2023), from a range of "*In Conversation With*" topics and dates, was conducted to assess the impact and satisfaction of members of the pharmacy profession attending the webinars. The data included webinar subject areas, dates, durations, registrations, live attendances, and recorded YouTube views. A total of 37 webinars were analysed.

Results

The findings revealed that webinars covering a diverse range of subjects attracted significant interest from pharmacists. Topics such as mental health support, COVID-19, clinical updates, leadership, communications, and operations garnered substantial registrations and attendance. The recorded webinars also amassed a considerable number of views on YouTube, indicating a broader reach and accessibility beyond the live sessions.

Notably, webinars addressing timely issues related to COVID-19 received high levels of engagement. Pharmacists sought to enhance their knowledge in infection control, medication management, and patient care during the pandemic. Additionally, webinars focusing on mental health support provided valuable insights into building resilience and managing stress, reflecting the growing recognition of the importance of pharmacist well-being.

The data highlights the benefits of webinars as a flexible and convenient mode of continuing professional development (CPD) for pharmacists. Webinars enable access to up-to-date information, expert perspectives, and interactive learning experiences, fostering continuous learning and competence development. Furthermore, the recorded webinars offer on-demand access, accommodating individual schedules and facilitating self-paced learning.

Webinars serve as a digital lifeline for pharmacists, enabling them to stay abreast of evolving healthcare landscapes, expand their professional networks, and contribute to improving patient care. The results of this analysis underscore the potential of webinars to enhance pharmacy education and empower pharmacists in their quest for lifelong learning.

Conclusion

This abstract highlights the value of webinars as an effective means of continuing education and professional growth for pharmacists. The findings demonstrate the significant interest and engagement among pharmacists in diverse webinar topics. The accessibility and flexibility of webinars make them an invaluable resource, promoting knowledge acquisition, skill development, and resilience in the pharmacy profession.

When ‘yes’ means ‘no’ - Supporting clinical educators and practice supervisors with cultural competence

Poster

Mr. Thomas Smith [1], ***Prof. Roisin O’Hare*** [2], ***Ms. Sara Laird*** [2], ***Ms. Fiona Hughes*** [1], ***Dr. Sharon Haughey*** [1]

1. *Queens University Belfast,* ***2.*** *Southern Health and Social Care Trust*

Introduction

One of the key aims of the revised MPharm is an increased focus on Equality, Diversity and Inclusion, both with patient and inter-professional interactions. We are all familiar with standard educational approaches to course and curriculum design, in which we focus on appropriate, clear, tangible and measurable learning outcomes and objectives. For anyone seeking to develop intercultural competence, it is essential to engage with and personally reflect on culture, the impact it has on us, and the impact it has on others. We can then reflect on the vast array of contexts in which this area can lead to misunderstanding and different perceptions of behaviours and situations.

All hospital pharmacists in NI receive training to support their teaching, including cultural competence, to improve inclusivity and belonging during experiential learning. In contrast to existing Cultural Awareness Workshops which I facilitate (often 3 hours+ in duration) this session is much more concise and focussed on the discussion as it relates to this specific ‘hospital experiential learning’ context, focussing primarily on the following areas:

- Micro-aggressions and ‘other-ising’
- Cultural empathy and understanding
- Cultural differences (In Education and Pharmacy)
- The key to clear communication
- Reflection and shared experience.

The hope from this short training workshop is that participants will develop

- An understanding that they are not the only ones experiencing challenges
- An ability discuss related challenges in a safe space
- An understanding of how to help, or what to do, in challenging situations
- A familiarity with common cultural differences when working with International groups in clinical pharmacy environments
- A tool-kit of approaches.

Methods

Practice Educators were invited to participate in one of six 2.5 hour multiprofessional (pharmacists, teacher and cultural competence trainer) Train the Trainer (TTT) programme between January to June 2023, followed by a brief evaluation. Participants were asked to complete a short evaluation form after the session. Descriptive statistics were used to characterise the data. Neither ethical approval or research governance were required as this was judged as an evaluation of an existing service.

Results

One hundred and fifteen (77.7%) of participants completed the evaluation; when asked to choose the “best” thing about the TTT session with the option to choose more than one option, 33% (62/192) responses were “to understand more about cultural competence and how to create an inclusive learning environment” (figure 1). For most respondents, the unexpected added bonuses experienced included their increased empathy for the student experience, as well as an appreciation for the importance of inclusion and belonging (figure 2).

Conclusions

Cultural awareness is something which is developed via personal reflection and engagement, rather than being able to memorise a number of culture-related facts. The focus of these workshops was to engage the attending pharmacists with the topic in a safe space. This was achieved via the sharing of related lived experience, in particular the experience of International students living and studying in this part of the world, examples from current affairs and the media and reflection on situational examples shared by the participants.

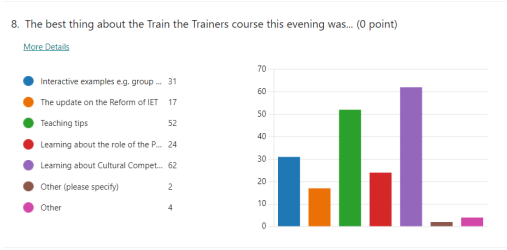

Figure 1 - best thing about ttt.png

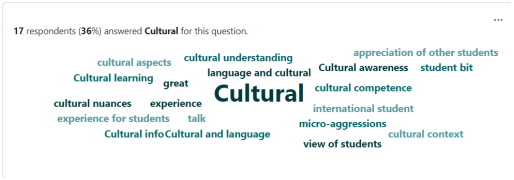

Figure 2 - unexpected bonuses of ttt.png

Who teaches the teachers? A multi-professional approach to supporting Practice Educators to teach pharmacy students during hospital experiential learning

Poster

Prof. Roisin O'Hare [1], ***Ms. Sara Laird*** [1], ***Dr. Sharon Haughey*** [2], ***Mr. Thomas Smith*** [2], ***Ms. Fiona Hughes*** [2], ***Ms. Olivia Hamill*** [2]

1. *Southern Health and Social Care Trust,* ***2.*** *Queens University Belfast*

Introduction

Pharmacy is undergoing a seismic change via the Reform of Initial Education and Training[1]. This enhanced programme of learning in the practice setting is intended to produce a more practice-ready pharmacy graduate who enters the Foundation Training Year ready to become a prescriber at the point of registration[1]. Research on medical students' experiential learning highlights the importance of learner-practice setting integration, achieved via active participation in authentic tasks, with the support of practice educators encouraging reflection on experiences[2,3]. In this model, learners gain a deeper understanding of the "tasks" undertaken in the workplace, their relevance to patient outcomes, and move beyond an assessment driven approach towards professional socialisation.

In the NI hospitals, experiential learning in hospital practice is led by a team of 11 Clinical Education Pharmacists who develop, deliver and evaluate learning for around 1,000 MPharm undergraduates per year across all 5 hospital Trusts. Hospital pharmacists are integral to the provision of mentorship and teaching to pharmacy students and their ongoing development as Practice Educators, including teaching tips, cultural competence and feedback conversations are essential to the success of experiential learning.

Methods

Practice Educators were invited to participate in one of six 2.5 hour multiprofessional (pharmacists, teacher and cultural competence trainer) Train the Trainer (TTT) programme between January to June 2023, followed by a brief evaluation. The TTT programme's objectives were to: Define Experiential Learning and the role of the Practice Educator in hospital; describe the benefits for students and staff; to explore cultural competence and how to inculcate a sense of inclusion and to apply bedside teaching pedagogy to simulated tasks. Participants were asked to complete a short evaluation form after the session. Descriptive statistics were used to characterise the data. Ethical approval was not required.

Results

One hundred and fifteen (77.7%) of participants completed the evaluation; the average overall rating for the course was 4.73 out of 5 (4; n=31, 5; n=84). Respondents objectives for attending TTT included to learn more about to facilitate (90.8%; n=93) and enhance (79.1%; n=91) student learning, to learn more about what is expected from a Practice Supervisor (76.5%; n=88) and to understand how to create an inclusive learning environment (60%; n=69). For most respondents, the unexpected added bonuses experienced included their increased empathy for the student experience, as well as an appreciate for the importance of inclusion and belonging.

Conclusions

A TTT programme increased Practice Educators understanding and confidence in relation to the facilitation of experiential learning, and also offered an opportunity to enhance their empathy for the student experience, particularly in relation to international students.

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Working Together for Patient Safety. The Incident Reporting System: Can a simple intervention tool increase nursing engagement with reporting and capture system failures?

Poster

Ms. Grainne Feely [1], ***Mr. Charles O'Connell*** [1], ***Ms. Suzanne McCarthy*** [2]

1. *National Orthopaedic Hospital Cappagh, Finglas, Ireland,* ***2.*** *School of Pharmacy, University College Cork*

Background

Over half of all medication errors are preventable[1]. Recognition of systemic flaws is essential for effective error management. High reliability organisations must ensure a commitment to error management[2]. The incident reporting system is a universally implemented method to manage risk in healthcare, however, underreporting and organisational barriers limit their use[3]. Recent Irish studies have appealed for improvement[4,5]. Irish legislation requires that all state hospitals submit incidents to a National Incident Management System (NIMS). The purpose of this study was not to replace NIMS but to complement it. The aim was to identify local perception and barriers to incident reporting, and using co-design methodology develop an intervention capable of increasing nurse engagement with reporting and capturing system failures.

Methods

Step 1: A comprehensive search of the literature on incident reporting interventions was undertaken.

Step 2: The 'Specialist Rehabilitation Unit' was selected for this pilot study. The unit currently has a total of 20 beds and 16 full-time nurses. A survey was undertaken to determine nurses' perception of patient safety culture and barriers to incident reporting.

Step 3: The intervention was designed, informed by the literature and input from the key stakeholder, the nurses on the ward. The intervention would collect 'system failures'. Nurses would continue to report incidents to NIMS. The intervention designed was a pocket sized flash card system created to be simple, accessible and quick to use.

Step 4: The intervention was piloted over an eight-week period.

Step 5: The number and nature of reports during this time was analysed.

Step 6: A post-intervention survey was administered to assess the views of nurses on the intervention.

Results

Systematic review: This review illustrated that a multifaceted intervention is required to cultivate a culture of safety essential to enhance incident reporting. Therefore, the pilot study involved establishing a culture of safety prior to implementing the intervention.

Pre-intervention survey: There was an overall positive safety culture reported by nurses. However 33% of nurses had never submitted an incident report and only 13% knew how to correctly use the system. The main barrier identified was the time consuming nature of the system (87%).

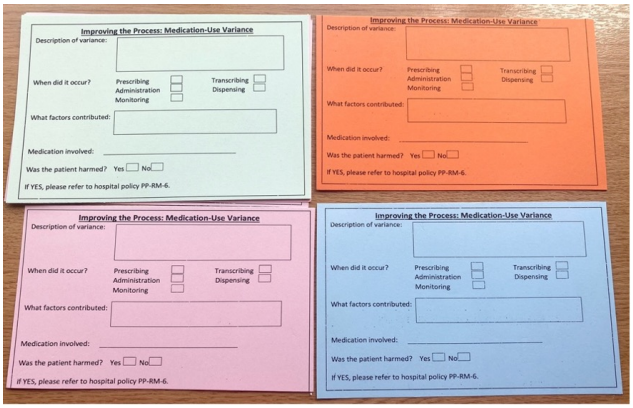
Intervention data: There was a clear increase in engagement with reporting. 51 reports were received over the eight-week period. The tool successfully captured system failures. Nurses reported 'Staff competency and education' as the largest contributory factor (41%) while the researcher identified 'Communication' as a significant factor (55%).

Post-intervention survey: Following the pilot study, there was a positive change in nurses' perception of safety culture and all nurses agreed that the intervention should continue.

Conclusion

This study has commenced an investigation on interventions to enhance incident reporting in an Irish hospital setting. The results provide an insight into the specific local barriers impacting engagement with reporting. This project illustrates that a simple unit-based intervention can be used as a momentum for change, increasing

engagement with reporting, capturing system failures and ultimately improving patient safety. The findings of this study will contribute to future process improvement projects.



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“Narrowing the Gap’ – Supplementary Chemistry Tutorials for non A-level Chemistry students of Pharmacy

Poster

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Background

As student cohorts become larger and more diverse, there is a need to comprehend how to engage and support all students. MPharm students entering on the non-traditional route of A levels, i.e. Leaving certificate, Access Courses, BTEC or an international qualification can struggle with the Chemistry content in the first semester of first year. This has been reflected in the exam results and feedback from students.

Aim

The aim of this work was to implement supplementary Chemistry Tutorials for students struggling with the Chemistry component of a first semester first year module

Methods

Subject areas within the A level syllabus were identified and aligned with the first year, first semester module chemistry components. A questionnaire was devised to determine what the needs were and distributed to all first-year students at the start of semester. A PhD student with a strong background in Chemistry took the tutorials. The academic staff member met with the PhD student twice a week to discuss material to be covered and any feedback from students. The academic also worked closely with students to understand the problem areas through informal discussions, minute papers at the end of each of the tutorials and teaching assessment questionnaires at the end of semester.

Results and Conclusion

Based on the feedback from students, the PhD tutor and the exam results, the extra Chemistry Tutorials were deemed a success. The fail rate for the Module exam decreased significantly from 21.3% to 6.1% in the academic year after implementation. Due to the success of the tutorials, they have become part of the practice within the first-year cohort. This practice is transferrable as Chemistry in another School or as a different subject area such as Mathematics which is frequently seen as a challenge in teaching first year students across numerous disciplines[1].

References

1. Anderton R, Hine G, Joyce, C. Secondary School mathematics and science matters: Academic performance for secondary students transitioning into university allied health and sciences courses. International Journal of Innovation in Science and Mathematics Education 2017 25(1): 34-37.

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