

Nordic Social Pharmacy Conference

June 2025

Abstract Book

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ABSTRACTS FOR ORAL PRESENTATIONS

Cultural Sensitivity and Care, Conference Room 2, June 4, 2025,
11:00 - 12:30

1. Cultural adaptation of the medicine management toolkit "I manage my meds" for a South Asian population.

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Introduction

With an ageing population and consequent increase in age related illnesses, polypharmacy has become significant for patient safety. A toolkit called 'I manage my Meds' was developed to support people aged 65 years and above with polypharmacy and self-manage their medicines. However, older people from ethnic minorities experience the intersectionality of age and ethnicity in relation to medication management. Minority ethnic groups in the UK are at risk of poor medication management because factors such as cultural beliefs, language barriers, and lack of healthcare system knowledge.

Aims/Objectives

To cultural adapt the 'I manage my meds' toolkit to consider the unique aspects of people 65 years or older managing polypharmacy from a South Asian background.

Methods

We follow the Cultural Adaptation Process Model (CAP) to modify the intervention. The three phases of adaptation; researchers meeting with ten community stakeholders, both lay and expert, to find a balance between cultural requirements of the South Asian population and toolkit functionality, piloting of the adaptation with two South Asian community groups and collecting their feedback, and integrating observations and data gathered in the previous step into a finalised intervention. The three phases were iterative and consisted of ongoing evaluation, amendments, and reinvention.

Results

An adaptation of the 'I manage my meds' toolkit has been developed to ensure the toolkit is accessible in terms of literacy requirements, visual aids, and checked for cultural competency for older people from a South Asian background. Acceptability of the toolkit was demonstrated with no significant difference between general population and South Asian population.

Discussion/Conclusion

Cultural adaptations are not typically described in studies addressing different populations, nor has there been a focus on determining whether adaptations enhance program effectiveness and implementation. Design processes and evaluating effectiveness of cultural adaptation should feature prominently when considering intersectionality in medicine management interventions.

2. Accessing care across cultures: qualitative insights into the reality of informal caregivers from ethnic minority groups

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Introduction

There are increasing numbers of informal carers within the UK, and this is likely to continue with an ageing population. People from ethnic minority groups who are carers can be less represented in research yet provide more caring hours than majority groups.

Aims/Objectives

To explore, using qualitative methodology, the experiences of informal carers from ethnic minority groups; specifically, to develop understanding of perceptions of caregiving and any associated cultural nuances.

Methods

Semi-structured interviews were conducted with carers by telephone, video call or in person; Interpreters were provided as necessary. Participants were recruited via convenience and snowball sampling. All interviews were audio recorded and transcribed verbatim. Reflexive thematic analysis was utilised to develop themes. Ethical approval was obtained from the institution's Research Ethics Committee (2275/46476).

Results

In total, 14 carers were interviewed; their experiences spanned a variety of caring roles and there was diversity in participant ages and self-reported ethnicity. Three overarching themes were developed:

- I. Defining the role of a carer: people's journeys to becoming carers and how these contribute to personal identity and expectations of caregiving.
- II. Advocating for inclusive care: carers had to actively drive involvement in care and it was important for them to receive accessible and understandable information to overcome linguistic barriers.
- III. Impact of wider culture and community on caring responsibilities: carer experiences were impacted by the interplay of their culture, support networks and community perceptions of health.

Discussion/Conclusion

Experiences of caregiving were shaped by cultural expectations and community-based norms – both of which were attributed to how, or whether, a person identified as a carer. Participants reported facing linguistic barriers, compounded by lack of culturally-sensitive healthcare care services. This study has highlighted the need to develop culturally sensitive and accessible engagement with carers from ethnic minority groups across health and social care services.

3. Pharmacy students' understanding of the diversity-sensitive care – a prospective qualitative study

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Introduction

In 2022, Vilnius University launched a two-week blended-learning elective course on intercultural competences for pharmacy students. The course content, teaching methods, and its effects on students' knowledge and attitudes are detailed elsewhere and will be briefly outlined during the presentation.

Aims/Objectives

This study aimed to explore students' understanding of diversity-sensitive care and examine whether it changed after completing the course.

Methods

Students completed an online questionnaire before and after the course. An open-ended question asked them to define diversity-sensitive care. Their responses were analysed using content analysis, and the themes identified before and after the course were compared.

Results

Of the 40 students enrolled in the years 2023–2024, 34 responded before, and 27 after the course. Women comprised 85–78%, 94–78% had at least one parent with university education, 21–15% identified as minorities. The median age (IQR) was 22 (22–23). All were born in Lithuania. Before the course, four themes defined diversity-sensitive care: (1) “addressing individual needs,” (2) “being inclusive and providing good care to all,” (3) “acquiring special competences,” and (4) “being empathic.” After the course, these themes persisted, and were supplemented with the theme “focusing on minority and vulnerable patients”.

Discussion/Conclusion

Students' initial understanding of diversity-sensitive care aligned with a person-centred approach, emphasizing the importance of addressing individual needs and viewing patients holistically within cultural, social, and personal contexts, however, potentially overlooking health professionals' biases. They also recognized the need for specific competences — skills and knowledge to engage with individuals from diverse cultures — consistent with the Cultural Competence Model. After the course, their understanding expanded to include knowledge of social determinants of health and insights from Intersectionality theory, outlining how various social identities, like ethnicity or sexuality, intersect to create unique experiences of oppression or privilege, and how this may affect healthcare access and health.

4. Deprescribing and Medication Appropriateness: Addressing Health Equity for Indigenous Peoples Through Sharing Circles in Canada

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Introduction

Indigenous Peoples in Canada and worldwide face inequities in social determinants and health outcomes as a result of forced assimilation and colonization. Polypharmacy, commonly defined as the use of ≥ 5 medications, disproportionately affects Indigenous Peoples. The Canadian Medication Appropriateness and Deprescribing Network (CADeN) is devoted to tackling polypharmacy by promoting safe and appropriate medication use. In 2024, CADeN released a 5-year decolonization and Indigenization action plan. Rooted in Respect, Relevance, Reciprocity, and Responsibility, this plan outlines how CADeN can meaningfully partner with Indigenous Peoples to co-create community-based solutions to polypharmacy through collaborative research.

Aims/Objectives

As an early step in implementing the CADeN plan, we will conduct a series of culturally safe sharing circles to build relationships with Indigenous Peoples and gain an understanding of the medication-related needs and priorities of diverse Indigenous communities.

Methods

CADeN partnered with Indigenous communities and organizations with whom its members had prior established relationships. Guidance from local Elders was sought to ensure circles were conducted safely, respecting protocols, and opened in a good way. Prompting questions focus on medication concerns and safety, over- and under-use, and needed resources.

Results

Four sharing circles are being held from July 2024 to April 2025 with First Nations in British Columbia and healthcare professionals working with Indigenous communities across Canada. Approximately 75 individuals are expected to participate in total, recruited through purposeful sampling.

Discussion/Conclusion

Sharing circles are an important Indigenous methodology that create safe, non-hierarchical spaces for sharing perspectives and stories. CADeN is committed to creating reciprocity for participating Indigenous communities, and these circles will inform the co-creation of community-specific medication safety initiatives as well as guide future relationship building. The Network is committed to upholding Indigenous data sovereignty, including participants retaining control over the dissemination, approved uses, and timing of data sharing from their circle.

5. Co-design of a Medicine Management Needs Assessment Tool for Older Adults with Visual Impairment

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Introduction

Older adults with sensory impairment (OAwSI) experience substantial challenges with medication management. A variety of devices and strategies exist to support medicine management but people (both the older adult and professionals providing care for them) do not necessarily know what is available and what solutions might best suit their needs and preferences.

Aims/Objectives

The objectives were to:

1. Identify assessment tools for assessing medication management capacity in OAwSI.
2. Explore Health and Social Care Professionals (HSCP) current practices for assessing medication management needs and providing assistive technologies to community-dwelling OAwSI.

Methods

The programme comprised two empirical components:

- A scoping review to identify medication management assessment tools.
- An interview study with HSCPs in Scotland to explore current practice with medicines management assessment. The interviews were conducted online and analysed using the Framework Method.

Results

The scoping review identified 17 medication management assessment tools, none of which were specifically designed to address sensory impairment-related medication management needs. Most tools focused on cognitive and physical abilities, with limited validation and applicability for sensory impairments. Interviews were completed with 13 HSCPs and identified a lack of standardised practice in terms of medicines management needs assessment. HSCPs relied on self-assessment by OAwSI. There was limited awareness of relevant assistive technologies, how to access them, and funding options that did not rely upon self-funding by patients.

Discussion/Conclusion

There is a need for a standardised, validated tool tailored to identify the medication management needs of OAwSI. Given the prevalence of visual impairment and its impact on medication safety, the final stage of this research programme will focus on the co-design of a tool to address the medicine management needs of OAwVI and improve safe and effective medicine in these patient populations.

6. Prescribing for Older People with Sensory Impairment

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Introduction

Older people with sensory impairment (OPwSI) (hearing and/or vision loss) experience substantial challenges in managing medication. Primary care health professionals undertake the majority of prescribing for OPwSI. The extent to which prescribers are trained to accommodate the medicine-related needs of OPwSI has not previously been explored.

Aims/Objectives

To explore primary care professionals' resource-use, training and prescribing for OPwSI. The objectives were to:

1. Identify evidence-based resources to inform prescribing for OPwSI.
2. Explore current prescribing practice and training needs of primary care prescribers.

Methods

Two empirical studies were undertaken. A scoping review was conducted using Joanna Briggs Institute [JBI] methodology. Electronic databases (MEDLINE, EMBASE, Cochrane Library, and CINAHL) and grey literature were searched from January 2012 to April 2023. Duplicate, independent screening, selection, and data extraction were undertaken. An interview study was conducted with primary care prescribers, utilising online, semi-structured interviews. Transcripts were uploaded into NVivo, accuracy checked, with over 10% double coded, and analysed using the Framework Method.

Results

No studies met the inclusion criteria for the scoping review. Fifteen prescribers were interviewed, (pharmacists (n=5), general medical practitioners (GPs) (n=6), nurses (n=3), and one optometrist). Interviewees reported minimal if any training regarding prescribing for OPwSI.

"There's no formal training." (P14, Nurse)

Prescribers relied upon experiential learning to prescribe for their patient.

"You sort of build on your own experience. You've just done what's worked, and then when it doesn't work, you think I'm not going to do that again." (P5, Pharmacist)

No evidence-based resources were identified or used.

"I'm not sure we have a guideline [or] checklist, or I can't remember seeing one. I can't think of anything along those lines." (P7, GP)

Discussion/Conclusion

Prescribers need evidence-based resources and training to support medicine optimisation for OPwSI.

7. Co-designing pharmacy software safety alerts to support people with sight and/or hearing impairments: Experiences from FLAG-Me Vision & FLAG-Me Sound.

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Introduction

Although much work around medication safety has focussed on high-risk settings (acute hospital settings) and high-risk medicines such as insulin and opioids, the majority of medication prescribed is taken by people living in their own homes.

Aims/Objectives

We sought to understand the medication safety challenges faced by people with sight and/or hearing impairments and to involve them in the co-design and co-creation of solutions.

Methods

Four co-design workshops were held online, two focussed on people with sight impairments, with the first session looking at challenges and the second at potential solutions. The second two focussed on people with hearing impairments. Participants in all sessions were joined by pharmacists and medication safety researchers who facilitated the events, ensuring they were accessible.

Results

The co-design process helped to develop a shared understanding of the experiences of both patient groups and pharmacists. It highlighted an important finding in that pharmacists did not have access to a persons sight or hearing status.

Participants with sight impairments wanted to have a 1:1 with the pharmacists and to ensure information about their medication was accessible.

Participants with hearing impairments wanted staff to be aware and more understanding of their hearing impairment so they could be offered additional support, particularly around making appointments, knowing when their name was called in the pharmacy, and ordering prescription refills.

Discussion/Conclusion

With both groups having a requirement for identification and not wanting to highlight vulnerabilities nor re-tell their 'story', we set about creating software to search the patient electronic health record to identify hidden impairments and create a logo-based alert for pharmacy staff.

FLAG-Me Vision and FLAG-Me Sound software were created utilising existing coded health data. We are currently conducting integration tests with a Pharmacy Software Supplier, to pilot in ten community pharmacies in Greater Manchester in Summer 2025.

8. Barriers to Healthcare Access: A Qualitative Study of Older Adults with Visual Impairment (OAwVI)

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Introduction

The prevalence of visual impairment (VI) increases with age and impacts older adults' ability to navigate healthcare journeys. This hinders the receipt of timely and appropriate care and leads to anxiety and a higher risk of falls.

Aims/Objectives

This study investigated the environmental challenges experienced by OAwVI on their regular healthcare journeys, including visits to community pharmacies. It includes four stages of journey planning, travel to healthcare premises, navigation of healthcare settings, and access to key facilities.

Methods

Semi-structured interviews were conducted with older people (≥ 65 years) with VI, in their preferred format (in-person, telephone, online). Interview data was thematically analysed. A minimum of 10% of the transcripts were double-coded to enhance the validity of the results.

Results

Twelve interviews were completed with a diverse sample (blind or partially sighted). Challenges were identified at each stage including inaccessible information to inform planning, unsafe pavement conditions and street clutter of urban spaces. Interviewees also discussed concerns about low visibility and unclear symbols in restrooms within healthcare premises. Several challenges were related to finding destinations inside healthcare settings due to poor lighting, complex layouts, and non-standard signage. One participant mentioned the cluttered layout of pharmacies:

"They always have this pile of things like shampoos that are on a special offer or whatever and my dog, she's got to negotiate around that." [R1, blind, guide dog user]

Another interviewee mentioned issues with navigating large commercial pharmacies:

"You can't walk from A to B in a straight line anywhere. You're wandering around haircare and footcare and it's like a maze." [R2, partially sighted]

Discussion/Conclusion

OAwVI experience multiple and varied challenges when accessing healthcare, from planning to navigating healthcare facilities. These results will be used to inform more person-centred, inclusive design strategies to facilitate healthcare access and promote independence among OAwVI.

9. A qualitative study of healthcare professional views on appropriate prescribing interventions for people who are co-dependent on opioids and benzodiazepines / z-drugs

Dr Hannah Family^{1,2,3}, Dr Gabriele Vojt¹, Mrs Hannah Poulter^{1,4}, Dr Chris Bailey⁶, Dr Ana Paula Abdala Sheikh⁵, Dr Damiana Cavallo⁵, Dr Sara Karimi⁶, Prof Matt Hickman^{1,2,3}, Prof Graeme Henderson⁶, Dr Joanna Kesten^{1,2,3}, Dr Jenny Scott^{3,7}; ¹NIHR Health Protection Research Unit in Behavioural Science and Evaluation, University Of Bristol, Bristol, United Kingdom, ²NIHR Applied Research Collaboration, Bristol, United Kingdom, ³Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, United Kingdom, ⁴Centre for Applied Psychological Science, Centre for Social Innovation, Teesside University, Middlesbrough, United Kingdom, ⁵e School of Physiology, Pharmacology & Neuroscience, Faculty of Life Sciences, University of Bristol, Bristol, United Kingdom, ⁶Dept for Life Sciences, Centre for Therapeutic Innovation, University of Bath, Bath, United Kingdom, ⁷Centre for Academic Primary Care, Bristol Medical School, University of Bristol, Bristol, United Kingdom

Introduction

Poor mental health and trauma are associated with benzodiazepine and/or z-drugs dependency. Benzodiazepine/z-drug and opioid (Bz-Op) co-use is recognised as a frequent poly-drug death combination. Yet, most national guidance and treatment pathways focus solely on opioid dependence. With highly potent synthetic opioids being detected in UK street drugs, and the ever-changing drug market, updated guidance is urgently needed.

Aims/Objectives

To explore healthcare professionals' views on facilitators, barriers and areas of improvements in current prescribing for people who co-use Bz-Op substances.

Methods

Twenty five semi-structured interviews (online /in person) were undertaken with clinicians (4 GPs, 3 Addiction Psychiatrists, 2 Pharmacist Prescribers, 1 nurse, 3 Clinical psychologists) and drugs workers/harm reduction experts (n= 10), across England (n= 12) and Scotland (n=13). Anonymised interviews were inductively coded for barriers and facilitators to appropriate prescribing interventions for Bz-Op co-use and mapped to the Capability Opportunity Motivation – Behaviour model.

Results

Current Bz-Op co-use treatment was highly variable, but the main treatment all services offered was opioid substitution treatment (OST) and guidance for benzodiazepine self-detox. Participants reported a lack of benzodiazepine prescribing policy in most services (opportunity barriers). The lack of evidence, guidance and clinical consensus to underpin Bz-Op prescribing decisions presented motivation and capability barriers. Motivation barriers to benzodiazepine prescribing were risk of diversion, overdose and iatrogenic harms with uncertain benefits were cited by prescribers. Non-prescribers agreed, but contextualised risk of overdose as greater from illicit rather than prescribed benzodiazepine use. Lack of integrated mental health care, especially in reducing benzodiazepine use, for people who co-use was a universally agreed barrier (opportunity barrier).

Discussion/Conclusion

Tailored prescribing and harm reduction advice specific to the co-dependent individual is needed to reduce variability in practice. Future research e.g. trials of co-prescribing benzodiazepines and OST alongside mental health support are crucial.

10. Development of the iHOST guideline to improve the management of opioid withdrawal symptoms in hospital, in people who use drugs.

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Introduction

Management of opioid withdrawal in hospitals is essential to support inpatient care and prevent self-discharge among patients who use opioids such as heroin. Guidelines can support timely provision of opioid substitution therapy (OST), but in England there is no standardised guidance across National Health Service (NHS) Hospitals. We previously found varying approaches and procedural barriers to timely management of withdrawal.

Aims/Objectives

To develop a clinical guideline for opioid withdrawal management at University College London Hospital (UCLH) to be evaluated as part of the iHOST (Improving Hospital Opioid Substitution Therapy) research project (NIHR HS&DR Project: NIHR133022).

Methods

Starting with existing UCLH guideline, development was informed by evidence review, focus group (n=14) and discussions with NHS clinicians (n=2) and four focus groups (n=16) with people who use heroin/OST. Root cause analysis identified barriers/points of delay. A deliberative process approach included: multidisciplinary working group developed evidence-based recommendations, reviewed by stakeholder oversight committee. Iterative review and guidance from UCLH clinical governance structures was included. All activities were audio-recorded or had detailed note taking.

Results

Decision making on guideline parameters focused on three domains: (1) identifying opioid dependence and prompt OST continuation; (2) initiating or re-titrating OST; (3) ensuring safety and continuity at discharge. Changes included removal of mandatory urine drug testing, increasing initial methadone dose and provision for higher total day-one dosing when safety criteria met. A new titration schedule for buprenorphine was incorporated. Continuity of community care and reducing risk of overdose was emphasised in discharge planning, with allowance for OST bridging prescriptions and naloxone provision on discharge.

Discussion/Conclusion

Through a collaborative, iterative process we developed the iHOST guideline, to optimise opioid withdrawal management for hospital inpatients dependent on drugs such as heroin. It is currently being evaluated in two NHS trusts, if successful future work will focus on national implementation.

11. Development and testing of a training intervention delivered to undergraduate pharmacy students to address stigma towards people with substance dependency

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Introduction

Substance dependency is a significant societal challenge, with particularly higher mortality rates associated with this in Scotland. Experiencing stigma when accessing healthcare for recovery is common, including from pharmacy professionals. There is a need to develop interventions in undergraduate pharmacy degrees to foster empathetic and compassionate health care professionals.

Aims/Objectives

To evaluate an educational session on stigma towards people with substance dependency (PwSD) within a Scottish MPharm degree.

Methods

An educational session informed by prior Scottish research was delivered to approximately 100 third year pharmacy students on October 3rd 2024, co-led by an academic community pharmacist and two representatives from a mental health stigma charity. The session addressed: stigma definitions; the impact on health-seeking behaviour and outcomes; examples of practices in the Scottish community pharmacy sector; and encouraged student discussions and reflection on their own practice and observations in experiential learning. An adapted Opening Minds Stigma Scale was used pre- and post-session to assess changes in beliefs about PwSD, with descriptive analysis conducted whereby responses from the five-point Likert-type scale were trichotomised to agree, neutral, and disagree.

Results

Ninety-four participants completed the pre-evaluation, with 64 (68.1%) completing the post-evaluation. The results suggest a positive change in beliefs towards PwSD. Post-session, 87.5% agreed they could help PwSD, an increase from 61.1% pre-session. Additionally, post-session, less than a quarter (23.9%) agreed they were more comfortable helping individuals with physical illnesses than those with substance dependency, a reduction from 47.9% pre-session. Lastly, whilst 17.7% agreed pre-session that people with substance dependency do not try enough to get better, this reduced to 6.3% post-session.

Discussion/Conclusion

This study demonstrates that stigma-focused interventions can impact beliefs. However it remains unclear whether changes in beliefs lead to meaningful behaviour change of pharmacy students towards PwSD. The collation of anonymised data limited the possibility of statistical analysis.

**12. Integrated medicine optimisation for older people living with frailty:
Preliminary results of a qualitative study across multiple health
organisations**

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Introduction

The UK health system is under growing pressure to meet the care needs of an increasingly older population. Older people are facing significant health challenges such as frailty, co-morbidity, and polypharmacy, putting them at high risk of adverse outcomes. Medicines play a key role in the management of diseases, and several healthcare professionals (HCPs) are often involved in medicine optimisation (MO) processes. Cross-organisational MO is vital to provide more joined-up care, however, the way current health systems are designed hinders collaborative working leading to fragmented and uncoordinated care. This is associated with risks of medication problems, increased costs, and poorer patient outcomes.

Aims/Objectives

To explore the issues HCPs are facing when providing MO across organisations.

Methods

Following ethical approval, HCPs were identified iteratively using purposive and snowballing techniques. The first round of recruitment included eight semi-structured interviews conducted online. Recruitment began from NHS Hospital and then extended to other community organisations. The interviews were transcribed and analysed using analytical strategies appropriate for ethnographic data.

Preliminary Results

Participants included pharmacy technicians and clinical pharmacists, an advanced care practitioner, and a discharge coordinator. Pharmacists in the home-ward, Primary Care Network, and community pharmacy were also interviewed. Common themes were developed highlighting issues around integrated MO: poor communication about medication changes post-hospital admissions, communication challenges due to numerous systems containing different patient information, and a one-way transfer of information with no feedback loop.

Discussion/Conclusion

These initial interviews revealed issues commonly encountered by HCPs when providing MO, which can lead to fragmented and disjointed care. Promoting cross-organisational working through policies and procedures and shared electronic health systems can improve and streamline communication paths across organisations. Further interviews with a diverse range of health and social professionals are needed to explore the issues around providing integrated MO further.

13. Information sources for prescribing three groups of supplementary medicines for paediatric patients with cancer in Scottish paediatric oncology wards: A document analysis study.

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Introduction

The use of medicines for emesis, tumour lysis syndrome, and Pneumocystis pneumonia (PCP) prophylaxis is common in paediatric patients with cancer. Little is known about the available information sources, and their content, to support prescribing decisions for these aforementioned indications in Scotland.

Aims/Objectives

The study aimed to identify the documents available to support prescribing for paediatric patients with cancer for the indications of interest, and to assess their medicine-relevant content.

Methods

Documents were retrieved through conducting a search on commonly used web browsers and contacting National Health Service (NHS) practitioners to collect additional documents. The characterisation of documents was conducted by document and content analysis. Information on eleven medicine-relevant aspects, such as dose regimen, was reviewed for each medicine.

Results

In total, 20 documents were identified: international (n=2), national (n=11), and regional (n=7). Whereas twelve sources were designed for both adults and children, eight were paediatric-specific sources (paediatric cancer-specific (n=6) and paediatric-specific (n=2)). The most informative source for the three indications was the summary of product characteristics (SmPC). Clinical knowledge summaries (CKS) presented no paediatric-specific content to guide the prescribing process for the three indications. The British National Formulary (BNF), in particular, showed a lack of information on specific medicines for the three indications. The most mentioned content in all documents was the dose of medicines. Information on the response to toxicity and drug storage was mostly provided by SmPC. Variation was mostly apparent among information sources for emesis management.

Discussion/Conclusion

The results showed a variety of sources that might guide the prescribing process. Any single information source might not provide all needed information for prescribing. The lack of paediatric-specific evidence for certain medicines might explain the insufficiency of paediatric-specific information in certain sources. Future investigations might be beneficial to explore the way in which these sources influence prescribers to prescribe medicines.

14. What do voluntary safety incident reports tell about medication safety in the complex care setting of child welfare institutional substitute care?

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Introduction

The need for child welfare services and institutional substitute care has increased in Finland. Children experience complex health issues, and medications are commonly used during substitute care. Limited research indicates a knowledge gap regarding the medication use process and its safety risks in this complex setting operating under both social and health care legislations. To ensure quality care and to inform evidence-based development, it is necessary to investigate medication safety risks in institutional substitute care. Safety incident reports provide a tool for their identification.

Aims/Objectives

To understand medication safety risks in institutional substitute care and to learn from the care system, this study investigated 1) nature and type of medication errors (MEs) reported by care staff in institutional substitute care, 2) medications involved in the MEs, and 3) contributing factors.

Methods

This retrospective register-based study employed voluntary safety incident reports reported by care staff through a web-based reporting system across six public institutional substitute care units in the Wellbeing Services County of Central Uusimaa, Finland. All safety incident reports concerning MEs reported in 2019-2024 were included. A descriptive quantitative analysis complemented with a qualitative content analysis was undertaken.

Results

Of the 191 MEs, 59% (n=113) were actual errors and 41% (n=78) near misses. They had most often occurred in medication administration (51%, n=98), documentation (24%, n=46), and dispensing (in unit) (16%, n=31). Medicines most often involved were sertraline (n=27), quetiapine (n=22), fluoxetine (n=15), methylphenidate (n=15), and risperidone (n=15). Human factors (e.g. forgetfulness), time constraints, problems in information sharing (between professionals, and between professionals and family members), and insufficient staff resources were common contributing factors.

Discussion/Conclusion

The medication use process in institutional substitute care is complex, being affected by challenges in information sharing and adequate resourcing to safely manage medications. This study underscores the need for further process evaluation.

15. Perceived Usability and Workload of Medication Adherence Technologies Among Older Adults with Diverse Capabilities

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Introduction

Medication Adherence Technologies (MATech) offer potential solutions for supporting older adults in managing complex medication regimens. However, usability challenges may prevent accurate use, adoption, and sustained engagement.

Aims/Objectives

To evaluate the usability, usefulness, ease of use, ease of learning, satisfaction, and workload of MATech among older adults with diverse physical, cognitive, sensory, motivational, and environmental capabilities.

Methods

A prospective mixed-methods study was conducted with older adults 60+ years. Participant capabilities were assessed using validated questionnaires. Participants tested up to seven devices from a selection of thirteen smart and electronic MATech. Usability was assessed using the System Usability Scale (SUS) and the Usefulness, Satisfaction, and Ease of Use (USE) questionnaire, while workload was measured using the NASA Task Load Index (NASA-TLX). Descriptive statistics, correlation analyses, and regression modelling were performed to analyse usability scores and workload.

Results

The study recruited 96 participants with an average age of 75.1 years (SD ± 7.7) and the majority (89.6%) were regular medication users. The overall mean SUS score was 46.71 (SD ± 24.02), while the NASA-TLX workload score averaged 55.7 (SD ± 30.76). The USE questionnaire subscales showed mean scores of 15.11 (SD ± 8.03) for Ease of Learning, 36.42 (SD ± 19.28) for Ease of Use, 18.59 (SD ± 12.79) for Satisfaction, and 23.29 (SD ± 13.98) for Usefulness. Usability metrics were evaluated per device tested and user capabilities. Linear Mixed-Effects Models indicated that SUS scores were significantly influenced by the number of devices tested and environmental capabilities, while workload was significantly predicted by age, motivation, vision scores, and number of devices tested.

Discussion/Conclusion

Findings highlights the importance of user-centred design in MATech development. Reducing workload and enhancing usability are critical for sustained engagement and adherence. Future research should explore the long-term impact of MATech on adherence outcomes.

16. Supporting Safe Medication Management for Individuals with Intellectual Disabilities

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Introduction

Individuals with intellectual disabilities often face complex health challenges, including polypharmacy and communication barriers, which complicate medication management. This study is part of the project "Appropriate Medication Use for Individuals with Intellectual Disabilities - It's a Matter of Life," aiming to improve medication safety and reduce health inequalities.

Aims/Objectives

The study aimed to identify challenges faced by healthcare professionals in medication management for individuals with intellectual disabilities. It also sought to propose improvements for supportive strategies to enhance safety and consistency in medication practices.

Methods

We employed a mixed-methods approach. First, we conducted four focus group interviews with eight social educators and seven healthcare workers, alongside five pharmacists from local pharmacies. Data were analysed using Tjora's stepwise-deductive inductive method. Second, we performed open participatory observations in five residential units, analysed through inductive content analysis as per Elo and Kyngäs.

Results

The study revealed significant variability in medication management practices across units, including differences in pharmacy retrieval routines, medication list checks, and observation methods during administration. Challenges included inadequate storage solutions, frequent interruptions during medication preparation, and communication gaps between pharmacies and community services, leading to stress and misunderstandings.

Discussion/Conclusion

The findings highlight the need for supportive measures and standardized procedures to enhance medication safety for this vulnerable population. Suggested improvements include establishing dedicated medication rooms, optimizing task distribution between social educators and healthcare workers, and utilizing electronic medication lists. Enhanced collaboration between pharmacists and social educators is crucial to prevent errors and ensure consistent practices. Addressing these challenges is essential to support vulnerable patient populations and reduce health inequalities in medication management.

17. The Experience of People from Minority Ethnic Groups with their Cancer Journey: We Need to do Better

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Introduction

Health and cancer inequalities have recently attracted a lot of attention. According to the findings of the annual national cancer patient experience survey , people from minority ethnic groups (MEG) were less satisfied and had more negative experiences with cancer care than people of white ethnicity. Therefore, there is an unmet need to explore the reasons behind these discrepancies .

Aims/Objectives

The aim of the project was to investigate the experience of people from MEG with their cancer journey.

Method

A qualitative research method was adopted to investigate the experience of people living with cancer and/or carers' cancer journeys. Semi-structured interviews were conducted with people who were living with cancer, have had cancer, or their carers to learn about their cancer journey and suggestions for health care workers. The interviews were recorded and transcribed verbatim and thematic analysis was conducted.

Results

Sixteen interviews with people from MEG were conducted. Nine of the Sixteen interviewees identified as black, whilst six of them were of Asian ancestry.

The analysis of the transcripts revealed 6 themes including Feeling dismissed, Availability of Support, Feeling judged, Lack of information, Complementary services, and Available services. Participants believed that healthcare professionals, notably consultants, and general practitioners, were dismissive of their patients' concerns and they frequently felt that their concerns were not addressed . Participants were dissatisfied with the lack of support they received while undergoing cancer treatment. They were also dissatisfied with the lack of time to explore their alternatives, the lengthy referral procedure, and the absence of personalised prosthesis. Participants expressed their frustration with the information provision process as it ranged from vague to overwhelming.

Discussion/Conclusion

The results of this exploratory study shed light on some of the reasons behind the poorer experiences encountered by people from ethnic minorities and highlighted areas for improvement.

18. The Development and Evaluation of a Pregabalin Deprescribing Protocol by a Lead Pharmacist for Patients in a Male Residential Prison in Edinburgh, Scotland

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Introduction

Pregabalin's euphoric effects contribute to misuse and addiction, particularly in prison settings where it is often co-prescribed with opioids, increasing risks of overdose and death. NHS Lothian formulary restricts pregabalin to specialist use for generalised anxiety disorder and epilepsy. However, an audit by the Lead Pharmacist for Prison and Police Custody (PPC) in November 2023 revealed non-formulary, off-label use for patients under NHS Lothian care at HMP Edinburgh, a male mid-long-term prison.

Aims/Objectives

To develop and implement a deprescribing protocol to reduce inappropriate pregabalin prescribing

Method

The audit found 79 of 872 patients at HMP Edinburgh on inappropriate pregabalin therapy. To prevent pregabalin-related deaths, a deprescribing protocol was developed by the lead pharmacist PPC, approved by the therapeutics committee, and implemented in December 2023. This included assessing diagnosis, medication history, misuse, and poly-analgesia risks. Over one-year, multifaceted interventions, education sessions for multidisciplinary clinicians, patient-focused materials, and a formal process for raising concerns were implemented. Responsibilities within the multidisciplinary team (MDT) were defined, with a follow-up audit in December 2024 and feedback sought from staff and patients.

Results

The December 2024 review audit of the same 79 patients found 11 remained on pregabalin (86% reduction). Feedback from clinicians and new-admissions audits confirmed improved formulary-compliant prescribing. There were no severe withdrawal incidents. Patients felt supported in choosing a safer therapy, with one stating, "I was not aware I was addicted to pregabalin." Addressing patient concerns occasionally required longer or additional consultations. Feedback suggested a case load manager would be beneficial, and communication of alternative therapies should be improved. A letter to patients was considered unclear and could be simplified due to literacy concerns.

Discussion/Conclusion

A collaborative MDT approach, with clear plans for managing temporary workload increases, enabled successful deprescribing. Follow-up appointments and simplified communication would further enhance patient understanding and progress.

19. Development and evaluation of a telepharmacy service in primary care in Northern Sweden's rural areas: a single-arm, non-randomised, interventional pilot study

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Introduction

Medication-related problems (MRPs) are common among older adults. Home-living rural older adults also often face barriers to access healthcare, such as long distances to healthcare services and poor continuity of care. Surprisingly, there have been limited attempts to utilise telepharmacy services for home-living older adults in Sweden's rural areas.

Aims/Objectives

Therefore, we aim to develop and evaluate a telepharmacy service in primary care in Northern Sweden's rural areas for 100 home-living older adults. Objectives are to evaluate this service regarding MRPs, medication adherence, beliefs about medicines, and quality of life.

Methods

A pilot study was performed to develop the logistics of the service. The key principles were to perform video-based medication interviews with participants, to conduct structured medication reviews, to conduct medical record reviews, and to have interprofessional collaboration with primary care physicians. All meetings were conducted through videoconferencing via a secure virtual care platform. Descriptive statistics were used to describe MRPs. Semi-structured interviews were conducted, and data were analysed thematically to make a qualitative evaluation regarding the feasibility of the study design.

Results

Eight people received this 12-week telepharmacy service. The mean age was 74 years (range 66–82 years) and on average they were prescribed 10 medications each (range 6–17). Twenty-four MRPs were identified. Unnecessary drug therapy (n=9) and monitoring need (n=4) were the most common types of MRPs. The two physicians accepted 19 (79%) of the pharmacist's recommendations. Discontinuation of medication therapy (n=10) was the most frequent action to resolve MRPs. Participants and physicians expressed positive attitudes towards the telepharmacy service.

Discussion/Conclusion

The results of this pilot study indicate that development of a telepharmacy service could be successful in Northern Sweden's rural areas. Despite the small sample size, several MRPs were identified, and the high acceptance rate of the pharmacist's recommendations reinforces the advantage of interdisciplinary collaboration to identify and resolve MRPs.

20. Health inequalities among the migrant population: How much do pharmacy students know?

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Introduction

Health inequalities among migrant populations remain a significant public health concern, often driven by systemic barriers such as language, socioeconomic status, and discrimination.

Aims/Objectives

This study aimed to assess the knowledge, attitudes, and practices (KAP) of pharmacy students regarding health inequalities faced by migrant populations; to identify gaps in education; and to inform curriculum improvements.

Methods

This study employed a mixed-methods approach. A quantitative survey adapted from existing similar tools in the literature, was filled by 72 Level 7 pharmacy students at Kingston University. The second tool was qualitative interviews with six interprofessional learning students who had worked with migrants during the summer of 2024. Data collection tools were piloted on a small sample of participants and validated before use. Data collection occurred from October to December 2024.

Results

Quantitative results revealed that while students demonstrated positive attitudes toward addressing health disparities, their knowledge and practical skills in this area were limited. The majority of respondents (77.8%) recognised the importance of culturally competent care, yet nearly half (48.6%) reported inadequate training in this area. Qualitative findings emphasised that students valued direct interactions with migrant populations as an essential element of their education.

Discussion/Conclusion

This study highlights the need for integrating experiential learning, cultural competence workshops, and interprofessional collaboration into pharmacy curricula to better prepare students for recognising and addressing health disparities. By equipping future healthcare professionals with the knowledge and skills to meet the unique needs of migrants, pharmacy education can play a pivotal role in promoting equity within healthcare systems.

21. Innovative methods to teach health inequalities in pharmacy: Evaluation of a health inequalities workshop using a design thinking approach in the MPharm.

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Introduction

Pharmacy students must be equipped for their future roles, having a greater emphasis on equality, diversity and inclusion to combat discrimination and manage health inequalities to create a sustainable future with good health and wellbeing for all (United Nations, 2023). Design thinking offers a systematic process for creativity, empathy, collaboration, and user-centred solutions (Wolcott and McLaughlin, 2020).

Aims/Objectives

To evaluate pharmacy students' perceptions of health inequalities following a design-thinking workshop.

Methods

Second-year students participated in a health inequalities workshop with a design thinking approach using collaborative learning. Students worked in small, mixed groups to research and prepare short in-class presentations addressing the background of a significant health inequality using evidence-based resources, culminating with innovations or ideas that addressed their inequality, e.g., 'worsening mental health outcomes among prisoners' and 'higher cardiovascular disease rates in learning disabilities.' Following ethical approval, post-workshop paper surveys were distributed and analysed.

Results

115 survey responses were received (response rate = 94%, n=115/122). 73% (n=84) agreed the session improved their awareness of health inequalities affecting the general population, with 72% (n=83) indicating the session improved their knowledge of protected characteristics. 62% (n=71) felt they improved their confidence to discuss health inequalities. 67% (n=77) believed they improved their design-thinking skills and 66% (n=76) wanted to take action and combat health inequalities. Qualitative feedback indicated students enjoyed researching, group work, and the interactive approach to learning.

Discussion/Conclusion

Students enjoyed the design thinking approach, with similar benefits highlighted by Wolcott and McLaughlin (2020) e.g., collaboration, creativity, and effective communication with peers. Majority of students perceived improved awareness and knowledge of protected characteristics and health inequalities with increased confidence to discuss these. Further use of design thinking may improve key skills and confidence. Approximately two-thirds of students expressed desire to tackle health inequalities, thus working towards more inclusive, sustainable practice.

22. The evaluation of a suicide prevention workshop for MPharm students

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Introduction

Most of those who die by suicide have been in contact with a healthcare professional in the months prior to their death. Pharmacists are amongst the most trusted and accessible healthcare professionals, and are well positioned to provide support. However, most have not received any form of suicide prevention training, and therefore feel ill-equipped to help those at risk.

Aims/Objectives

To evaluate the impact, appropriateness, acceptability and feasibility of a suicide prevention workshop for MPharm students.

Methods

MPharm students at University College Cork were invited to take part in an optional evaluation of a suicide prevention workshop in September 2024. Ethical approval was obtained for the study. Study information was provided in advance of the workshop, and informed consent was obtained.

The workshop was delivered by two appropriately trained co-facilitators. Attendance was preceded by a brief online suicide prevention training, "Let's Talk About Suicide." The three-hour in-person workshop further built upon this learning via didactic group and case-based content, covering suicide epidemiology, risk/protective factors, communication, and personal wellbeing.

Evaluation via an online pre-post survey comprised of a demographics form, two subscales from the Suicide Attitudes, Behaviour and Competence Questionnaire, and the Acceptability, Feasibility and Appropriateness (AFAS) Scale. Responses were analysed using descriptive statistics and paired t-tests.

Results

A total of 53 students participated in the workshop, of whom 27 completed the pre-post evaluation survey. Statistically significant improvements were demonstrated in students' suicide prevention competency (mean score difference=15.7, $p<0.001$, Cohen's $d=2.69$) and perceived suicide prevention importance (mean score difference=1.8, $p=0.004$, Cohen's $d=0.62$). The workshop was found to be acceptable, feasible and appropriate, with all respondents advocating for continuing to embed it in the MPharm curriculum.

Discussion/Conclusion

Embedding suicide prevention training into the pharmacy curriculum can equip future pharmacists with the skills and knowledge required to effectively support at-risk individuals.

23. Special Populations Represented in an Advanced Therapeutics Pharmacy Course

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Introduction

'Special populations' are not consistently defined in the literature yet the term remains part of pharmacy texts, research publications, and curriculum plans. Many curricula attempt to provide some orientation to working with select particular special populations but specific requirements for accreditation are lacking. The course being studied was adapted from a paediatrics/geriatrics course in the previous curriculum.

Aims/Objectives

The purpose of this study was to describe the diversity of patients represented in cases used in a mandatory Doctor of Pharmacy senior level Special Populations course.

Methods

Cases used in the course over the previous 5 years were mapped according to diversity characteristics and special populations listed in pharmacy and medical texts.

Results

Over the 5 years the course has run there was up to 8 case sessions/year for group-based interactive learning. There 12 distinct paediatrics cases, 8 different geriatrics cases, 3 Indigenous cases, 3 general adult cases, and 2 set in an incarceration setting. Chronic illness was included in all the cases except for a set of 4 paediatrics cases. Vulnerability characteristics included incarcerated setting, homelessness, single parent homes with complex paediatric cases, rural/remote setting of care, and social assistance required. Financial stressors were included in approximately half of the cases. Psychosocial issues were included in all the geriatrics cases.

Discussion/Conclusion

This course, taking place at the end of the curriculum, addressed a variety of populations and care issues for vulnerable situations and patients. A framework for special populations could guide further development of cases to ensure that cases are maximizing diversity in the pharmacy curriculum.

24. Self-reported medication adherence in the general Finnish population

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Introduction

Adherence is crucial for the effectiveness of medicines. Adherence to a certain medication or among patients with a certain medical condition are the most typical study settings in adherence research. Medication adherence in the general population is less studied.

Aims/Objectives

The aim of this study is to assess self-reported medication adherence in the general Finnish population, compare adherence between different medical conditions and to identify characteristics that are associated with self-reported medication adherence.

Methods

The study data are based on the Finnish Medicines Barometer, a biannual population survey carried out by the Finnish Medicines Agency. In 2023, the survey included a module on medication adherence where respondents were asked whether they have forgotten to take their medicine in the past month and whether they have not started taking any prescription medicines or discontinued any medicines without telling their physician. The survey included questions also on, for example, sociodemographic characteristics, health information, health literacy, and views on medicines. The study data will be analysed using frequencies and logistic regression.

Results

There were 2,020 respondents to the survey. Over 70% of them used at least one prescription medicine regularly or as needed. The results of the statistical analyses will be presented in the conference.

Discussion/Conclusion

The study will provide important, novel information on self-reported medication adherence in the general population. This information can be used in identifying patients who need more support in implementing their medication treatment.

25. General pRactice phArmacist-led Antipsychotic cardiometabolic phySical health and medication review scoPing study for Early action and prevention (GRAASP-Early)

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Introduction

People with severe mental health conditions have a life expectancy 15-20 years shorter than the general population, often due to preventable and/or treatable cardiometabolic disease. This can be exacerbated by antipsychotic medicines that are effective for treating mental illness. Literature indicates that physical health monitoring, aligned with national guidelines, is inadequate, with <50% of patients being monitored appropriately.

Aims/Objectives:

To scope and assess the potential of a general practice-based pharmacist-led multidisciplinary intervention to improve physical health monitoring and polypharmacy review delivery. To improve 'all-or-none' physical health monitoring care bundle (glucose/glycosylated haemoglobin, lipids, blood pressure and body mass index) and assess the importance of associated medication review interactions.

Method

Prospective intervention cohort study in five urban general practices. Patients aged 18-65 years, prescribed an oral antipsychotic were identified and invited for monitoring and medication review with a pharmacist. Interventions were recorded and collated. Pre- and post-review data analysed, and actions graded for clinical importance.

Ethical approval was sought but not required. Caldicott Guardian approval was obtained from practices to analyse anonymised data.

Results

In total 1.3% (330/25,011) patients met inclusion; usual care practice (n=58) and intervention practices (n=272). 'All-or-none' care bundle, from baseline, increased by 7% in the usual care practice and median 33% (range 19% to 58%) for intervention practices.

Half (136/272) of patients participated in medication reviews, requiring pharmacological and/or non-pharmacological clinical actions, median 1 (1 to 15) per patient. The majority (72%) of actions were graded as moderate to severe importance. 3% of patients were identified as new pre-diabetic/diabetic, and 7% were at high risk of heart disease requiring statin initiation.

Discussion/Conclusion

A pharmacist-led multidisciplinary general practice-based approach may be effective at optimising cardiometabolic monitoring, identifying and treating amenable risk factors. This multidisciplinary model may help to overcome known capacity issues, health inequalities and barriers to care.

26. Enhancing Financial Accessibility of Medicines: A Comparative Study Between Estonia, Latvia and Finland

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Introduction

Estonia, Latvia, and Finland, located in Northern Europe, enjoy membership in various international organizations, e.g., WHO that guides healthcare system development. Despite this commonality, each nation maintains the autonomy to implement distinct healthcare and pharmaceutical policies.

Aims/Objectives

The study aims to explore the impact of medicine pricing policies on accessibility in Estonia, Latvia and Finland.

Methods

This research employs qualitative content analysis, drawing connections between the pharmaceutical financing systems in the three countries and out-of-pocket expenditures for medicines through a comparative methodology.

Results

The assessment of the relationship between average annual income and expenditures on medicines in Estonia, Latvia, and Finland during the period from 2013 to 2021 indicates that Finnish residents incurred the lowest spending on medicines, at less than 1.2% of their annual income. In contrast, Estonian individuals spent approximately 1.7% of their income on medicines, while Latvian citizens experienced the highest out-of-pocket costs, averaging below 3% only once in 2021. The findings of this study suggest a correlation between out-of-pocket spending on medicines and average life expectancy at birth. Specifically, Latvia recorded the lowest life expectancy among the three nations at 75.9 years, whereas Finland's lower expenditure of 1.5 percentage points less than Estonia corresponds to a life expectancy exceeding 5 additional years. Estonia's out-of-pocket spending of 1.6% on medicines is associated with a life expectancy at birth of 78.8 years.

Discussion/Conclusion

It is imperative that proactive state intervention and effective health and pharmaceutical policy regulations are implemented to mitigate out-of-pocket expenditures for residents. Ensuring financial accessibility to these medicines is crucial for fostering patient adherence to treatment and enhancing overall public health outcomes. This study encourages a re-evaluation of medicine pricing policies in Estonia, Latvia, and Finland to leverage best practices and improve accessibility and health equity across the region.

27. Medicines Awareness Among Estonian Adolescents: A Case Study of State Gymnasium Students

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Introduction

With the rising availability of over-the-counter and prescription medications, young people need to be educated on safe consumption practices. Enhancing medicine awareness can lead to better health outcomes and foster responsible behaviour regarding medication use.

Aims/Objectives

The research aimed to evaluate Estonian adolescents' understanding of medicines, including their sources of health and medicine information, their medicine usage habits, and their self-medication practices.

Methods

A quantitative online survey (validated questionnaire) was conducted using Microsoft Forms in February 2024 among students (N=7147) from state gymnasiums. Ethics Committee approval (384/T-20) from the University of Tartu Research Ethics Committee was received.

Results

A total of 183 students from eight state gymnasiums, with a median age of 17 years, responded to the survey. Among the participants, 31.1% reported using medication daily, and the median frequency of pharmacy visits was once every six months. The main sources of information about health and medicines for adolescents were their parents and the Internet, less than half turned also to healthcare professionals. Self-medication was reported by 61.2% of respondents. Almost half of the study participants had used medication that did not belong to them, including sedatives and sleeping pills, to relieve stressful moments. Overall, adolescents demonstrated a good awareness of medicines, including proper storage methods and adherence to usage instructions. However, there is a concern about the handling of pharmaceutical waste, as only 16.4% of respondents dispose of medicines properly.

Discussion/Conclusion

The study highlights the need to enhance medicines awareness among Estonian adolescents. While most participants demonstrated a good understanding of proper medicine usage and storage, there are significant areas for improvement, particularly in the handling of pharmaceutical waste and the reliance on self-medication. By addressing these gaps through targeted educational initiatives, we can promote safer consumption practices and ensure better health outcomes for young people.

28. Challenges in pain identification and behavioural symptoms in people living with Dementia: leveraging the power of AI and digitalization

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Introduction

Pain assessment in people living with advanced dementia is challenging due to their difficulties in self-reporting pain. As a result, their pain is often poorly managed, resulting in challenging behaviours, often pain-related, being highly prevalent.

Aims/Objectives

Develop a system that overcomes current challenges through the use of artificial intelligence (AI) and smart automation.

Methods

The need to improve existing pain assessment methods was identified through a systematic process of reviewing medications in Western Australian nursing homes. Digitization and then AI capabilities were identified as means of overcoming challenges in existing pain assessment tools. As a result, we developed a digitalized hybrid system that includes a point-of-care application which uses AI to detect facial action units indicative of pain. When combined with non-facial indicators of pain, collected through digital checklists, allow the automatic calculation of a pain score and assignment of a pain intensity.

Results

Excellent psychometric and clinimetric properties were shown by a series of validation studies. As a result, the tool evolved into what is known today as PainChek®, which after receiving regulatory clearances is now implemented in Australia, New Zealand, the UK and Canada and is currently being reviewed by the Food and Drug Administration (FDA). Over 7,000,000 pain assessments were conducted by approximately 16,000 trained carers and health professionals across over 1000 aged care homes. Findings from various implementation sites, suggest a number of clinical improvements related to reduction in antipsychotic and benzodiazepine use, as well as safeguarding events and related behaviours. Recently in implementation sites in Scotland, a 42% reduction in falls incidence was observed over a 6-month period.

Discussion/Conclusion:

Combining digitalization with AI capabilities through a process that keeps the focus on a humanistic approach to care results in successful technology implementation while overcoming existing challenges in pain identification and delivering better health outcomes.

29. Informal carers involvement and engagement in medication management for people with long-term conditions: A systematic review

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Introduction

Medication management (MM) requires adjustments beyond adhering to a fixed routine. Informal carers can play a crucial role in supporting people with complex medication regimens. An informal carer is anyone who offers unpaid support to family, friends, or community members concerning their health and well-being. However, not much is known about the role of carers in MM.

Aims/Objectives

To explore the involvement and engagement of informal and familial carers in supporting MM for people living in the community with long-term conditions.

Methods

A systematic search was conducted in MEDLINE, Embase, PsycINFO, CINAHL, Scopus, and Web of Science from inception to April 2024. Further studies were identified by searching the reference lists of the included papers. Studies were considered if they reported MM activities carried out by adult carers for people with long-term conditions. Broad inclusion criteria were adopted without language or country restrictions. A quality assessment was conducted using the Mixed Methods Appraisal Tool, with no intention of excluding papers based on their scores. Findings were narratively synthesised.

Results/Discussion

Twenty studies met the inclusion criteria. Most carers were family members who provided a wide array of MM activities. Carer roles were categorised into physical roles, such as managing prescriptions, and cognitive roles, including decision-making around medication use. A variety of strategies and tools were utilised by carers to undertake MM activities. However, carers experienced numerous challenges during their caregiving. Specifically, carers highlighted their need for additional knowledge and support to undertake MM activities.

Conclusion

Carers provide multi-faceted and interlinked MM activities. This review highlights the significance of addressing the fragmentation between carers, healthcare providers and medication-related knowledge. Further research is needed to empower carers as partners in improving health outcomes. Developing best practice recommendations for carers support is essential for optimising carers involvement and engagement.

30. Exploratory study of reported harm and ethnicity based on patient safety incidents

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Introduction

Health outcomes are intrinsically linked with socio-demographic factors, including ethnicity. Evidence shows that people from ethnic minority backgrounds are at higher risk of preventable harm, such as hospital acquired infections, adverse drug events and dosing errors.

Aims/Objectives

Our aim was to explore whether there was any association between patients' ethnic background and the reported degree of harm following patient safety incidents at a tertiary care, London teaching hospital.

Methods

An observational study, using retrospective review of voluntary reported patient safety incidents registered in the organisation's incident reporting system from 1 April 2021 to 30 November 2023. Patient ethnic background was retrieved from the electronic health record. Incident category and reported degree of harm was explored descriptively across ethnic backgrounds and assessed for significance using Chi squared test.

Results

A total of 34,143 incidents were reported in the study period, with the majority reporting no harm (26,387, 77%) or low harm (6,660, 19.5%). The top five categories for moderate and above harm categories (1095, 3.2%) were treatment related, anaesthetics and theatres, maternity, infection related and delays. There was a high level of missingness for ethnic background data overall (4506, 13.2%), due to reasons of 'Not Stated / Unknown', 'Not Yet Asked' and 'Refused to Give'. There was no significant difference in harm reporting by year, or between harm and no harm across ethnic groups.

Discussion/Conclusion

In this explorative study of patient safety incident reports, we found no evidence of association between reported harm based and ethnic background. However, these findings are limited by the fact that over one in seven patients' ethnic background was not known.

31. Exploring Facilitators and Barrier to PrEP Access, Use and Adherence for Indigenous Peoples in the Greater Toronto Area

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Introduction

Indigenous Peoples experience disproportionately higher incidences of HIV infection compared to settler Canadians. This makes PrEP a plausible solution to decrease transmission, however it remains poorly adopted among Indigenous Peoples in Canada. Further, minimal research seeks to understand what Indigenous Peoples know, or do not know, about PrEP.

Methods

Indigenous methodologies was used to describe the experiences of PrEP in Indigenous Peoples in Toronto. A community-based advisory board consisting of a Two-Spirit Elder Advisor, HIV community champions, knowledge users, and the research team was established to help execute four Talking Circles alongside 2-Spirited People of the 1st Nations in Toronto. Talking Circles were audio recorded, transcribed, and analysed using Indigenous Theorizing.

Results

Thirty people participated in the Talking Circles. No participant was currently or had ever taken PrEP. Queer men and participants working for non-profit organizations had an in-depth understanding of PrEP, while women and straight men tended to have minimal to no understanding of PrEP. Considerations for taking PrEP included allergies, pregnancy compatibility, side effects, drug interactions, dosing frequency and cost. Patient-level facilitators to PrEP included mail delivery options, coverage through Non-Insured Health Benefits, incorporation of culture and Indigenous ways of understanding health in care delivery. Barriers included the near-exclusive promotion of PrEP to the gay community, frequency of bloodwork and mistrust in healthcare systems, pharmaceutical industry and Western medicines. Participants also acknowledged the patriarchy, racism and stigma as determinants for the lack of PrEP awareness in Indigenous communities - especially womxn. Intramuscular PrEP was favoured over oral. Suggestions to improve PrEP awareness included educating outreach workers, attending community events like Powwows, education at the First Nations high schools, and education through Elders and social media.

Discussion/Conclusion

Talking Circles were effective and culturally appropriate to understand how Indigenous Peoples conceptualize PrEP. Culturally tailored health promotion is needed to improve PrEP uptake.

32. Developing A Community Pharmacy Service to Promote Adherence to Antidepressants: An Implementation Science Approach

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Introduction

Adherence to antidepressants is crucial for achieving remission in patients with depression. Patients often fail to adhere to their prescribed antidepressant treatment. Such nonadherence increases the risk of therapeutic failure and relapse, and imposes a burden on healthcare systems. Community pharmacists are accessible and can support patients in adhering to antidepressants, but their expertise remains underutilised.

Aims/Objectives

To develop a community pharmacy service to promote adherence to antidepressants in patients with depression.

Methods

Intervention Mapping (IM) was used to guide the service development, comprising six steps: needs assessment; definition of behavioural objectives; selection of theory-based intervention methods; intervention design and development; implementation planning; and evaluation planning. Needs assessment was undertaken using a systematic review and stakeholder engagement. Behavioural objectives were identified by analysing key adherence and implementation barriers and mapping them to the Capability, Opportunity, Motivation-Behaviour (COM-B) model. The Behavioural Change Wheel (BCW) framework guided the selection of appropriate intervention functions and behaviour change techniques (BCTs) to address barriers to antidepressant adherence and community pharmacy service utilisation among patients with depression.

Results

The needs assessment identified key adherence and service utilisation barriers among patients with depression (e.g., lack of privacy in community pharmacies) and implementation barriers for pharmacists (e.g., limited time to provide adherence assessment). Behavioural objectives were mapped to COM-B and aligned with BCW intervention functions such as environmental restructuring and enablement. BCTs were then selected, such as rearrange the physical environment and optimising workflow. A structured five-step service was developed, outlining patients identification, adherence education, personalised support, and follow-ups. Implementation and evaluation planning—including pharmacist training, patient recruitment, and adherence assessment—will be conducted in future research.

Discussion/Conclusion

The service components will be developed and refined using an iterative process involving patients with depression and pharmacists, including the identification of barriers to service use and delivery, respectively.

33. Supporting Residents Living with Severe Mental Disorder in Social Psychiatric Residences in Shared Medication Coordination

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Introduction

Supporting residents living with severe mental disorders in social psychiatric residences through medication coordination (MedCo) is essential within cross-sectoral and multi-disciplinary contexts. However, this remains challenging due to residents' varying cognitive impairments. For over a decade, supported patient involvement (PI) has facilitated shared MedCo in a Danish residence through a staff-supported health questionnaire. Despite its success, this intervention has yet to be successfully implemented in other residential settings.

Aims/Objectives

This study aimed to co-create a PI tool and approach that amplifies the voices of residents with varying cognitive abilities in MedCo.

Methods

Building on the staff-supported health questionnaire, we refined a PI tool and approach through a co-creative process with residence carer staff. The tool and approach were adapted to the residence context, tested and refined over five months involving residents in pharmacist-led medication review and shared MedCo consultations with their general practitioner and psychiatrist. Feasibility and acceptability were evaluated as indicators of residents' ability to express their voices.

Results

The PI tool was refined across twelve iterations outlining multiple healthcare, adverse effect, statutory and documentary conditions. The final PI approach consisted of four-steps designed to ensure effective communication of the resident's voice, regardless of their cognitive abilities: Step 1) Resident voice, Step 2) Supported resident voice, Step 3) Advocated resident voice, and Step 4) Translated findings into health language.

Discussion/Conclusion

This study enhanced the expression of resident voices in healthcare and was deemed feasible and acceptable. The successful implementation of the Shared MedCo PI tool and approach underscores the importance of contextual adaptation and stakeholder co-creation in complex cross-sectoral and multidisciplinary MedCo interventions. This study shows promise for empowering vulnerable populations living with severe mental disorders in social psychiatric residences, enabling them to have a voice in their healthcare.

34. Refugees' and professionals' views on a new digital health solution to improve their mental health and well-being: a qualitative study

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Introduction

Poor mental health is one of the biggest health issues faced by refugee communities. Existing inequalities make it difficult to access appropriate mental health care. Digital health solutions could offer more equal and personalised care but given the complexities, there is a need actively involve end-users in the design of such solutions.

Aims/Objectives

The study aimed to explore the views of refugees and working professionals in Glasgow on how a digital solution could address mental health needs, its potential requirements and existing (digital) barriers.

Methods

Through a community based participatory research approach, this study utilised qualitative mixed methods consisting of semi-structured interviews and focus groups with refugees and working professionals. Participants were recruited through project and steering groups, and relevant refugee organisations. Researcher(s) followed a distress protocol, and participants could be signposted to mental health resources if needed. Focus groups and interviews were audio recorded, transcribed and data underwent inductive thematic analysis using a framework approach.

Results

Fourteen refugees and four professionals participated.

Preliminary results show two main themes for solution needs: Content and Features. Participants highlighted importance of signposting to appropriate services and support. Participants felt that a digital solution should be free, web-based, ad-free and prioritise privacy. Videos with supportive content were also discussed as a preferred media, with culturally relevant content in a variety of languages. There was also a need for training and education on how to use any digital solution. Prominent digital barriers reported were poor or no internet connection or no access to the web; cost; and language barriers.

Discussion/Conclusion

This study shows that digital solutions for refugees requiring mental health support need to be accessible both economically and culturally. Involving refugees, and the professionals who support them, in the co-design process will ensure that digital solutions will be useful, appropriate and impactful.

35. A Pharmacist's Journey into Child and Adolescent Mental Health Services (CAMHS) & Neurodevelopmental Services (NDS) – an NHS Lanarkshire Perspective

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Introduction

In recent years, pharmacists have been introduced into many CAMHS/NDS multidisciplinary teams. NHS Lanarkshire were the second health board in Scotland to do so, recruiting three prescribing pharmacists to set up pharmacist-led clinics to increase prescribing capacity and reduce patient wait times from assessment to treatment.

Aims/Objectives

- Quantify additional pharmacist prescribing capacity within CAMHS/NDS
- Demonstrate ability to offer initial medication appointment within 12 weeks of referral
- Review implementation/development of pharmacist-led CAMHS/NDS clinics and respond to colleague/patient/carer feedback

Method

Clinic Data

- Data was analysed from reports generated by TrakCare PMS; the system used to book appointments within NHS Lanarkshire

Feedback

- Validated 'Multi-Source Feedback' and 'Patient Survey' tools were used to gather colleague/patient/carer feedback

Results

- 502 pharmacist appointments offered within 3-month period
- 7-week average wait for initial medication appointment
- Pharmacist 'Clinical Scope of Practice' document implemented

Colleague feedback:

"Pharmacists have adopted a flexible approach in order to successfully implement changes and establish a sense of order to a service which is under a lot of pressure. They have used their expertise to develop a new role within CAMHS/NDS which has become indispensable to the service."

Patient/carer feedback:

"My child was never a fan of healthcare settings, but now likes to attend CAMHS. The pharmacist has a warm and friendly attitude and has taken the time to know and understand my child and how ADHD and autism impacts their life."

Discussion/Conclusion

- Pharmacist-led clinics have increased prescribing capacity within CAMHS/NDS, improving medication access
- Colleague/patient/carer feedback was extremely positive, affirmed current practice and will inform further service development
- 'Clinical Scope of Practice' document developed to guide colleagues on cases suitable for pharmacist referral
- CAMHS /NDS would benefit from an extended pharmacy team to further improve capacity and medication access

ABSTRACTS FOR POSTER PRESENTATIONS

Cultural Sensitivity and Care

1. Deaf, Deaf-blind and Hard of Hearing Community Needs and Perceptions of Pharmacy Services

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Aims/Objectives:

To understand the perceptions of Deaf, Hard of Hearing (HOH), and Deaf-Blind individuals regarding experiences at community pharmacies, and identify barriers and enablers to providing pharmaceutical care.

Methods

A qualitative study was conducted from March 2022 to March 2023. Participants were grouped according to age, type of disability, and ability to use American Sign Language. These groups include: Deaf signing seniors (65+ years old), HOH non-signing seniors (65+ years old), Deaf signing individuals (19-64 years old), HOH non-signing individuals (19-64 years old), and Deaf-Blind individuals (19+ years old). Patient demographics were collected as part of the study and focus groups occurred online via Zoom. During the focus groups, participants were asked a series of guided discussion questions around their expectations of a pharmacist, pharmacy-related services they would like to access, and barriers and suggestions to better meet their healthcare needs. Focus groups were recorded, transcribed, and thematically analysed.

Results

18 participants completed the study. Participants understood pharmacists to be medication experts. They expected pharmacists to provide access to medications, provide medication and health education, and administer vaccinations. Positive experiences occurred when pharmacists accommodated participants (e.g., writing down instructions, typing or texting) and demonstrated patience. Issues at the pharmacy included ineffective communication when counselling on medications and lack of access to interpretation services.

Deaf participants preferred visual communication and using American Sign Language. The Deaf-Blind participant desired access to tactile methods of wayfinding around OTCs and differentiating medications. HOH participants preferred communicating through typing. All participants expressed the need for interpretation services, effective medication counselling strategies, and greater awareness about people with hearing disabilities.

Discussion/Conclusion

Improvements are needed for Deaf, HOH, and Deaf-Blind individuals when accessing pharmacy services. Access to interpretation services and making accommodations for patients with hearing needs can prevent adverse drug events and improve patient medication knowledge.

2. Alexander First Nation members' views of their relationships with community pharmacists using Community-Based Participatory Research

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Introduction

Indigenous Peoples in Canada have health inequities due to historical and ongoing colonial practices. Community pharmacists are trusted and accessible healthcare professionals, and in Alberta, they have a broad scope of practice, including prescribing. Prior research with pharmacists has explored patient trust, communication, and patient experiences, but rarely from an Indigenous perspective.

Aims/Objectives

This research explores First Nation members' views of their relationships with community pharmacists, including their trust in and expectations of pharmacists and their willingness to discuss traditional medicines with pharmacists.

Methods

Indigenous research principles, community-based participatory research, and creation of ethical space informed study design. Alexander First Nation, located approximately 60 km northwest of Edmonton in Treaty 6, co-developed the research through the Alexander Research Committee. Inclusion criteria were members of Alexander First Nation who had at least one interaction with a pharmacist as an adult. Data was collected through one-on-one semi-structured interviews as conversation. The Indigenous conversation method is built on respect, storytelling, and oral tradition. A research assistant from Alexander was hired to assist with thematic analysis to ensure culturally appropriate interpretation.

Results

The four themes identified were 1) Relationships through human connection, 2) Relationships impacted by colonization, 3) Coming together in worldview, and 4) Access. Expectations of services that pharmacists provide were low and often met when pharmacists were friendly, did not make assumptions, and patients had continuity of care. Stereotyping and discrimination prevented relationship building and affected subsequent interactions. Participants recommended education for pharmacists around traditional medicines, Treaty, Indigenous worldview, and the colonial history of Canada to strengthen relationships. The first three themes impacted access to pharmacists and perceptions of access to preferred medications.

Discussion/Conclusion

This First Nation community emphasized relationships as the key to improving pharmacy services with community members, yet numerous barriers were identified that continue to weaken relationship building.

3. Lessons learned from Community-Based Participatory Research with a First Nation community

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Introduction

Within Canada, Indigenous Peoples have social determinant and health inequities due to historical and ongoing colonial practices. To address these inequities, research must be conducted by Indigenous researchers or collaboratively with Indigenous Peoples using Indigenous values and ways of knowing.

Aims/Objectives

This research aimed to conduct research collaboratively, ethically, with respect, relevance, and relationality, in a reciprocal relationship with the Alexander Research Committee (ARC) in Alexander First Nation (AFN) located near Edmonton, Alberta, in Treaty 6.

Methods

A community-based participatory research (CBPR) approach, viewed through the lens of ethical space, was used to explore AFN members' views of their relationships with community pharmacists. Ethical space, developed by a Cree scholar, is created when groups with differing worldviews can respectfully address power imbalances.

Results

Protocol was offered to ARC before the research idea was presented to create meaningful relationships. The research investigator, (AR) spent time in the community to develop relationships and learn about Cree worldview. At the start of the project, researchers attended monthly meetings virtually due to COVID restrictions and then in person to establish relationships with ARC members and to ensure a partnership. The research proposal (e.g. methodology, recruitment, data collection and type of analysis) was co-developed with ARC to ensure the research was ethical and respectful. To demonstrate partnership and reciprocity, ARC members were supported to be co-presenters at conferences, meals were provided during meetings, and ARC was listed as an author on abstracts and publications. Knowledge dissemination included traditional academic avenues, interactive community events, and a presentation to the nation to create relevance for the research findings to the community.

Discussion/Conclusion

Competing CBPR with an Indigenous group requires dedicating time to building relationships and understanding from a community perspective. We discuss insight on how research can be conducted ethically and respectfully, benefiting the community.

Sensory Impairment

4. Co-designing a searchable online resource of assistive technologies to support the safe and effective use of medicines by older people with sensory impairment

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Introduction

Older people with sensory impairment (OPwSI) frequently experience multiple medicine-related challenges, many of which could be addressed using assistive technology.

Aims/Objectives

To co-design a searchable online resource that identifies assistive technologies to support the medicine journey of OPwSI.

Methods

The co-design study comprises three stages: baseline and two rounds of user studies involving health and social care professionals (HSCPs) (primary users) and OPwSI and/or their carers (secondary users). The assistive technologies included in the resource were previously identified by market and scoping reviews, and a prototype website formed the starting point for the co-design process. The co-design stages are being conducted in parallel with five “sprints” that develop the prototype website. The study uses several co-design methods including Cognitive Walkthroughs/Think Aloud, Keep/Lose/Change, MoSCoW (must/should/could/won't have), as well as the Technology Acceptance Model to assess accessibility, usability, user experience and perceived usefulness of the resource.

Results

A total of 49 participants completed baseline (30 primary and 17 secondary users) across 19 workshops. Primary Users requested the inclusion of: additional filter options e.g. price, administration route, associated conditions e.g. dexterity, diabetes; videos to demonstrate how products work; and, the addition of disclaimers and endorsements to build trust in the resource. Secondary users requested: mobile/tablet compatibility; that the resource was created as a trusted unified resource accessible to all users; and, that the default font size and colour scheme were modified to promote greater accessibility. Both user groups opted to keep a simple interface to avoid clutter, built-in user adjustable accessibility tools, and compatibility with screen readers; lose built in audio features over concerns of screen reader compatibility; and change terminology to simplified layman's terms.

Discussion:

The resource will be launched in May 2025 and full results available for presentation at the conference.

Substance Dependence

5. Two international scoping reviews of interventions designed to address stigma towards people with substance dependency: a focus on undergraduate pharmacy students and pharmacy staff

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Introduction

Substance dependency presents a societal challenge, and when patients access healthcare for recovery it is common for them to experience stigma. This includes from pharmacy professionals, with discriminatory attitudes towards people who use opioids observed in community pharmacy. Stigma is a barrier to improving opioid-related outcomes and may be addressed with interventions and strategies to destigmatise dependency.

Aims/Objectives

To identify interventions which have been designed and tested for addressing stigma towards people who use opioids in pharmacy practice.

Methods

Two international scoping reviews were conducted; one focusing on interventions towards pharmacy students and another towards pharmacy staff. Databases Medline, Embase, and PsychInfo were searched October 2024, using MeSH and Emtree headings where relevant. Title/abstract screening was conducted by DG and EK, followed by full-text review based on predefined eligibility criterion. Studies published 2014 onwards were included. The Arksey and O'Malley scoping review structure was followed.

Results

Nineteen relevant publications were identified; 8 focusing on interventions towards students and 11 towards pharmacy staff. Most studies were conducted in the USA (n=18). The reviews identified distinct types of interventions. Educational Sessions on stigma and harm reduction were commonly delivered to both cohorts. Interventions Involving People with Lived Experience and forms of Experiential Learning were more commonly delivered to students, and Policy Interventions and Service Implementation (e.g. Brief Screening Interventions) were more common with pharmacy staff. All intervention types were successful in varying degrees at reducing opioid-related stigma. There was heterogeneity in the evaluation of interventions, ranging from quantitative (n=11) and qualitative (n=8) with little similarity across studies.

Discussion/Conclusion

This study demonstrates various stigma-focused interventions which may impact beliefs and behaviours. However, the comparative and long-term effects of such interventions remains relatively unclear. Nevertheless, addressing stigma with a dual focus on pharmacy students and established pharmacy teams may accelerate necessary culture change.

Age and Medicines

6. Empowering Vulnerable Populations: Exploring Clinicians' Needs to Support Cannabis Decision-Making for Older Adults with Arthritis

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Introduction

Arthritis is highly prevalent among older adults, often causing severe pain and functional limitations. Medical cannabis has recently emerged as a potential treatment for arthritis; however, older adults struggle to make informed decisions about its use. As a vulnerable population, older adults may also experience cognitive decline, multiple comorbidities, and polypharmacy, all of which can further complicate their cannabis decision-making process.

Aims/Objectives

We aimed to explore clinicians' decisional needs to effectively support older adults with arthritis in making informed cannabis-related decisions.

Methods

A qualitative descriptive design was used to explore clinicians' perspectives. Purposive and snowball sampling recruited clinicians who treated patients with arthritis and received inquiries about medical cannabis. Semi-structured Zoom interviews were audio-recorded, transcribed verbatim, and analysed using reflexive thematic analysis. Coding was guided by both deductive and inductive approaches. Deductive coding drew on the Ottawa Decision Support Framework (ODSF), while inductive coding allowed novel concepts to be constructed when data did not align with ODSF.

Results

A total of 11 clinicians (37% pharmacists, 27% family physicians, 27% rheumatologists, and 9% registered nurses) with clinical experience ranging from 1 to 50 years participated in the study. Clinicians reported that patients seek more information about cannabis than they could provide. Three key themes were identified, reflecting clinicians' perspectives: (1) limited knowledge of available cannabis products, (2) uncertainty regarding cannabis efficacy and safety, and (3) decisional conflict about the extent of support they can offer patients.

Discussion/Conclusion

Clinicians reported numerous challenges that impact their ability to provide the required cannabis decision support to older adults living with arthritis. Such a gap may leave this vulnerable population struggling to navigate cannabis use decisions independently, highlighting the need for targeted interventions addressing identified clinicians' decisional needs and thus empowering patients to engage in shared decision-making regarding cannabis use for arthritis.

7. Personas for a decision aid tool that matches older adults' age-related abilities to the features of medication adherence technologies

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Introduction

Medication adherence technologies offer a solution for managing complex medication regimens amongst older adults. However, selecting the right technology remains a challenge due to diversity in capabilities.

Aims/Objectives

This study aims to develop personas to inform the design of a decision aid that matches older adults' abilities to the success rates of tasks needed to use the technologies.

Methods

This project used the Goal-Directed Design Framework which focuses on aligning users' goals and needs with the functionality and design of products. Personas are one of the essential elements in this framework. We utilized data from qualitative semi-structured interviews with 23 participants, including older adults, care-partners, and clinicians which investigated their decision-making strategies, medication management routines and challenges, technology use, and optimal design features for the decision aid. Personas were created by using 8 steps: grouping interviewees based on their role, capturing their behaviours, grouping similar characteristics, and refining them into fictional characters.

Results

Behavioural variables such as decision-making styles, technology proficiency, and the need for decision aids shape the personas. Participants included older adults (3 personas), care-partners (2 personas), and clinicians (3 personas). Older adults and care-partners prefer to explore their options and research the pros and cons to make decisions (analytical), while clinicians are behavioural (people-oriented) decision-makers, where they make decisions by engaging their patients, understanding their needs and consulting other professionals. While older adults and care-partners prioritized comprehensive, user-friendly tools with trusted information, clinicians emphasized the importance of ease of integration into clinical workflows and facilitating decision-making.

Discussion/Conclusion

Personas provide a foundation for developing a decision aid that enables choice in the use of medication adherence technology, supports decision-making, and addresses the challenges faced by older adults, care-partners, and clinicians.

8. I Manage My Meds. A co-designed educational tool to support older people living with frailty to self-manage multiple medicines

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Introduction

Managing multiple medicines at home can be a difficult and demanding task. If not managed well, medicines can cause harm and health outcomes are likely to be worse for older people living with frailty. Despite that, there is still limited evidence of interventions to support older people living with frailty taking five or more medicines (polypharmacy).

Aims/Objectives

To make medicines self-management at home safer and easier for people 65 years old or older with polypharmacy and living with frailty.

Methods

We used "experience-based co-design" (EBCD), a method which involves working with patients, their families, and healthcare professionals to identify priorities for change and potential solutions. We conducted a review of evidence, and a qualitative study of patient experiences of medicines self-management. A short film of patient interviews was produced. The video helped to provoke discussion and identify priorities at stakeholder meetings. Subsequently, patients, family members and healthcare professionals worked in small groups to identify solutions. Iteratively, the identified solutions were developed into a resilient healthcare informed prototype intervention - 'I Manage My Meds'.

Results

At stakeholder meetings three priorities were identified: Practical day-to-day management, Understanding the medication system, Communicating with healthcare teams.

'I Manage My Medicines' is an educational tool and covers the following areas:

1. Understanding medications
2. Organizing medication supply
3. Taking medications correctly and monitoring their effects
4. Managing changes in medication
5. Knowing when and where to get help

Discussion/Conclusion

More needs to be done to acknowledge the role patients and their families play in keeping the system safe. 'I Manage My Meds' draws upon patient and healthcare professional experiences to celebrate such knowledge and provide step by step support around safe medicines management at home.

Two adaptations, an easy read version and Urdu translations have been developed, working with community groups.

At-risk Patient Population

9. Breast is best, a forgotten public health strategy: exploring the views and experiences of breastfeeding women and their interactions with healthcare professionals.

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Introduction

Breastfeeding has multiple health benefits for mothers and infants contributing to future public health, is a cost-effective approach for infant feeding in low-income households and potentially reduces health inequalities. In infants, breastfeeding reduces risk of sudden infant death syndrome (SIDS), infections, cardiovascular disease and obesity (NHS,2023). However, the United Kingdom has one of the lowest rates of breastfeeding globally (Unicef). Factors like breastfeeding complications, medication usage and experiences with healthcare professionals (HCPs) may impact breastfeeding but there is insufficient data exploring views of breastfeeding women.

Aims/Objectives

To explore the perceptions and experiences of breastfeeding women and their experiences with HCPs, particularly pharmacists.

Methods

A mixed-methods approach gained statistical evidence and contextual insight. Following ethical approval, surveys were distributed via social media breastfeeding groups, a local pharmacy and baby gym. Inclusion criteria was breastfeeding mothers who currently or have breastfed in the last five years. Semi-structured interviews were conducted. Data was analysed using Excel and thematic analysis.

Results

There were 113 survey responses and ten interviews. 56%(n=63) women generally felt supported with HCPs. 23%(n=26) stated breastfeeding complications and 15% stated HCPs advice (n=17) influenced them to stop breastfeeding.

Parents were most satisfied with their pharmacist (14.2%;n=16) and least with GPs (3.5%;n=4) regarding medication usage advice.

Women believed factors influencing why the required support was not received were lack of awareness and/or training of HCPs (50.4%;n=57), lack of time (33.6%;n=38) and funding (27.4%;n=31). Thematic analysis indicated HCPs lacked knowledge of breastfeeding while pregnant and with multiple pregnancies.

Discussion/Conclusion

Patient interactions with HCPs varied. Improving awareness, education and training of HCPs is imperative to increase breastfeeding rates. Evidence-based informed care must be provided regardless of personal beliefs or experience (Hussainy and Dermele,2011).

Parents viewed HCPs having different roles, but all HCPs should advocate breastfeeding and appropriately signpost. Limitations include small sample size.

10. Exploring Career Aspirations and Motivations of Pharm.D Students: Insights for Healthcare Professional Development

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Introduction

The career aspirations and motivations of healthcare students play a pivotal role in shaping the future workforce. Pharm.D students, as key contributors to patient-centred care, face unique challenges in aligning their education with professional goals. Understanding these aspirations and barriers is important for optimizing pharmacy education and supporting healthcare workforce development. Pharmacists play a crucial role in improving medication access and patient care, particularly for vulnerable populations, making it vital to address workforce challenges to ensure equitable healthcare delivery.

Aims/Objectives

This study aimed to explore the career aspirations, motivations, and perceived barriers among Pharm.D students at Umm Al-Qura University, identifying areas for educational improvement aligned with evolving healthcare needs.

Methods

A qualitative study using semi-structured interviews with open-ended questions was conducted among 105 fifth- and sixth-year Pharm.D students between November 2024 and January 2025. Thematic analysis was performed using Microsoft Excel, with peer debriefing and triangulation ensuring credibility and validity.

Results

Findings revealed a near-equal preference for hospital (42.9%) and pharmaceutical company careers (41%), with financial stability and professional growth as primary motivations. Barriers to hospital-based careers included high workloads, unclear roles, and limited recognition of clinical pharmacists. The majority (75%) expressed interest in further education, emphasizing advanced clinical training and leadership development. Students interested in clinical pharmacy careers highlighted a commitment to serving underserved communities, addressing pharmacist shortages in vulnerable populations.

Discussion/Conclusion

Tailored educational strategies are needed to bridge gaps between academic preparation and real-world clinical demands. Addressing barriers like role clarity and workload can help develop a future-ready pharmacy workforce. Aligning pharmacy education with career motivations can enhance pharmacist availability in underserved areas, improving healthcare access for vulnerable populations.

11. Development and evaluation of ChatGPT Models to support pharmacy students in becoming confident self-care advisors

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Introduction

Effective communication is crucial in pharmacy practice, especially for self-care advice. With the growth of online pharmacies and written interactions, training pharmacists for digital consultations is increasingly important. Artificial intelligence (AI) tools like ChatGPT offer a safe, structured, and engaging learning environment to enhance written communication skills. Improved communication skills benefit vulnerable patients by enhancing access to care and ensuring culturally competent interactions.

Aims/Objectives

To develop and evaluate ChatGPT-based models to improve pharmacy students' written communication skills and confidence in self-care consultations.

Methods

Generative Pre-training Transformer (GPT)-models were designed to simulate patient cases using prompt engineering strategies. Three scenarios were created based on common self-care areas, providing feedback on question techniques, listening skills, and person-centred consultations. Nine pharmacy students and five teachers tested the model and provided feedback through semi-structured interviews. Thematic analysis was conducted to analyse the interviews.

Results

The ChatGPT-based model successfully simulated realistic and engaging patient interactions. Students highlighted the model's ability to replicate emotional expressions, enhancing realism. The communication feedback provided by the model was perceived as detailed, structured, and tailored to students' needs. Both students and educators viewed the model as a valuable complement to traditional teaching methods, despite occasional inaccuracies in the feedback provided by the model and a desire for greater scenario diversity.

Discussion/Conclusion

ChatGPT can be used to create realistic patient cases, helping pharmacy students develop communication skills and confidence in self-care counselling. The models provided structured feedback, supporting students in becoming more competent in their roles. By focusing on cultural competence and accessibility, the model is a valuable and engaging tool for communication training, fostering pharmacists' self-care counselling skills.

12. Evaluating the Impact of a Journal Club Activity on Pharmacy Students' Learning Outcomes and Professional Skills Development and Its Implications for Patient Care

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Introduction

Developing critical thinking, research, and presentation skills is essential for healthcare professionals. Structured educational activities, such as Journal Clubs, provide valuable opportunities to enhance these competencies. These skills are particularly important in preparing future pharmacists to address the needs of vulnerable patient populations, including those with chronic and severe diseases, and to provide up-to-date information.

Aims/Objectives

To evaluate the learning outcomes, perceptions, and feedback of undergraduate pharmacy students participating in a Journal Club activity, focusing on differences between 3rd and 5th-year students and how these competencies can translate into improved care for vulnerable patient groups.

Methods

This cross-sectional study involved 207 undergraduate pharmacy students from the 3rd and 5th years at Umm Al-Qura University, Makkah, Saudi Arabia. Students were paired, provided with structured guidelines, and tasked with analysing and presenting research articles. Emphasis was placed on research related to clinical trials and patient-centred care for chronic and severe diseases. Data were collected via a validated survey covering general experience, learning outcomes, perceptions, and feedback. Statistical analyses included Fisher's Exact Test, Wilcoxon rank-sum tests, and Cronbach's alpha, using RStudio (version 2024.9.1.394, Boston, MA, USA) with R version 4.4.2.

Results

A majority (89.4%) reported acquiring new knowledge, and 77.7% noted increased confidence in critically evaluating research. Fifth-year students reported higher critical thinking (58.4% vs. 42.3%, $p = 0.031$) and presentation skills (72.7% vs. 50.8%, $p = 0.002$). Strong correlations were observed between learning outcomes and perceptions ($R = 0.743$, $p < 0.001$).

Discussion/Conclusion

The Journal Club effectively promoted critical thinking, research, and presentation skills. Differences between academic years highlight the need to tailor activities to student levels. Integrating patient-centred research enhances pharmacists' awareness and preparedness to serve vulnerable populations.

13. Preparing to train as an independent prescriber – bridging return to higher education

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Introduction

Increasing numbers of UK pharmacists train as independent prescribers (IPs) after time away from academia. To bridge their return to higher education (HE), the Centre for Pharmacy Postgraduate Education (CPPE) offers 'preparing to train as an IP' (PPTIP), a multiplatform group learning programme. It is important to understand whether PPTIP meets its intended learning outcomes (ILOs).

Aims/Objectives

To describe learners' reasons for PTTIP enrolment (survey 1) and gather workshop feedback (survey 2).

Methods

Survey 1, sent pre-course (02-05/2024) to 282 PTTIP learners, asked about reasons for enrolling, expectations and confidence related to ILOs. Survey 2 was sent to 875 attendees of 18 workshops (09/2023-07/2024). Analysis was descriptive for quantitative and thematic for qualitative data.

Results

Thirty-five respondents (12.4%) completed survey 1; 73.5% (n=25,) were female. Registration-year ranged 1990-2024. Two-thirds (n=33,61.1%) worked in community pharmacy, 22.9% (n=8) in primary and 17.1% (n=6) in secondary care. Respondents had enrolled to return to HE (5.3/10) and increase confidence to become IPs (5.8/10). Prior to PTTIP, of ILOs, respondents were most confident around describing how their knowledge, skills and experience had evolved since their initial training (7.5/10), and least confident in building networks (6.1) and creating development plans (6.0).

Survey 2 achieved a 24.0% response rate (n=210). The PTTIP workshop received a mean rating of 8.5/10. Half (n=105) rated the workshop 4/4 for increasing topic understanding, and 55.7% (n=117) rated 4/4 for being thought-provoking. One-hundred-and-forty-eight (70.5%) responded about most positive workshop aspects, highlighting group discussions, networking and peer support; continuing peer groups beyond workshops was valued to overcome isolation.

Discussion/Conclusion

PTTIP learners recognised a need to learn to create development plans; they welcomed the opportunity to build confidence and expand their network prior to applying for an IP course. Future research will investigate longer-term impacts and PTTIP participants' progression towards becoming IPs.

14. Moving to the next level of practice: A qualitative analysis of pharmacists' reflections on clinical decision-making

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Introduction

Clinical decision-making (CDM) is integral to providing high-quality pharmaceutical care. The University of Strathclyde introduced a CDM module within its MSc in Advanced Clinical Pharmacy Practice. This included decision-making frameworks which assist in guiding the CDM process. Students were assessed by reflective essays on their evolving CDM approaches.

Aims/Objectives

To analyse the pharmacists' reflective essays to identify commonalities in CDM processes, enhancing understanding of their role and confidence in CDM.

Methods

An inductive thematic analysis of 40 reflective essays, from 12 pharmacists, was conducted. Data analysis followed Braun and Clarke's six-phase framework and aided by NVivo software. An independent non-pharmacist researcher independently coded 20% (randomly selected). Students indicated their consent at the beginning of their submission.

Results

Four themes emerged: the Complexity of Patient Cases, Analysis and Decision-Making, Factors Influencing CDM, and Future Consideration. In terms of the Complexity of Patient Cases, complex cases often involve high-risk patients, medications, or people with co-morbidities, which was compounded by a pharmacist's limited experience. Analysis and Decision Making relied on thorough patient assessment, applying evidence-based guidelines, multidisciplinary collaboration, and balancing treatment risks with professional expertise. Factors Influencing CDM included the pharmacist's knowledge, a patient's involvement, data availability, and time constraints. Future Considerations included leveraging past experiences, applying decision-making theories, and enhancing shared decision-making to mitigate negative outcomes. The Clinical Reasoning Cycle emerged as a valuable tool for people to apply in practice.

Discussion/Conclusion

The study underscores the complexity of CDM in pharmacy practice, highlighting the significant role of pharmacists' experience, evidence-based practice, and confidence in the process. Addressing challenges such as workload and time constraints could enhance pharmacists' CDM capabilities. The findings emphasise the importance of MDT collaboration and patient involvement in the process. Further research should explore interventions to better support pharmacists to be involved in complex CDM.

15. Enhancing Pharmacy Education through Partnerships: A Longitudinal Analysis of Student Engagement with Substance Use and Harm Reduction Services.

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Introduction

The University of Bath MPharm degree has worked in a unique partnership with a local substance use and harm reduction service since 2007. This collaboration has provided pharmacy students with practical experience and insights into the complexities of addiction and harm reduction to augment classroom teaching.

Aims/Objectives

Evaluate the usefulness of this experience for both students and service users, and to determine whether it equips students with the necessary skills to effectively engage with people who experience addiction.

Methods

All pharmacy students attend a scheduled visit to the harm reduction service during their final year of study following a structured seminar series which includes input from people who use the service. Students complete a confidentiality agreement prior to the visit and feedback was collected at the end of the unit through on-line student feedback surveys. Feedback data was subject to content analysis to identify trends over time and assess the impact of these visits on students' understanding and preparedness for practice.

Results

Findings suggest that the partnership is highly beneficial for students, with consistent positive feedback. They report enhanced empathy, communication skills, and confidence in dealing with addiction-related issues and reducing stigma towards people who use drugs. Students appreciated the opportunity to meet clients and apply their knowledge in practical settings. Service users also reported positive interactions with students, indicating a mutual benefit. We will now explore whether these experiences should be integrated earlier in the MPharm program to maximize their impact.

Discussion/Conclusion

The partnership between the pharmacy degree and the harm reduction service provides a valuable experiential learning opportunity. Incorporating these experiences earlier in the MPharm curriculum could further enhance students' ability to effectively support individuals with addiction and engage with challenging patient groups in their professional practice.

16. Reflections on Coaching: Personal and Professional Impact of Executive Coaching

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Introduction

Executive coaching is available for academics in leadership or administrative positions but is not often part of career planning for faculty members in pharmacy. However, coaching is built on the idea that all professionals can benefit from reflection and guidance on career, professional, and personal development to have impact.

Aims/Objectives

The purpose of this presentation is to reflect on the impact of initiating executive coaching late career in terms of personal and professional development.

Methods

A reflective approach to the coaching experienced over 2 years was applied to identify areas that had been prioritized in the coaching sessions and consider how those areas had been impacted and developed further.

Results

The priority at the start of the coaching had been to become more organized with time management for the workload as a professor. Progress throughout the journey highlighted that rigorous goal setting and achievement was not a priority and practices such as rest, prioritizing well being, and celebration for successes were helpful in making meaning of a career. Focusing on re-framing using the concept of legacy allowed for discussions of prioritization and initiation of a 5y plan with a revised goal of re-experiencing joy in academia.

Discussion/Conclusion

The process of executive coaching highlighted far deeper issues of meaning and legacy through career that displaced administrative habits such as goal formulas or schedules and time management. Personal growth and well being were prioritized as integral to supporting a meaningful career. Executive coaching even at later stages of a career was beneficial for reflection and intentional planning for the final years of scholarly work.

17. Motivational interviewing for enhanced communication skills among pharmacists: a feasibility study

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Introduction

Motivational Interviewing (MI) is an evidence-based, empathetic communication style that supports behavioural change and improves medication adherence. We hypothesise that enhancing pharmacists' MI skills will improve their ability to provide person-centred pharmaceutical care and motivate patients to adhere to their medications.

Aim/Objectives

This study aimed to assess the feasibility of an educational intervention on MI for pharmacists who perform pharmaceutical care services.

Methods

The educational intervention was evaluated using a mixed-method approach with pre-/post-tests and qualitative methods. It consisted of two modules, both including asynchronous online learning activities and a workshop. The intervention was tested among ten pharmacists experienced in conducting New Medicine Services in pharmacies in Norway. Outcomes of the training were assessed via role-play of pharmacy consultations before and after each training module. Role-plays were audio-recorded and coded using MI Treatment Integrity (MITI 4.2.1). Feasibility was evaluated through data on e-learning module uptake, semi-structured interviews with pharmacists, and reflections by workshop leaders.

Results

Preliminary results indicate that pharmacists found the training valuable and feasible to implement in their work schedules. However, some participating pharmacists did not allocate the required time for the asynchronous learning modules before workshops. Pharmacists appreciated the workshops for training and understanding key elements of MI and valued the opportunity to reflect with peers on implementing these elements in daily pharmacy practice. Workshop leaders reported full engagement and noticeable progress in understanding and skills, though with significant variation. Quantitative data on changes in MI skills as measured by MITI 4.2.1 will also be reported.

Discussion/Conclusion

This study explores the feasibility of MI training to enhance pharmacists' communication skills, which are crucial in helping patients towards safe medication management and adherence. It highlights the need for continuous professional development in patient-centred communication using a work-integrated learning approach.

18. Person-centred communication in pharmacies: A co-created Motivational Interviewing course

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Introduction

Numerous interventions have been described to enhance medication safety and adherence in pharmacies. A key element is person-centred communication, employing strategies such as Motivational Interviewing (MI). In Norway, there is a need for a service tailored to support the safe use of chronic disease medications. To succeed, pharmacists' communication skills must first be strengthened.

Aims/Objectives

This study aimed to develop a course on MI adapted for pharmacists working in community pharmacies, to enhance their person-centred communication skills.

Methods

A co-creation design, modified from the Design Thinking approach, was used. Participants included pharmacists, researchers, educators, and a patient co-researcher. The learning activities were collaboratively developed through an iterative process. T.K. adapted the activities to an online learning platform. Six pharmacists evaluated the prototype.

Results

The MI learning approach featured a stepwise design with gradual progression in knowledge and skills, defined in two modules with specific learning outcomes. Both modules included asynchronous online learning activities across six units. Module 1 featured an online synchronous workshop, while Module 2 included a physical workshop. Online activities involved video podcasts, literature, reflection assignments, and quizzes. Workshop activities included skills training through role-plays, demonstrations, feedback, reflections, and discussions. During the course, the pharmacists practiced their skills in the real-life pharmacy setting.

Discussion/Conclusion

An MI learning intervention for pharmacists has been developed, incorporating online learning and skills training in workshops. The co-creation design was crucial to ensure the learning strategies were adapted to the target group and pharmacy practice.

19. Utilisation patterns and quality of lipid control among patients prescribed lipid-lowering therapies in primary care settings in Kuwait: a nationwide cross-sectional study

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Introduction

Cardiovascular diseases (CVDs) were the leading cause of mortality in Kuwait in 2023, with a rate of 67.75 per 100,000 inhabitants. Uncontrolled lipid levels remain a critical modifiable risk factor for CVDs. Primary health care centres (PHCCs) play a pivotal role in managing non-communicable diseases (NCDs), including lipid disorders.

Aims/Objectives

To evaluate prescribing patterns of lipid-lowering therapy (LLTs) and assess the extent of lipid control among patients attending PHCCs in 2023.

Methods

A nationwide, cross-sectional study was conducted using the WHO STEPwise approach to surveillance (STEPS) across six randomly selected PHCCs, representing Kuwait's six governorates. The sample size was determined based on population data from the Public Authority for Civil Information (PACI). Patients attending NCD clinics and prescribed at least one LLT were included. CV risk categories and lipid treatment goals (LDL-C and non-HDL-C) were defined using the 2021 Middle East consensus. The primary outcomes included prescribing patterns and the proportion of patients achieving therapeutic goals. Data analysis included descriptive statistics and multivariate logistic regression to assess associations between lipid goal attainment and key variables such as CV risk category, type of LLT, and statin intensity.

Results

A total of 434 patients were included, with a mean age of 54.3±9.7 years and a comparable gender distribution. Statins were the most commonly prescribed LLTs (98.8%, n=429), with only 3.2% (n=14) receiving combination therapy with ezetimibe. Moderate-intensity statin therapy (MIST) was used by 90.4% (n=388) of patients. Achievement rates for LDL-C and non-HDL-C goals across all CV categories were 20.4% and 26.6%, respectively. CV risk category was significantly associated with achieving LDL-C and non-HDL-C goals (p<0.001).

Discussion/Conclusion

Despite the widespread use of statins, lipid control remains suboptimal in PHCCs. These findings highlight the urgent need for targeted interventions to optimise lipid management, including improving adherence and adopting more intensive LLT regimens.

20. Utilisation trends of lipid lowering therapies between 2017 and 2022 and lipid target attainment among patients receiving proprotein convertase subtilisin-kexin type 9 inhibitors at a specialised tertiary hospital

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Introduction

Statins are the cornerstone for managing uncontrolled low-density lipoprotein cholesterol (LDL-C), with ezetimibe as an add-on for insufficient control. In 2016, proprotein convertase subtilisin/kexin type 9 inhibitors (PCSK9Is) were introduced in Kuwait for patients with persistent lipid control issues.

Aims/Objective

To evaluate dispensing trends among incident lipid-lowering therapy (LLT) users over six years (2017-2022) and assess lipid control following PCSK9I initiation at a specialised tertiary hospital.

Methods

This retrospective cohort study was conducted at Al-Dabbous Cardiac Centre (DCC), Al-Adan Hospital, utilised pharmacy dispensing data for statins, ezetimibe, and PCSK9Is. Incident LLT users were defined as those without LLT prescriptions in the previous 12 months. The effectiveness of PCSK9Is (evolocumab and alirocumab) was assessed by relative reductions in LDL-C and non-HDL-C within 90 days of initiation and the proportion achieving 2021 Middle East consensus lipid targets. Descriptive statistics and relative median percentage reductions were used for analysis.

Results

Between 2017 and 2022, incident statin users declined by 31% (n=751), while high-intensity statin therapy (HIST) increased by 165% (n= 949). Ezetimibe and PCSK9Is users rose by 381% (n= 723) and 300% (n= 99), respectively.

Within 90 days of PCSK9I initiation, the median LDL-C (n=104) was 1.7 mmol/L, reflecting a 41.9% reduction (95% CI: -50.9% to -24.1%, p<0.001), and the median non-HDL-C (n=115) was 2.4 mmol/L, showing a 38% reduction (95% CI: -46.5% to -23.0%, p<0.001). Lipid targets were achieved by 43% for LDL-C <1.4 mmol/L and 45% for non-HDL-C <2.2 mmol/L (extreme risk), and by 52% for LDL-C <1.8 mmol/L and 53% for non-HDL-C <2.6 mmol/L (very-high/high risk).

Discussion/Conclusion

The decline in incident statin users suggests a shift toward primary care, with hospitals prioritising therapy intensification. Although PCSK9Is achieved significant lipid reductions, these results didn't fully replicate trial outcomes. Further investigation using comprehensive patient-level data is needed to confirm their effectiveness.

21. Measuring activities to enforce the prohibition on antibiotics being sold without prescription in eastern Europe and central Asia

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Introduction

All countries in the European region have laws that prohibit over-the-counter (OTC) sales of antibiotics (AB). However, AB sales OTC in eastern Europe and central Asia are still common. Knowledge of the character and extent of existing and planned activities, and barriers to these, to support enforcement of the prohibition in the region is lacking.

Aims/Objectives

To develop a questionnaire that measures the type and extent of activities enforcing the laws prohibiting AB OTC sales in eastern Europe and central Asia.

Methods

Scoping reviews of scientific literature, policy documents and grey literature in combination with semi-structured interviews with representatives from Ministries of Health of relevant countries and WHO experts, were conducted. A list of relevant enforcement activities was identified and included in the instrument. Questions and response options were developed and refined, balancing relevance and depth of content with respondent burden. Further, the layout was adjusted. The instrument will be validated in spring 2025 through cognitive interviewing to detect problems with comprehension, retrieval, decision and response.

Results

Three major themes have been defined and constitute the chapters of the questionnaire at this stage:

- 'Regulatory Framework and Monitoring Processes' (8 items) addressing regulations, frequency and scope of inspections, and monitoring criteria.
- 'Penalties and Enforcement Mechanisms' (12 items) exploring the sufficiency and application of penalties, challenges in enforcement, and strategies to promote compliance.
- 'Inspection and Monitoring Effectiveness' (7 items) measuring perceptions of the effectiveness of inspections and barriers to conducting them.

Discussion/Conclusion

To help reduce inappropriate use of AB in eastern Europe and central Asia, a new questionnaire identifying and measuring activities enforcing the laws prohibiting AB OTC sales in these countries is under development. The questionnaire is considered transferable to similar contexts, though final validation and subsequent refinements of the instrument is still in progress.

22. Primary care Pharmacist-led Actions in Community Drug Surveillance Systems on Illegal Drug Distributions and Inappropriate Drug Use in Local Communities in Thailand

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Introduction

Illegal drug distribution and inappropriate health product use are common in local communities in northern region of Thailand. Primary care pharmacists (PCP) are key actors in community drug surveillance systems (CDSS).

Aims/Objectives

To describe CDSS led by PCP.

Methods

A qualitative study used in-depth interview, focus group discussion, direct observations, and document research. Illegal drugs import across borders, use of harmful health products in community, and antibiotic use in fish farms were selected. 40 key informants from government, non-government, and public sectors of CDSS from 3 provinces in the northern region of Thailand were interviewed from November 2023 to May 2024.

Results

Imported illegal drugs were distributed in flea markets and grocery stores. Case reports related to harms from community hospitals were used to scope product surveillance by PCP with district secretary, public health personnel, police and military officers, and community health volunteers (CHV). Collaborations on product surveillance among officers were established with a neighbour country.

DSS actions on harmful health products in communities included active sharing information about their distributions among the stakeholders in the community networks (public health office, consumer council, monks, municipality, schools, and CHV), developing media to raise awareness and educating public, and implementing trigger tools from hospital database to identify harmful health products.

CDSS in fish farms was implemented by collecting and sharing data with key actors at provincial and district level (provincial department of fishery, veterinarians, public health officers, farmers, fisher cooperative organizations, university, and antibiotic distributors). Under food safety policy, farm surveillance, farmer education, water management, fish product improvement and marketing were carried out.

Discussion/Conclusion

CDSS led by PCP are active data collection and sharing on drug problems, engaging community stakeholders, educating the public, and taking legal actions to improve public awareness on illegal drug distribution and promote appropriate drug use.

23. Pharmaceutical waste reduction activities in pharmacies – a Delphi survey with pharmacy staff from Denmark and Iceland

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Introduction

Reducing pharmaceutical waste is crucial for minimizing environmental harm and ensuring sustainable medication use. Despite its recognized importance, limited knowledge exists on which activities are both impactful and feasible in pharmacy practice.

Aims/Objectives

This study aimed to rank the impact and feasibility of various pharmaceutical waste reduction activities in pharmacies.

Methods

Scientific and grey literature searches were conducted to identify studies addressing pharmaceutical waste reduction activities in pharmacies. These activities formed the basis of a questionnaire used in a two-round online Delphi survey with pharmacy staff from Denmark and Iceland. Participants ranked the impact and feasibility of each activity on a scale from 1 (no impact at all, absolutely not feasible) to 4 (high impact, highly feasible or already implemented).

Results

The literature search revealed 30 studies on pharmaceutical waste management, drug reuse, or other sustainability activities in pharmacies. From these, 34 pharmaceutical waste reduction activities were identified, grouped into 10 categories, and included in the initial questionnaire. A total of 114 participants enrolled in the surveys: 82% were pharmacists, 12% were pharmacy technicians; 65% worked in community pharmacies, and 18% in hospital pharmacies. Additionally, 55% reported “often” considering sustainability in their workplace, while 33% thought about it “sometimes.” Three activities ranked 3 or above for both impact and feasibility: (1) “Ordering expensive and rarely used medicines to the pharmacy the day before the patient needs them” (mean impact: 3.9, mean feasibility: 3.5), (2) “Dose-dispensed medicines” (mean impact: 3.9, mean feasibility: 3.0), and (3) “Ensuring patients can finish medications before expiration” (mean impact: 3.5, mean feasibility: 3.0).

Discussion/Conclusion

The study identified key activities balancing high impact and feasibility in reducing pharmaceutical waste in pharmacies. The findings provide a foundation for prioritizing actionable strategies to minimize pharmaceutical waste while maintaining high quality of patient care.

24. Why interdisciplinary approaches are essential for policy making and healthcare delivery – the case of Hospitals in the Home (HiTH)

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Introduction

Hospital services and care in the Global North are undergoing significant changes driven by increasing hospital costs, workforce shortages, and evolving patient preferences. The Danish government is adopting the Hospitals in The Home (HiTH) model to expand primary care and reduce hospital admissions. However, there is a shortage of comprehensive interdisciplinary research on the social and functional consequences of expanding home-based healthcare.

Research on HiTH primarily focuses on clinical and economic outcomes from a healthcare perspective. Recognizing the need for a broader, interdisciplinary approach to address medication management complexities within HiTH, social pharmacy researchers at the University of Copenhagen's Social and Clinical Pharmacy joined with the Centre for Privacy Studies to organize an interdisciplinary workshop in 2023 to explore the broad implications of introducing HiTH.

Aims/Objectives

To illustrate the process and results of this workshop.

Methods

The workshop included short lectures, transdisciplinary group work, and a plenum summary. Participants identified and categorized focus points for future research, which were condensed into four themes.

Participants primarily worked and lived in larger Danish cities, especially Copenhagen. Our transdisciplinary team included professionals and researchers from pharmacy, sociology, anthropology, history, theology, law, science and technology studies, health management, nursing, architecture, and health advocacy.

Results

Key themes identified for future HiTH research:

1. Definitions, concepts, and terms
2. The home: materiality, atmosphere, and everyday life
3. The home as a workplace for healthcare professionals
4. The social network: relatives, patients, and responsibilities

These themes address working environment, medicine management, and collaboration with healthcare professionals including pharmacists and pharmacies.

Discussion/Conclusion

The collaboration between Social and Clinical pharmacy and the Centre for Privacy Studies underscores the value of a diverse, interdisciplinary approach to policymaking, which enriches our understanding of medicine management and the future role of pharmacy in Hospitals in the Home (HiTH).

25. The Point-of-care DiagnosticS for respiratory tract infectionS **(PREDICTORS) Study: Developing guidance for using C-reactive protein** **point-of-care tests in the management of lower respiratory tract infections** **in primary care using a Delphi consensus technique**

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Introduction

Antimicrobial resistance is a growing global health challenge, exacerbated by unnecessary antibiotic use for respiratory tract infections (RTIs), particularly in primary care. In the United Kingdom, nearly half of primary care antibiotic prescriptions are for RTIs, many of which are likely viral in origin. Point-of-care tests (POCTs), such as C-reactive protein (CRP), could provide rapid diagnostic information to help prescribers determine whether antibiotics are clinically indicated. However, no formal guidance exists on how CRP POCTs should be used in primary care for managing lower RTIs (LRTIs).

Aims/Objectives

To develop guidance for using CRP POCTs in the management of LRTIs in primary care.

Methods

A scoping review informed the development of the guidance statements. A Delphi consensus process followed with an expert panel (n=19) from diverse healthcare backgrounds, including general practitioners, pharmacists, and respiratory physicians. Three rounds of web-based questionnaires were distributed to achieve consensus on 49 statements. Panellists rated each statement using a 5-point Likert scale, with acceptance, revision, or rejection determined by median scores, interquartile ranges, and feedback.

Results

Eighty relevant studies were identified through the scoping review, highlighting CRP as the most utilised POCT for LRTIs in primary care. Following three rounds of web-based questionnaires, 37 statements were accepted, categorised into five sections: intended use, bacterial LRTI detection and antibiotic provision, communication strategies, device performance, and user operation. Statements include the need for healthcare professional training, interpreting specific CRP cut-off values and recommended action. Three statements related to CRP POCT use in community pharmacy were rejected due to concerns about antibiotic stewardship and patient care fragmentation.

Discussion/Conclusion

A set of guidance statements for using CRP POCTs in LRTI management in primary care is now available, providing a foundation for clinical practice. To ensure effective implementation, wide dissemination and increased access to CRP testing are essential.

26. The Medicines Optimisation Innovation Centre (MOIC): A dedicated centre driving innovation in medicines optimisation - influencing healthcare policy

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Introduction

Sub-optimal medicines use is a challenge globally, contributing to poorer health outcomes, inefficiencies and waste. The regional Medicines Optimisation Innovation Centre (MOIC) was established in Northern Ireland (NI) by the Department of Health (DH) in 2015 to support implementation of the Medicines Optimisation Quality Framework.

Aims/Objectives

MOIC aims to inform policy and provide support to commissioners to improve population health and wellbeing, providing evidence to influence change across four MOIC strategic themes.

Methods

Securing evidence to inform DH policy, MOIC leads the evaluation of an array of Health and Social Care cross-sector projects agreed in an annual DH business plan. In addition MOIC collaborates with partners across academia, industry (SMEs and multinationals, linking with Invest NI), healthcare, policy, patients and representative organisations to undertake projects. Partnerships extend across Ireland, Europe and internationally, including large European funded projects.

Results

Having established more than 25 partnerships across Europe, participated in numerous projects and disseminated extensively, MOIC has influenced healthcare policy and pathway redesign, for example: The iSIMPATY model has been accepted by DH as the gold standard for medicine review in NI. The SHAPES project is informing digital enablement. Post discharge telephone follow up by clinical pharmacists is now routine in a Trust and Consultant Pharmacists for Older People model has been scaled and spread across NI. The Pharmacy First Service in Community Pharmacy using rapid diagnostics in the management of sore throats and urinary tract infections is well established and reports have been published on new models of prescribing by non-medical prescribers. Work has commenced on a pharmacogenomics informed medicine review pathway.

Discussion/Conclusion

MOIC has demonstrated considerable success informing healthcare policy and practice and driving innovation and best practice in medicines use and associated technologies.

27. Knowledge Gaps influencing Inappropriate Surgical Antibiotic Prophylaxis Prescribing in Kuwait: Qualitative Study

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Introduction

Inappropriate surgical antibiotic prophylaxis (SAP) prescribing is a major contributor to antimicrobial resistance and suboptimal surgical outcomes. Findings from our point prevalence survey (PPS) revealed significant deviations from SAP guidelines in obstetric and gynaecological surgery in Kuwait.

Aims/Objectives

This study investigated the role of knowledge gaps in driving inappropriate prescribing.

Methods

Semi-structured interviews were conducted with thirteen healthcare professionals, consultants and registrars, in multiple hospitals in Kuwait. Thematic analysis guided by COM-B (Capability, Opportunity, Motivation, Behaviour) was employed to explore how knowledge influences SAP prescribing to explain the PPS results.

Results

Analysis identified critical knowledge-related factors contributing to inappropriate SAP prescribing. Limited awareness of guidelines was evident, with registrars often relying on consultants, perpetuating outdated practices. Misconceptions about the type and duration of SAP were common. Prolonged postoperative antibiotic prescribing beyond guidelines was frequently justified by perceived safety concerns. Participants highlighted the absence of structured training programs to enhance their knowledge of evidence-based SAP prescribing, emphasising the need for mandatory courses on antibiotics for all healthcare staff. Knowledge gaps contributed to the routine use of broad-spectrum antibiotics and unnecessary anaerobic cover with metronidazole, reflecting outdated and empirical prescribing behaviours.

Discussion/Conclusion

The findings underscore the need for structured education and training programs, clear and accessible guidelines, and regular audits to reinforce evidence-based practice. Bridging these gaps could reduce inappropriate SAP prescribing, mitigate antimicrobial resistance, and improve surgical outcomes.

28. Pharmacists' Perspectives on the Challenges of Medicine Shortages in Estonia

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Introduction

Medicine shortages are an increasing problem that significantly impacts the daily lives of both patients and pharmacists. According to Beuriot and Crunenberg (2024), these shortages affect pharmacy practice and can negatively influence pharmacists' well-being.

Aims/Objectives

This study aimed to gain insights into the daily challenges faced by Estonian pharmacists regarding medicine shortages in both community and hospital pharmacy settings.

Methods

A validated electronic questionnaire consisting of 24 open- and multiple-choice questions was distributed to pharmacists (N=1750) across Estonian pharmacies (N=506) in December 2024.

Results

Only 63 pharmacists responded, representing 3.6% of the total pharmacist population. Two-thirds of the participants had over 10 years of experience in the field. A significant majority (80%) reported experiencing medicine shortages daily. This situation increases their responsibility to ensure that medicines are in stock (88.9%) and extends the time required for counselling patients (92.1%). Furthermore, 73% of participants reported an increase in frustration by patients directed towards them. The primary consequences of medicine shortages include delays in patient treatment (90.5%), a decrease in people's trust in healthcare (76.2%), and worsening adherence to medications (74.6%). The main source of information regarding medicine shortages is the ordering environment provided by pharmaceutical wholesalers (93.6%), although the public medicine register is also deemed relevant (77.8%). Having prior information about upcoming medicine shortages allows pharmacists to prepare better for medicine shortages and seek alternative solutions in advance. Key stakeholders identified in addressing these shortages include medicine market-authorization holders (82.5%), pharmaceutical wholesalers (77.8%), and the State Agency of Medicines (76.2%). Notably, pharmacists do not see themselves as significant contributors to resolving the issue of medicine shortages.

Discussion/Conclusion

Medicine shortages are a daily challenge for 80% of pharmacists, increasing their workload and patient frustration. These shortages lead to treatment delays, decreased trust in healthcare, and poorer medication adherence.

29. Digital caregivers' prescribing of over-the-counter drugs in Sweden

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Introduction

Digital caregivers have given patients new possibilities to seek treatment after their invention in 2016. County council Region Sörmland (Sweden) has given out guidelines for prescribing over-the-counter drugs (OTCs). In Sweden there are no prescribing pharmacists and patients often consult Internet-based GPs first to get prescriptions.

Aims/Objectives

To describe digital caregivers' prescribing of OTCs. Analyses were made to detect differences in prescribing with respect to patients' gender and age. The prescribing was compared to local guidelines for prescribing OTCs.

Methods

A quantitative retrospective cohort study. Data collection was made from a register for prescriptions by digital caregivers in Sörmland from January 2020 to March 2021. Appointments selected with prescription in relevant ATC-codes. Analysis was performed for age and sex.

Results

The biggest ATC group was R06 with 3296 prescriptions. Women got significantly more prescriptions in the ATC group N02 while men got significantly more prescriptions in D01, A06 and C05. Women were significantly older in the ATC groups D02, R01 and R06 and men were significantly older in A02 and M01. Further analysis showed there were significant differences in therapy choices between men and women in ATC groups A07, C05, N02, R01 and R06.

Discussion/Conclusion

The results showed that OTCs are prescribed to a relatively big extent. Women used more digital care, leading to more OTC prescriptions. Due to lack of information in the register, it is hard to draw a conclusion regarding the extent of OTCs being prescribed within the relevant ATC groups (differences in package size are differently classed). Prescriptions of OTCs by GPs is a cost for the society which could be used more efficiently. The pharmacies services could be expanded with for example prescribing pharmacists to replace the online appointments and prescriptions of OTC.

30. Exploration of Enabling Factors of Community Participation in Drug Surveillance System at District Level

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Introduction

Community participation (CP) has been recognised as one of the important components of drug surveillance systems (DSS), resulting in a decrease in prevalence of illegal drug distribution in grocery stores. Little is known on factors of CP in DSS.

Aims/Objectives

To identify factors affecting CP in DSS.

Methods

Focus group discussions with key informants from 6 communities in 6 provinces from 4 regions of Thailand was conducted. The communities were chosen using the district-level RDU performance score as 'Best' and confirmed by expert opinion. The performance level was considered by an information feedback loop between hospital and community and performance improvement after actions. Eight stakeholders from each community, including pharmacists, public health technical officers, directors of sub-district health promoting hospitals, village health volunteers, village headmen, and community representatives, participated in the discussions. Focus group discussion guide was developed using the WHO surveillance model, Spider-gram components of CP, Spectrum of Public Participation, and Thailand's district-level community participation mechanisms.

Results

Semi-urban areas faced diverse beliefs about health products, illegal drug distributions, and inappropriate drug use behaviours, including misuse of health products ordered from online markets. DSS was operated by formal committees from private and government agencies. Rural areas reported limited drug access, reliance on local stores, and illegal mobile vendors. DSS was mostly led by pharmacists working directly with local stakeholders. Ten key factors affecting CP in DSS on RDU were identified, including integrated management with strong community networks, continuous public education on health and drugs, capacity building for healthcare volunteers, effective leadership support, proactive monitoring of inappropriate drug distribution and feedback, engagement of religious and education sectors, strategic communication using mobile applications, relationships between healthcare workers and the community, and effective coordination among DSS networks.

Discussion/Conclusion

The identified factors can serve as policy recommendations for designing and developing community-based DSS.

31. Effectiveness of deprescribing tools and interventions in detecting and deprescribing potentially inappropriate medications and their effect on patients' clinical outcomes: A systematic review

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Introduction

Polypharmacy and potentially inappropriate medications (PIMs) are linked to adverse outcomes, yet the effectiveness of existing deprescribing tools remains uncertain and context dependent.

Aims/Objectives

This systematic review summarised recent evidence on the impact of deprescribing tools on patients' clinical outcomes.

Methods

Four databases (Embase, PubMed, Scopus, Medline) were searched for observational studies (OSs) and randomised control trials (RCTs) (2010–2023) reporting the application of deprescribing tools to detect/deprescribe PIMs, with/without clinical outcomes. Keywords and MeSH terms (e.g., "polypharmacy", "deprescribing") were used and linked by Boolean operators. Due to substantial heterogeneity, meta-analysis was not feasible to be performed. Consequently, the clinical outcomes of patients were summarised narratively.

Results

Out of 5,579 studies, 82 were included (n=58 OSs, n=24 RCTs). Half (n=42 studies: n=18 OSs, n=24 RCTs) reported clinical and other outcomes, with OSs focusing on mortality and change in the number of medications. All 24 RCTs used unique interventions, mainly deprescribing algorithms (n=22 (91.1%)). OSs reporting the application of different deprescribing algorithms along with some explicit tools (e.g., STOPP and STOPPPFrail criteria). Clinical outcomes, including drug burden index (n=4 (10.6%)), falls (n=9 (37.5%)), healthcare visits/need (n=14 (33.3%)), all-cause mortality (n=14 (33.3%)), and quality of life (n=3 (12.5%)), showed mixed results, which predominantly suggested insignificant impact. Specific clinical end points (n=2 (4.7%)) (e.g., change in blood pressure) showed no or negative impact. Other outcomes, such as deprescribing rates and reduction in medication numbers (n=25 (59.5%)), also showed mixed results, with few studies reporting a significant impact on the latter at shorter follow-ups (e.g., three months) but predominantly insignificant results at longer periods (e.g., one year), likely due to deprescribing failure.

Discussion/Conclusion

Findings indicate that the effectiveness of deprescribing and deprescribing tools is still uncertain. There is a need for prospective studies with sufficient follow-up period to confirm the effectiveness on long-term outcomes.

32. Types of potentially inappropriate medications (PIMs) classes targeted by deprescribing tools and interventions: A systematic review

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Introduction

Polypharmacy can lead to drug-related problems (DRPs) and interactions, often involving potentially inappropriate medications (PIMs). PIMs can be identified and, when appropriate, deprescribed using various tools/interventions; however, gaps remain regarding the suitability and effectiveness of specific tools for different medication classes.

Aims/Objectives

This systematic review aimed to identify types of medication classes targeted by deprescribing tools, as well as the most frequently applied deprescribing tools and interventions.

Methods

Four databases (Embase, PubMed, Scopus, Medline) were searched for observational studies (OSs) and randomised control trials (RCTs) (2010–2023) reporting the application of deprescribing tools to detect/deprescribe PIMs. Keywords and MeSH terms (e.g., "polypharmacy", "deprescribing"), linked with Boolean operators. Results were summarised narratively and descriptively. Medications were classified by shared inappropriateness (e.g., risk of fall) and physiological body systems.

Results

Eighty-two studies (n=58 OSs, n=24 RCTs) were included. A total of 44 deprescribing tools/interventions were identified, including 24 unique interventions applied in the 24 RCTs. In total, 74 targeted medication classes were identified (239 active substances) and categorised into 11 groups. The most common groups included Frailty-increasing drugs (FIDs) (36 classes), Fall risk-increasing drugs (FRIDs) (n=35), drugs with major/minor anticholinergic properties (DMAPs) (n=31), cardiovascular drugs (n=19), and psychotropics (n=14), based on the number of classes within each group. The top 10 targeted PIMs based on the detection frequency included alpha-receptor blockers (detected 33 times), proton pump inhibitors (n=27), statins (n=22), calcium/vitamin D supplements (n=21), and antidiabetics (n=19). The most commonly applied deprescribing tools were STOPP (n=17 (20.2%)), Beer's criteria (n=13 (15.4%)), STOPPFrail (n=11 (13.1%)), and STOPPFall (n=6 (4.7%)).

Discussion/Conclusion

Deprescribing tools target a wide range of medication classes, with frailty- and fall risk-increasing drugs (detected by STOPPFrail and STOPPFall) being the most frequently addressed. Despite diverse tools and targeted medications, standardisation and further research are needed to optimise their clinical effectiveness.

33. Scope and factors associated with dietary and vitamin and mineral supplement (VMS) counselling by pharmacists in Australia

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Aims/Objectives

To compare the scope of dietary and VMS advice provided by pharmacists and to identify factors associated with the frequency of counselling provision.

Methods

A 62-item online survey was conducted with Australian pharmacists, recruited via convenience sampling. The survey collected demographic details, pharmacy experience, current frequency of diet and VMS counselling on common conditions (19) for which patients seek diet and VMS information from pharmacists; attitudes to and confidence in providing dietary and VMS counselling.

SPSS version 29 (IBM) was utilised for statistical analysis, including descriptive analysis. Univariable and multivariable logistic regression were performed to identify variables associated with frequency of diet and VMS counselling). Significantly associated variables were entered into a multivariable model. The model fit was tested using the Hosmer–Lemeshow statistic. The significance was determined by $p < 0.05$.

Results

The proportion of pharmacists providing counselling daily or every 2-3 days was 45% for dietary advice and 66% for VMS advice. In terms of dietary advice, frequently counselled topics were type 2 diabetes and GORD. For VMS, commonly consulted topics were more focused on prevention e.g. in conditions such as pregnancy and pre-conceptual care.

In the univariable analysis, older age group, more years of pharmacy experience, higher attitude and confidence scores were associated with greater frequency of diet counselling provision. In the multivariable model, only higher confidence scores remained significant (OR 3.18 95%CI 1.66-6.10). Pharmacists working in community pharmacy (OR 4.13 95%CI 1.30-13.15) with higher confidence scores (OR 1.94; 95%CI 1.63-3.68) were associated with greater frequency of VMS counselling.

Discussion/Conclusion

Respondents provided dietary and VMS counselling on various topics. Pharmacists differed in confidence levels over topics, however the greater their confidence, the more frequently they provided dietary and VMS counselling. Hence, improving confidence through better pharmacy nutrition education may improve provision of nutrition counselling to improve patient outcomes.

34. Clinical Decision Support (CDS) tools for Medicine Optimisation in Hospitals

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Introduction

Medications benefit patients by treating their underlying conditions and preventing associated symptoms. However, they carry risks of unintended harms disproportionately affecting vulnerable populations. Improving medicine delivery safety is paramount and can be enhanced through use of Digital Health Interventions (DHI), such as Clinical Decision Support (CDS) tools.

Aims/Objectives

To summarise the available evidence on CDS tools design features and functionalities. The objective is to establish a comprehensive taxonomy of these characteristics, with a secondary aim of demonstrating the features that maximise the use of CDS tools and therefore support safer prescribing.

Methods

A search strategy will be developed using key concepts relating to adult patients in secondary care settings and the design features of CDS tools for prescribing. This strategy will be applied to databases including CINAHL, SCOPUS, and Web of Science focusing on studies published between 2015-2025. To evaluate the feasibility of the review and identify potential gaps in the literature, a preliminary search for systematic and scoping reviews was conducted in October 2024. This initial search aimed to assess the current body of evidence available.

Results

The preliminary search yielded 495 reviews. Following the screening process, 17 articles were selected for analysis. Results were categorised by tool features and technical characteristics including integration and alert types. This process revealed a lack of existing reviews that summarise and evaluate the input and output features, design and function of CDS tools, indicating the necessity of our proposed scoping review. The scoping review will categorise the features found in the primary literature using The Performance of Routine Information System Management Series (PRISM) framework supplemented by a systems design checklist specifically developed for this study.

Discussion/Conclusion

DHI is an emerging field and instrumental in overcoming medicines related challenges. Despite this, there is minimal literature published on their design features and functionality.

35. Pharmacist Intervention for Lower Urinary Tract Symptoms – Approaches by the Pharmacist

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Introduction

Older adults are at greater risk for lower urinary tract symptoms (LUTS) which impact morbidity and carry stigma. Most people with LUTS suffer in silence for years before being assessed yet there is extensive evidence supporting non-pharmacologic and pharmacologic interventions. Pharmacists in the community are ideally located to identify, assess, and determine and initial course of action for patients with LUTS.

Aims/Objectives

The purpose of this project was to assess the impact of pharmacist intervention on community dwelling older adults with LUTS. This presentation will focus on the types of interventions selected by pharmacists when caring for patients with LUTS.

Methods

A randomised controlled trial was conducted with older adults presenting at community pharmacies. If the patients screened positive for LUTS they were assigned to the intervention or control group. Validated outcome measures were compared for patients at baseline and at the end of the 8-week study. Types of interventions and practices by pharmacists were documented and analysed descriptively.

Results

A total of 68 patients (n=34 in intervention group) were enrolled, 44% female. 57% white. With the pharmacist assessment there were 3 patients with medications changed, lab work ordered in 4 patients, and 10 referrals to other healthcare professionals. Twenty patients had recommendations to change caffeine intake, 17 to change fluid intake, and 4 to reduce alcohol. Pelvic floor muscle exercises were recommended in 4 patients and 7 were encouraged to practice scheduled toileting.

Discussion/Conclusion

Pharmacist assessment for LUTS results in primarily non-pharmacologic interventions and referrals rather than changes to medications. The breadth of pharmacist interventions demonstrates that they can address a complex geriatric syndrome such as LUTS in the community.

36. Person-centred care in practice: Observational study of pharmacist and healthcare team encounters with patients with chronic pain in primary care

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Introduction

Multidisciplinary interventions are recommended for the management of chronic pain, alongside person-centred care (PCC). A model developed by Gothenburg Centre for Person-centred Care (GPCC) highlights understanding the patient as an individual and fostering the partnership between patient and healthcare professionals. This approach leads to improved patient outcomes, such as increased self-efficacy, reduced hospital stays, and fewer rehospitalizations. Many Swedish healthcare claim to follow GPCC, yet studies indicate otherwise.

Aims/Objectives

To explore how pharmacists and healthcare teams work person-centred in a multidisciplinary team-based intervention for chronic pain patients in primary care.

Methods

The observations focused on person-centred care during consultations between patient and healthcare professionals (pharmacist, physician, psychologist, physiotherapist and care manager). A preliminary analysis was conducted based on five pharmacist consultations and five team-rounds with patients. Data were analysed using a qualitative deductive approach guided by the GPCC three main concepts; initiating, working and safeguarding partnership.

Results

Pharmacist A initiates the partnership by introducing themselves to build rapport and partially establishes a shared agenda. They work the partnership by identifying goals and treatment preferences based on the patient's narrative and safeguarding the partnership through transparent documentation. Pharmacist B focuses on the patient's story but makes limited efforts to build personal contact. By emphasising the patient's opinion in proposed treatments, they promote working in partnership and partially safeguarding it. Team-rounds primarily emphasised working in partnership by together creating health plans based on the patient's summarised narrative. The team praised, motivated and emphasised the patient's strengths to increase the participation. However, the documentation of health plans and goals was notably absent during the meetings, impacting the safeguarding of the partnership.

Discussion/Conclusion

The implementation of PCC varies across consultations. While the patient's opinions consistently was sought, greater emphasis is needed on initiating and safeguarding the partnership.

37. Digitalisation and the pharmacy market: Key factors in choosing between online and physical pharmacies

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Introduction

The digital transformation of society, including the pharmacy market, has significantly influenced how individuals access healthcare services. In Sweden, a substantial and rising proportion of the population now collect their prescription medications online. This shift reflects broader trends in digital consumer behaviour and has implications for pharmacy practice, medication accessibility and patient communication.

Aims/Objectives

To explore the factors that determine whether patients collect prescription medications from physical pharmacies or online pharmacies.

Methods

An online survey was conducted in October 2024 directed to adults who had collected prescription medications in the past year. The survey focused on patients' choice of pharmacy channel and reasons for this. In all it contained eight questions. Questions were developed based on previous research and marketing surveys.

Results

Of the 1065 persons who answered the survey, 79% chose to pick up their medication at a physical pharmacy. The proportion of respondents who stated that they were long-term users (using their medication for at least 6 months) was significantly higher in the group that ordered their prescription medication online (91 percent) than in the group that collected their prescription medication from a physical pharmacy (76 percent).

For those choosing a physical pharmacy, location was the main reason for their choice (64%), followed by staff attitude (5%). Online pharmacy users prioritised convenience (46%), pricing for OTC products (20%) and delivery options (14%). Of those choosing online pharmacies, only one percent asked for advice/counselling from a pharmacist.

Discussion/Conclusion

Different factors are important to patients when choosing between physical and online pharmacies. It seems as long-time users of medicine are more prone to choose online pharmacies, and that there is a lack of counselling in this pharmacy channel. This can possibly lead to worse health outcomes as potential questions are not asked and drug related problems are not solved.

38. Exploring Medication Adherence in Heart Failure from a patient perspective – a qualitative study

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Introduction

Optimal medication adherence (MA) is essential for symptom management and disease stabilisation in patients with heart failure (HF). No validated HF-specific MA assessment tool exists, limiting the ability to identify and address key adherence barriers effectively.

Aims/Objectives

To explore HF patients' perspectives on MA and factors contributing to non-adherence. The findings will contribute to the development of a HF-specific MA assessment tool tailored to the needs and experiences of this population.

Methods

Four focus group interviews (FGIs) were conducted: three with HF patients at a cardiac rehabilitation centre and one with outpatients from Landspítali – The National University Hospital of Iceland. Additionally, twelve in-depth interviews (IDIs) were conducted with patients randomised from the Icelandic HF Registry. All interviews, conducted between May 2022 and October 2023, were transcribed and analysed using inductive thematic analysis to identify key themes.

Results

A total of 27 HF patients (12 women), aged 40–89 years participated. Coding revealed four overarching themes influencing MA: (1) Practical factors surrounding medication intake and use, (2) Psychological and social factors, (3) Healthcare providers, healthcare system, and services, and (4) Disease- and medication-influencing factors. Practical issues included simplifying and organising medication schedules, adherence aids, dose adjustments, drug formulations, and number of medications. Psycho-social factors encompassed acceptance of illness, medication beliefs, patient accountability, mental health challenges, social support, age, and difficulties in personal life. Healthcare-related factors highlighted MA assessment, follow-up, patient-provider relationship, medication education, healthcare access, HCP support at home, interprofessional collaboration, and healthcare costs. While polypharmacy itself was not a major concern, MA was influenced by diuretic effects on daily life, side effects, disease symptoms, and physical or cognitive impairments.

Discussion/Conclusion

The findings highlight several interrelated factors affecting adherence, emphasising the need for a comprehensive HF-specific MA assessment tool to support targeted interventions and improve patient outcomes.

39. Treat the Person: Save the planet: iSIMPATHY, a person-centred approach to addressing polypharmacy

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Introduction

The iSIMPATHY project built on previous work of SIMPATHY, recognising that the increase in multiple long-term conditions and associated polypharmacy is not limited to the older person. Fundamental to the approach is that health and care providers work in partnership with patients to enable shared decision-making regarding medication, improving patient adherence and medicines related outcomes.

Aims/Objectives

Running across Scotland, Northern Ireland and the Republic of Ireland, iSIMPATHY delivered transformational change at scale through partnership working and sharing of expertise.

Methods

Using a multidisciplinary collaborative approach centred around pharmacist-led medicines reviews, this innovation ensured the best and most sustainable outcomes with medication use in people taking multiple medicines.

Over three years the project trained over 160 additional GPs, hospital doctors and pharmacists to undertake comprehensive medicines reviews and delivered over 6,000 medicines reviews with patients. The iSIMPATHY evaluation, illustrates the effects of prioritising working together to address inappropriate medication use, improving patient safety, care and outcomes whilst delivering significant benefits to the wider healthcare system, including cost savings and reduction of waste.

Results

Key findings include:

- 82% of interventions were rated clinically significant, while 4% of interventions (968) potentially prevented major organ failure or adverse drug reactions of similar clinical importance
- the appropriateness of medicines improved in 92% of reviews, with an average reduction of one medicine (from 12 to 11) for people from deprived areas as well as those in affluent areas
- direct medicines cost savings of £13,100 with a potential total of £168,800 savings from avoided healthcare resource usage per 100 reviews
- patients reported better understanding of their medicines, improved adherence and experienced less harm
- an average of 7.4 Quality-Adjusted Life Years (QALY) were gained per 100 patients.

Discussion/Conclusion

iSIMPATHY created a blueprint for undertaking medicines reviews for people managing polypharmacy by delivering integrated practice by multi-professional teams across a range of health and care settings.

40. Diabetes Care in Pharmacies: Use of Medications, Medical Equipment, and Pharmacy Services in Norway

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Introduction

In 2020, 221,000 Norwegians collected antidiabetics from pharmacies, and this customer group is increasing. New diabetes medications and technologies are emerging, increasing the importance of pharmacies to support individuals with the disease.

Aims/Objectives

To describe the use of medications, medical equipment, and pharmacy services among pharmacy customers with diabetes.

Methods

We conducted a questionnaire-based cross-sectional study. Pharmacy students interviewed pharmacy customers with diabetes in two two-month periods during spring 2023 and spring 2024.

Results

Overall, 1,168 pharmacy customers participated, 17% had type 1 diabetes (T1D), 81% had type 2 diabetes (T2D), and 2% had other diabetes. Among 200 pharmacy customers with T1D, 85% used only insulin, while 5% added oral antidiabetics. Of the 946 with T2D, 39% used only oral antidiabetics, among these 47% metformin monotherapy, and 13% used insulin. The mean HbA1c was 54.8 mmol/mol for T1D and 53.8 mmol/mol for T2D, but 35% with T1D and 53% with T2D did not know their HbA1c. Among all insulin users, 42 (10%) used a smart pen and 129 (29%) did not change the needle with each injection. Overall, 415 (36%) measured blood glucose at least twice daily. Tissue glucose sensors were used by 30% with T1D and 0.5% with T2D. Only 9% had used the Medicine Start service for people with T2D. Nevertheless, 40% of T2D-customers and 25% of T1D-customers were willing to pay for diabetes guidance at the pharmacy, and 23% were willing to pay over £15.

Discussion/Conclusion

A large proportion of people with diabetes do not know their HbA1c target, and a significant number do not change needles as recommended. Relatively few use smart pens and tissue glucose sensors. There is considerable potential for further developing diabetes care in pharmacies, shown by a strong desire for guidance and willingness to pay within the customer group.

41. Less analgesics prescribed after internet primary health care (PHC) appointments than after physical PHC – preliminary results from a Swedish database cohort study

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Introduction

Digital healthcare has increased the last decade and offers benefits like accessibility and convenience. Earlier studies have shown that particularly younger and healthier populations seek Internet PHC. Pain is one of the most common reasons for seeking PHC. Alarms have been raised concerning overprescription of painkillers in general and opioids especially.

Aims/Objectives

This study investigates differences in analgesic prescriptions between traditional physical primary health care (physical-PHC) and online primary health care (internet-PHC) in Sweden.

Methods

From 160,238 appointments registered in a quality database in the county Sörmland, Sweden, from January 2020 to March 2021 all appointments resulting in an analgesic prescription was analysed.

Results

Preliminary analysis revealed that internet-PHC prescribed significantly fewer analgesics than physical-PHC. Among internet-PHC appointments, less than 5% resulted in analgesic prescriptions, compared to 28-35% in physical-PHC. Opioid prescriptions were extremely rare in internet-PHC. Lighter analgesics, such as NSAIDs and paracetamol, were the most frequently prescribed drugs in both settings. However, internet-PHC consistently prescribed fewer analgesics overall.

Discussion/Conclusion

The results suggest that internet-PHC is less likely to manage severe pain cases compared to physical-PHC. This disparity could stem from the challenges of diagnosing and managing pain in virtual settings, which often lack comprehensive physical examinations and laboratory testing. Furthermore, digital healthcare's limited integration with traditional systems and lack of communication between providers might contribute to prescribing patterns. The study underscores the importance of regulating digital healthcare to maintain quality and prevent misuse, particularly in light of ongoing concerns about overprescription in certain contexts. Overall, internet-PHC represents a complementary, though distinct, approach to traditional care, with unique advantages and limitations.

Medicine Safety and Effectiveness

42. Co-design and development of a community pharmacy-based CVD risk screening service in Saudi Arabia: A Multi-stakeholders Nominal Group Technique (NGT) Consensus method.

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Introduction

Cardiovascular diseases (CVDs) are the leading cause of death in Saudi Arabia, making their prevention a top public health priority. Despite the success of community pharmacy-based CVD risk screening programmes internationally, no similar programme exists in Saudi Arabia.

Aim/Objectives

To co-design a community pharmacy-based CVD risk screening service in Saudi Arabia through stakeholder involvement and consensus-building.

Methods

A modified nominal group technique (NGT) was employed, integrating a pre-NGT questionnaire and an in-person NGT meeting. Purposive sampling was adopted to recruit experts from Saudi Arabia. Ideas regarding the service-targeted populations, screening processes, and post-screening interventions were collected from a literature review and pre-NGT questionnaire. Experts discussed and ranked these ideas by priority. A 70% consensus level was considered acceptable.

Results

Six experts attended the NGT meeting including a clinical pharmacist, a community pharmacist, a representative from the Ministry of Health, a public health representative, and two community pharmacy owners. Six ideas for age groups, 12 for targeted populations, 10 for screening processes and 8 for post-screening interventions were considered during the NGT meeting. The prioritised age group was ≥ 40 years, with priority given to individuals with comorbidities or currently on treatment for those conditions, with a family history of CVDs, or any lifestyle-related risk factors, currently on medications that cause CV harm, without comorbid conditions and not currently on treatment for any comorbidities. The top 6 screening process priorities included calculating the CVD risk scores, collecting patients' data, point of care testing, anthropometric measurements, diabetes risk assessment, and medication adherence assessment. The top 3 interventions focused on education, physician referrals with follow-ups, and medication therapy management with follow-ups. A 100% consensus was achieved on the final priorities.

Discussion/Conclusion

This study has mapped a potential model for the service. Further research is required to achieve national consensus using an e-Delphi.

43. Developing a medication safety self-assessment tool for rural primary care units - A case from Finnish Lapland

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Introduction

In rural areas, primary care faces several challenges, and medication therapy is one of the most complex processes. With a specific, proactive medication-safety self-assessment tool designed for rural primary care units, healthcare professionals could identify development needs in their medication processes.

Aims/Objectives

This study aimed to develop a comprehensive yet practical medication-safety self-assessment tool for rural primary care settings to improve safety of the medication processes.

Methods

A preliminary tool was designed based on three national and international risk management tools. The statements of the preliminary tool were evaluated using a two-round Delphi panel. Evaluated aspects were suitability for primary care settings, patient safety relevance, and the necessity of the statements to be included in the developed rural, primary care, medication-safety self-assessment tool.

Results

In the first Delphi round, a consensus was reached on 39% of the statements, of which 86% were included and 14% were excluded from the final primary care medication-safety self-assessment tool. In the second round, 84% of the statements reached a consensus, of which 70% were excluded and 30% were included in the final tool. The 144 included statements were divided into 12 thematic sub-groups: 1. Patient information, 2. Information, 3. Communication; 4. Drug labelling, packaging and nomenclature; 5. Storage and distribution, 6. Medication devices, 7. Environment, workflow and staffing patterns; 8. Staff competency and education, 9. Patient education, 10. Preventive risk management, 11. Learning from medication safety incidents, and 12. Electronic health records.

Discussion/Conclusion

The medication-safety self-assessment tool is targeted for proactive medication risk management in rural primary care settings. In the case of Lapland, the study group recommends that the pharmacies coordinate the self-assessment in healthcare units, which the units could complete before their annual remote audit. Adoption of the tool to rural primary care environments in different countries should be further investigated.

44. Drug-related problems experienced by prescription medicine users

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Introduction

Pharmacotherapy should be rational, i.e. effective, safe, of high quality, cost-effective, and equal. However, there can be problems with pharmacotherapy. Drug-related problems (DRPs) are events that actually or potentially interfere with the desired health outcomes of pharmacotherapy. DRPs have been investigated, particularly on the basis of observations made by healthcare professionals. There is little research from the medicine users' perspective.

Aims/Objectives

To investigate DRPs experienced by prescription medicine users and whether they have received help for these problems.

Methods

An online survey was conducted via the nationwide patient portal MyKanta in October 2021. The survey was targeted at adults of full age and legal capacity who had requested at least once a prescription renewal via MyKanta. The data were analysed using frequencies and content analysis.

Results

A total of 1694 prescription medicine users responded to the survey. Of them, 51.1% had experienced DRPs in the previous year. The most commonly reported DRPs were adverse effects (21.5%), insufficient effect (17.7%), and high cost of the medicine (12.1%). Other experienced problems included, for example, being prescribed a medicine that the user did not feel was necessary (6.7%), and unclear instructions on how to use the medicine (6.5%). Of those who reported DRPs (n=866), 42.6% had received help from healthcare or a community pharmacy. The most commonly reported help (n=369) was advice or guidance without specifying where the help came from (35.8%) and advice or guidance from a pharmacy (26.8%).

Discussion/Conclusion

DRPs are common among prescription medicine users, most of whom do not get help for these problems. Healthcare practices should be developed to better identify and solve DRPs. One way to do this is regular pharmacotherapy monitoring, in which the role of pharmacies should be strengthened.

45. Is therapeutic monitoring and/or identifying and solving medication-related problems a statutory task of community pharmacies as viewed from the perspectives of health care professionals and customers?

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Introduction

Even though medication counselling during dispensing is a statutory task for community pharmacists in all Nordic countries, legislation does not specify the contents. Research shows variation in the quality of medication counselling. A previous report by the Finnish Medicines Agency FIMEA concluded that it is unclear whether therapeutic monitoring and/or identifying and solving medication-related problems are statutory tasks of community pharmacies or extended pharmacy services that can be charged with an extra fee.

Aims/Objectives

The aim of this study, commissioned by the Ministry of Social Affairs and Health, was to define whether therapeutic monitoring and/or identifying and solving medication-related problems are statutory tasks of community pharmacies.

Methods

Surveys based on previous research were conducted for pharmacists (n=534), nurses (n=271), and customers (n=138), and interviews with physicians (n=8). Quantitative data was analysed with descriptive statistics and qualitative data with inductive content analysis.

Results

In addition to contents related to proper medication use, pharmacists, nurses, and customers considered that pharmacist should ensure that the medicine is used as directed (97%, 80%, 69%, respectively), provide adherence support (80%, 51%, 50%, respectively), identify if any medication-related problems had occurred (88%, 81%, 77%, respectively), and refer to health care, if necessary (97%, 89%, 86%, respectively). According to physicians' interviews, pharmacists were particularly expected to evaluate medication use adherence and potential problems.

Discussion/Conclusion

According to this study, statutory prescription medication counselling includes, besides medication use guidance, also therapeutic monitoring and identifying and solving medication-related problems. The Ministry of Social Affairs and Health will utilize the results of this study in its current Medicines and Financial Base of Pharmacies -project based on the Government Programme. The aim of this project is to increase the role of community pharmacies as a part of the healthcare system and successful pharmacotherapy.

46. Documenting statutory medication counselling in community pharmacies

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Introduction

Medication counselling during dispensing is a statutory task for community pharmacists in all Nordic countries, however, it is rarely documented.

Aims/Objectives

The aim of this study, commissioned by the Ministry of Social Affairs and Health, was to explore 1) whether medication counselling during dispensing would be necessary to document, and 2) what kind of content should be documented.

Methods

Surveys for customers (n= 138), pharmacists (n=534), and nurses (n=271), and interviews with physicians (n=8) were conducted. Pharmacists were separately asked about documenting the contents and observations made during counselling with structured questions. Nurses and customers were asked about documenting medication counselling with one structured question. All respondents were asked with an open-ended question about what content would be beneficial and relevant to document, as well as physicians during the interviews. Quantitative data was analysed with descriptive statistics and qualitative data with inductive content analysis.

Results

Pharmacists (63% contents, 71% observations), nurses (82%), and customers (68%) considered documenting medication counselling as a relevant reform. Pharmacists and physicians found it most beneficial to document clinically relevant observations during counselling, while nurses and customers would also document the counselling content. The topics that all respondent groups would document (both counselling contents and observations) included side-effects, drug related problems, underuse, issues raised by the medicine user, issues observed by the pharmacists, overuse, and treatment success and adherence.

Discussion/Conclusion

Documenting clinically relevant observations about medication therapy during dispensing would benefit the patient care. However, documentation is useful only if it is implemented and used by all actors involved in the medication use process. The Ministry of Social Affairs and Health will utilize the results of this study in decision making whether documenting medication counselling should be implemented in Finland.

47. Register-based study on medication errors in the patient safety case reporting system of Tartu University Hospital in 2020-23

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Introduction

A medication error is an unintended failure in the drug treatment process that may harm or endanger a patient's health. The reporting of patient safety incidents, its necessity and importance have been previously discussed in several articles and studies in Estonia, but up to date there is no national system for collecting and analysing medication errors.

Aims/Objectives

To analyse medication related errors reported to the Patient Safety Incident Reporting System (PSIRS) in Tartu University Hospital (TUH) during the years 2020-2023.

Methods

In registry based study the following data were collected from PSIRS: error reporting date, error type, reporting department, error severity, healthcare worker caused the error and decisions and actions documented by case handlers.

Results

In the years analysed, a total of 310 errors were reported. The median value of reports per year was 52, but a distinct rise in reporting can be seen from 2022 and it is still ongoing. In most cases, medication errors were classified correctly (69,0%) and reported errors were generally of low risk (73,9%). The most common errors were mistakes when rewriting treatment orders (12,6%), administering medication to the wrong patient (9,7%) or administering the wrong dose or concentration (9,0%). Most errors were reported by nurses (55%), who therefore play an important role in the prevention of medication errors. The solutions proposed for the prevention of medication errors were mostly connected to employees, e.g. training and working with manuals.

Discussion/Conclusion

Medication errors, often preventable, pose a threat to the health of patients and can be seen as a burden to the healthcare system. It is important to continue to report medication errors and analyse them in order to get more information about possible interventions that would help prevent errors.

48. What kind of factors contribute to medication safety incidents observed in community pharmacies? - A qualitative study of incident narratives

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Introduction

Medication errors, including prescribing errors, pose a significant risk to outpatient medication safety globally. Community pharmacies play a central role in medication safety, but their contribution to risk management in other social and healthcare settings is less studied.

Aims/Objectives

To investigate factors identified by community pharmacists as contributing to medication errors originating outside pharmacies. The study seeks to demonstrate how community pharmacies can work collaboratively with other social and healthcare organizations and provide value for enhancing medication safety.

Methods

Medication safety incident reports from three wellbeing services counties in Finland were analysed from February 1, 2022, and December 31, 2023, using qualitative content analysis. A data-driven approach with Systems Engineering Initiative for Patient Safety (SEIPS) model was applied to categorize and quantify the contributing factors of incident narratives.

Results

All detected incidents (n=461) concerned prescribing errors with contributing factors identified in 80% (n=367/461). Altogether, contributing factors were identified 573 times in the incident narratives. Organizational factors were the most common, constituting e.g., deficiencies in written communication (14%, n=81/573) and in work environment and management (13%, n=76/573). These were followed by task-related factors comprising deficiencies in working methods (15%, n=88/573), and person-related factors e.g., lack of knowledge and skills (8%, n=48/573). The least emerging factors were related to physical environment (<1%, n=1/573), technical problems in prescription writing (1%, n=6/573) and packaging or other features in medicinal products (2%, n=11/573).

Discussion/Conclusion

Community pharmacists were able to identify contributing factors to prescribing errors originated in other social and healthcare organizations. By harnessing the information provided by community pharmacists, these organizations can enhance their prescribing processes and improve medication safety. Consequently, the study provided preliminary insights into collaboration with other social and healthcare organizations but more research and national reporting practice standardization is warranted.

49. Medicine's role in the lives of citizens living with anxiety or depression

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Introduction

Anxiety and depression are the most common mental diseases in modern society, limiting citizens' possibility to pursue personal goals as well as participate and navigate in society. Medicine is one health commodity often used to reduce symptoms and increase quality of life, however, it often adds to health problems rather than solve them. In-depth understanding of the role of medicines in the lives of citizens living with anxiety or depression is needed to develop relevant activities, such as in community pharmacy, to improve the use of medicine for the individual citizen.

Aims/Objectives

To achieve in-depth understanding of the life context of individual citizens living with anxiety or depression, and on this basis understand the current role of medicine.

Methods

A video-ethnographic study combining in-depth interviews with video-diaries illustrating participants' daily lives. Citizens are recruited purposefully through offline and online media. Inductive thematic analyses of interviews are integrated with multimodal video analysis to uncover citizens' history, lifeworlds, and perspectives on medicines.

Results

Data from 5 citizens, out of 30, have been collected. Preliminary results point to a social need to appear competent, strong and happy handling daily life tasks, both in situations leading to their disease and during medical treatment. However, highly challenging life contexts were identified, where managing medicine dosages and side effects dominates daily life. Unpleasant thoughts and feelings in relation to the medicine in some cases co-existed unproblematically with keeping up a positive self-picture but in other cases prevented participants from seeking the help they needed.

Discussion/Conclusion

More results will be presented and elaborated on at the conference.

50. Identifying and developing a Community Pharmacy Depression Service in the UK: a systematic review and multi-stakeholder eDelphi study

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Introduction

Depression is the most prevalent mental health condition with rates increasing internationally. Community pharmacy personnel are willing to support individuals with mental ill health

Aims/Objectives

To synthesise the international evidence and derive multi-stakeholder consensus on priorities for a community pharmacy-led depression service.

Methods

Standard systematic review methods were used. Medline, EMBASE, PsycINFO and CINAHL were searched from inception to January 2025. Studies exploring community pharmacy-led depression services were included. The consensus process was undertaken as a two-round eDelphi and used 'Vignettes' developed from the review results, that described barriers/facilitators and clinical, humanistic, economic outcomes. Participants (people with lived-experience of depression, carers, healthcare providers, policy-makers, and third-sector representatives) rated each item using a 7-point Likert scale (1-7, very low/very high priority), provided justifications for their ratings, and suggested additional services. Medians (and interquartile ranges (IQR)) were calculated; with consensus defined apriori (median ≥ 5 , 'Moderate Priority'). Free-text responses were thematically analysed in NVivo. Ethical approval was granted by the University of Strathclyde.

Results

The systematic review included 48 studies from 13 nations (including the US (n=13), Australia (n=8), UK (n=5)) and identified five service types. In total, 59 individuals participated in the eDelphi, who identified four additional services. Consensus was achieved with four services with median scores of 6: Treatment Adherence (IQR 5-6), Education/Advice (IQR 4-6), Signposting/Referral (IQR 4-6), and Suicide Prevention (IQR 4-7). Qualitative analysis supported these services for improving patient experience, resource allocation and service delivery, with one participant stating, "this is exactly the sort of service that pharmacy staff should routinely deliver". Barriers included stigma and resource constraints.

Discussion/Conclusion

There is substantial, multi-stakeholder support for community pharmacy services to support people with depression. Future research will test a Treatment Adherence service encompassing advice, signposting and referral, and exploration of the inclusion of suicide prevention within pharmacy training.

51. Modernizing pharmacists' insomnia care to align with practice guidelines

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Introduction

Insomnia is one of the most common sleep complaints encountered in primary care, with its prevalence and use of sedatives increasing with age as well as their harms. Cognitive-behavioural therapy for insomnia (CBT-I) is the recommended first-line intervention for chronic insomnia and is becoming increasingly accessible in community settings. Despite the limited long-term effectiveness and inherent risks of sedatives, their use remains excessive in Nordic countries. Pharmacists, as highly accessible healthcare providers, are uniquely positioned to deliver first-line, evidence-based therapy for insomnia by integrating sedative deprescribing and facilitating access to CBT-I.

Aims/Objectives

This presentation aims to demonstrate advances in sedative deprescribing and enhanced access to CBT-I options that empower community pharmacists to deliver more effective, safer insomnia care. Attendees will become familiar with novel resources and programs—and their supporting research—to implement guideline-aligned insomnia care.

Methods

A concise, targeted overview of insomnia guidelines, CBT-I, and sedative deprescribing will be presented, contextualized by published stepped care models. The presentation will describe the behaviour change theory and techniques used to create effective interventions, including those implemented in the Your Answers When Needing Sleep in New Brunswick (YAWNS NB) randomized trial. A range of tools—print materials, online resources, and self-help solutions—will be examined.

Results

Direct-to-patient interventions, evaluated in randomized trials and systematic reviews, represent a novel, effective, simple, low-effort, and scalable approach to shifting insomnia care from a pharmacologically dominant standard to a first-line, evidence-based, non-pharmacological approach. Enhancing pharmacists' knowledge and skills in CBT-I—through an understanding of its components, course structure, and various formats available to patients—and its integration during gradual sedative dose reduction, can expedite the transformation of insomnia care.

Discussion/Conclusion

Integrating CBT-I and sedative deprescribing into routine pharmacy practice—beyond traditional sleep hygiene and sedative use—is essential for achieving guideline-based insomnia care.

ABSTRACTS FOR WORKSHOP SESSIONS

1. StrathLAB: Using Living Labs Ecosystems to Co-create Sustainable and Socially inclusive Health Tech Solutions in Pharmacy

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Introduction

StrathLAB is a Living Lab ecosystem hosted by the University of Strathclyde. We provide an open and accessible co-creation and innovation space for companies, the public, researchers and social innovation partners to design, develop, and test products and services for the health and wellness sector.

Aim

The aim of this workshop is to showcase co-production methods and to highlight Pharmacy relevant projects that adopted living lab methods to co-create and/or evaluate digital health products in a variety of home, hospital, and community settings. We will share best practices and lessons learned about how to meaningfully engage patients and the public in more inclusive ways in the co-design process.

Target Audience

This workshop would be suited citizens, researchers, and practitioners interested in how to use co creation to be more inclusive in health and wellbeing research and innovation projects.

Description

The workshop will showcase StrathLAB and invite participants to tour the lab, showing how the labs facilities and library of technology and expertise can be used to engage and enable the public in socially inclusive, scientific research and innovation. We will showcase 3-5 Pharmacy related projects (e.g. Community Pharmacy Scotland, AIM4ALL project, CMOP, SIPA2) where co-design was involved and share best practices around how to meaningfully involve citizens and patients in the co-design process. This will consist of guest speakers giving lightning talks; lab tours; short didactic sessions and small group demos that provide a hands-on experience of co-creation equipment and methods; finishing with a round table discussion on best practices and experiences from workshop participants and presenters.

2. Supporting patients with substance use related problems: maximising treatment benefits from pharmacies

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Introduction

Substance use is a prevalent issue affecting all social groups across the globe. The prevalence is generally higher in areas of greater social deprivation and inequality. This vulnerable population group are more like to experience social isolation, stigma, premature aging and develop physical health comorbidities, adding to the complexities in optimising care. Pharmacy is ideally placed to support this population group.

Aim

To explore the opportunities to maximise the skill of pharmacy teams in supporting patients with substance use related issues.

To bring an internationally diverse group together, with shared interest in supporting patients with substance use problems, to learn from different contexts and experiences.

The learning objectives are:

- Identify how pharmacy teams support patients with substance use issues.
- Provide the opportunity to share experiences and discuss how to improve the experience.
- Explore opportunities to improve patient health and minimise comorbidities.
- Identify roles and services that pharmacy can deliver to this vulnerable population group

Target Audience

Anybody working with patients with, or at risk of, developing substance use issues and/or with an interest in mortality relating to social inequality.

Description

The workshop would consist of three short presentations setting the scene within the Scottish context, the country with the highest drug-related death rate in Europe, with interventions and strategies relevant to other nations discussed.

The three presentations proposed are:

- Drug Related Deaths: what has been done to reduce them
- Challenges of polysubstance use: a focus on benzodiazepines
- Trauma Informed Care: Improving the pharmacy experience

The second section will involve smaller group discussions on issues raised and ways of supporting this vulnerable patient group learning from broader international experiences.

Finally, a recap summarising the discussions and general feedback to the audience on ways identified to improve the pharmacy experience for patients using substances.

3. Advancing social pharmacy research: understanding and engaging with patients in vulnerable positions

Mrs. Susanne Kaae¹, Dr Elin Lehnbohm², Prof Sofia Källemark Sporrang²

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Introduction

To reduce health inequalities, social pharmacy research plays a crucial role in addressing the challenges that patients in vulnerable positions face with medicines.

Aim

The aim of the workshop is to facilitate the exchange of experiences and innovative ideas among social pharmacy researchers, focusing on the needs and methodologies for effectively supporting patients in vulnerable positions' use of medicines.

Target Audience

This workshop is designed for social pharmacy researchers who are either experienced in or interested in the future in conducting research with patients in vulnerable positions.

Description

A) Conceptual framework: We will begin with a short introduction that critically examines the concept of vulnerability within patient populations. We will also discuss the importance of researcher reflexivity when engaging with these groups, covering key aspects such as patient support, voice empowerment and emotional dynamics during research.

B) Collaborative exchange: Participants will discuss how to refine best practices for conducting social pharmacy research projects with patients in vulnerable positions. The focus will be on developing recommendations for effective engagement and identifying emerging research needs in these populations in the coming years.

Learning outcomes.

Participants will:

- Deepen their conceptualization of vulnerability.
- Learn to increase reflexivity, recognize biases and apply ethical considerations.
- Connect with peers to foster collaboration and share insights.
- Identify emerging areas of research needs for patients in vulnerable positions.

4. Unlock the Power of Cultural Competence and Functional Health Literacy (FHL) in Healthcare Practice, Education, and Research

**Dr Anandi Law, Dr Michelle O'Driscoll, Associate Dean (Assessment and Research)
Prof of Pharmacy Practice Aleda Chen, Prof Radhika Devraj**

Introduction

Functional Health Literacy (FHL) is an individual's ability to retrieve, process, and understand basic health information to make informed decisions. Low FHL is associated with poorer medication adherence, decreased care satisfaction, higher hospitalizations and healthcare costs. With an increasingly diverse and aging population, health care providers need training to provide culturally competent healthcare focusing on improving FHL or attempts to reduce health disparities and improve culturally competent healthcare should focus on improving FHL.

Aim

This workshop will focus on equipping healthcare providers, researchers and educators with the knowledge and skills to effectively communicate health information to diverse patients, considering their cultural backgrounds and literacy levels, to ensure optimal health outcomes for all.

Target Audience

Healthcare practitioners, researchers, educators.

Description

Dive into an impactful 90-minute workshop designed to empower health care professionals with the tools to deliver more inclusive and effective communication. This workshop, structured into four engaging modules, offers actionable insights and skills:

Module 1: Start with the basics—gain a solid understanding of foundational concepts like Functional Health Literacy (FHL) and cultural competence and discover their vital role in improving patient outcomes with international statistics supporting its rationale.

Module 2: Explore practical frameworks and innovative tools to measure and enhance FHL and cultural competency in your practice and student training.

Module 3: Uncover real world challenges to implementing interventions that improve FHL and cultural competence, and potential solutions equipping you to take your practice, teaching, or research to the next level.

Module 4: Bring it all together by analysing case studies and real-life scenarios to apply what you've learned through an international lens.

But that's not all! You'll also discover how to leverage cutting-edge AI technology to update health education materials and seamlessly integrate FHL principles, ensuring you deliver culturally competent care to patients from all walks of life.

Join us and transform your approach to healthcare practice, research, and teaching to ensure that patients receive effective care.

5. Envisioning Medication Safety Systems in the Home Setting During the Care of Children with Medical Complexity

Dr Ephrem Abebe¹

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Introduction

Children with medical complexity (CMC) are medically fragile and vulnerable paediatric patients and rely on multiple and complex medication regimens, medical devices, and associated supplies. They have frequent contact with the healthcare system involving hospitalizations, outpatient clinics, and pharmacy visits but also receive healthcare in their home environment managed by their family caregivers. Managing medications makes up the bulk of healthcare tasks undertaken by family caregivers in the home environment. Yet, caregivers struggle with this responsibility due to lack of support and properly designed systems to support safe medication use at home.

Aim

- Describe the unique medication management needs of CMC and implications for medication safety research in the home environment.
- Foster establishment of an international interest group focused on promoting research with complex/vulnerable patient populations.

Target Audience

Pharmacists, pharmacist health services researchers, policy makers, program designers/implementers, device/pharmaceutical manufacturers.

Description

The host proposes a 90-minutes workshop with three parts as described below:

Part 1: The host (Dr. Ephrem Abebe) will deliver a 20-minute presentation to introduce participants to the topic and highlight key findings from his NIH-funded research grant focused on the medication management needs of CMC. Data collected for this project comes from interviews, observation field notes, and photographs with healthcare providers and family caregivers of CMC, in the hospital setting as well as during home visits.

Part 2: Breakout sessions where participants will discuss the following key themes (30 minutes discussion + 10 minutes preparation)

- Needs/challenges of conducting research with CMC and similar vulnerable populations
- Translating research evidence into practice innovations
- Research partnerships and resources

Part 3: Group discussion and action plan: 30 minutes

- Breakout group summary and overall discussion
- Discussion on research engagement with vulnerable populations
- Discussion on formation of interest groups to foster international research collaborations

6. Addressing health inequalities through undertaking Person centred polypharmacy reviews: 7 Step review supporting shared decision making

Dr Alpana Mair^{1,2}, Dr Iain Wilson¹

¹Scottish Government, United Kingdom, ²Edinburgh Napier University, United Kingdom

Introduction

Public health challenge of polypharmacy is increasing with up to 17% of hospital admissions in the UK attributable due to medication related harm. The 7 step process to review inappropriate polypharmacy, through the iSIMPATY (implementation of Simulating Innovation in Management of Polypharmacy and Adherence Through the Years) project has been shown to decrease the harm while improving patient outcomes

Aim

The aim of the workshop is to share and work through how this process can be implemented in practice, considering policy and cultural challenges, taking a person centred approach.

Target Audience

Healthcare professionals wanting to improve medication outcomes while reducing harm and policy makers and health planners who want to manage inappropriate polypharmacy.

Description

Workshop will be underpinned with training used in the iSIMPATY project and the 4th edition of the Scottish Government and NHS Scotland Appropriate Polypharmacy guidance. The workshop will include case studies and break out groups to provide the participants confidence to address inappropriate polypharmacy in practice, and support scale up of implementation of programmes, considering patient safety culture and professional boundaries. The workshop will also provide guidance on how to support people managing polypharmacy from deprived areas, addressing health inequalities through providing additional support in the consultations considering health literacy.

7. Integration of Indigenous Principles into Pharmacy Education and Research

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Introduction

Indigenous Peoples face inequities in social determinants and health outcomes and must be involved in education, policy development, and research to address these inequities. Allies in these settings are necessary but must know how to work with Indigenous Peoples in respectful, collaborative relationships.

Aim

To introduce pharmacy academics to Indigenous practices that can be applied to teaching and research activities and address barriers.

Target Audience

Pharmacy faculty engaged in research or teaching activities and interested in addressing gaps in knowledge, practice, and research regarding Indigenous populations.

Description

Content:

The workshop will begin with a discussion regarding Indigenous worldview. A brief review of Indigenous health inequities contrasted with community strengths will be presented. Scenarios of research activities will be provided to facilitate discussion of challenges, opportunities, and special considerations that must be respected when working with Indigenous Peoples.

Structure

Introductions and the presentation will be followed by division into smaller groups for facilitated discussion. The group will reconvene to debrief and discuss learnings. Individual and collective actions will be identified.

Activities

- Registrants will have been guided to bring any questions or examples they would like to share ahead of time (e.g. research questions, stories, teaching materials).
- All participants will join in an informal discussion with some facilitated discussion following a brief didactic presentation by the hosts/facilitators.
- Participants will break out into table groups and rotate through areas of focus (e.g. pharmacy education, research activities) to share their own content, dialogue, and discuss how to address challenges
- Individuals are encouraged to identify specific areas to add to an action plan for when they return to their teaching and/or research activities
- The large group will reconvene, and table groups will share key points from their discussion
- The facilitators will provide a wrap-up of the workshop