SAPC

Oral Presentations

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SW SAPC Oral Presentations

Amna Afzal (University of Southampton)

Title

Views on self-management interventions for Type 2 Diabetes Mellitus (T2DM) in African American patients: A systematic review of qualitative studies

Abstract

Background: Type 2 Diabetes Mellitus (T2DM) is rapidly on the rise across the world and requires good self-management in order to prevent complications. African Americans are more likely to develop the condition and suffer worse outcomes, partly due to their poor self-management. The death rate due to diabetes is also higher in Black Americans than in other racial groups in the U.S. Interventions to increase this population's knowledge and awareness around the condition and its self-management can improve their health-related outcomes.

Aim: To explore the views and experiences of African American patients on self-management interventions for T2DM including the barriers, facilitators and preferred intervention aspects.

Methods: The databases Medline, EMBASE, CINAHL and PsychInfo were searched to obtain relevant papers. These papers were de-duplicated then screened to include qualitative studies that explored the views, through methods such as interviews or focus groups, of African American adults with T2DM on self-management interventions for T2DM. The included papers were qualitatively analysed using thematic synthesis. The COM-B model (Capability, Opportunity, Motivation, Behaviour model) of behaviour was used to present the themes.

Results: Fifteen papers were included in the review, six of which involved digital interventions while the rest ran group education interventions in the community. Psychological capability to carry out the behaviour change was influenced by education and relating to support available, so having these therefore facilitated self-management. Physical barriers to having the opportunity to self-manage were lack of access to resources and financial difficulties. Social opportunity included cultural norms around diet and gender roles which were a barrier and social support which was found to be a huge facilitator. Encouragement for example through goal setting or monitoring, and religion motivated self-management while dietary habits and feelings were generally barriers. Some interventions that were well accepted were group-based education classes providing social support to address the knowledge gap and app interventions that focused on improving access to resources.

Conclusion: Future self-management interventions to improve this community's self-management should incorporate the key facilitators, which were education and social support, while also considering the main barriers, like financial difficulties and lack of access to resources.

Rebecca Anderson-Kittow (University of Oxford)

Title

The documentation of prognostication in out-of-hours primary care consultations with terminal care patients: an analysis of case record data

Abstract

Background: Out-of-hours primary care is a key part of providing good care to patients at the end of life. Terminal care patients and their families need to know they will have support to control their symptoms outside of GP office hours. If their health deteriorates out-of-hours, there may be a need for clinicians to have difficult conversations about prognosis and care.
In previous research, out-of-hours clinicians have expressed dread about terminal care consultations. This was due to a lack of confidence and a conflict between high pressure primary care out-of-hours services designed to deal with acute problems, and the need for long, complex consultations with terminal care patients.

Aim: To explore how prognostication is documented in case records of consultations between out-of-hours clinicians and terminal care patients.

Methods: A mixed methods analysis of a database of patient contacts to one UK regional out-of-hours primary care service over the 12 months from April 2019 to March 2020. Two-hundred case records were selected at random (based on case priority level; 1:1 ratio of routine or urgent calls) from a sample of 1,089 records of contacts coded as 'terminal care'. Descriptive statistics will be used to summarise characteristics including demographics, type of consultation and call origin. Free-text entries will be coded using content analysis to identify discussions and documentation of prognostication and decision making.

Results: Initial descriptive statistics show that 1.2% of all calls were coded as terminal care, 51.2% of these calls resulted in a home visit, and the majority of calls were from nursing homes (27.8%), paramedics (12.9%) or other healthcare professionals (33.3%). Free-text coding frameworks are currently being developed. We will present findings on the frequency and content of documented prognostication and decision making. Quotations will be used to demonstrate the different ways in which these are discussed and documented.

Conclusions: This study will provide an indication of the frequency and types of prognostication occurring in out-of-hours terminal care consultations. Detailed free-text coding will give insights into the role of generalist out-of-hours clinicians in these discussions and the support they may need to feel well prepared for these sensitive consultations.

Osei Asibey Owusu (University of Exeter)

Title

STanding blood pressure and its AssociatioN with major adverse cardiovascular disease and aDverse events (STANDD): a systematic review

Abstract

Background

The prognostic value of standing blood pressure (BP) is unclear. NICE hypertension guidelines recommend measuring and treating to standing BP in people with a significant postural BP drop or postural symptoms, such as falls or dizziness on standing. We systematically reviewed and synthesised the available evidence and aimed to quantify the association between standing BP and incident cardiovascular events, injurious falls and mortality.

Methods

Systematic review: We searched MEDLINE, Embase and Cochrane CENTRAL to October 2024 for randomised controlled trials (RCTs) and cohort studies reporting sitting or supine and standing BP measurements, with a minimum of two years follow-up, in people aged over 70 years. A-priori planned meta-analyses were not feasible due to paucity of suitable data across studies, therefore, findings were synthesised narratively.

Results

We included 19 studies (n= 33,854 participants; 2 RCTs, 17 cohort studies). Sixteen studies reported major adverse cardiovascular events (MACE) as a composite or constituent outcome and 3 studies reported falls outcomes. No studies provided point estimates of any association between standing BP and cardiovascular or falls outcomes. Two studies reported an association between standing BPs and all-cause mortality with conflicting findings; one reported a 17% (95% CI: 2–34%) increased risk of all-cause mortality per 10-mmHg rise in standing diastolic BP whilst the other reported a 21% (32%–18%) reduction in all-cause mortality for every 10-mmHg increase in standing systolic BP. Eleven studies measured BP in supine and standing positions, 8 in sitting and standing positions.

Conclusion

This systematic review confirmed that there is limited evidence to inform NICE's expert consensus guidance to treat older people with postural symptoms according to standing BP values. There was substantial heterogeneity between studies in the measurement of standing BP. These findings justify our current NIHR School for Primary Care Research funded individual participant data meta-analysis which seeks to estimate the relationship between standing BP, MACE, and injurious falls. It also informs ongoing research on the relative validity of sit-to-stand versus lying-to-standing BP measures to inform future clinical guidelines on the management of hypertension in the presence of postural hypotension.

Taeko Becque (University of Southampton)

Title

Systematic review of randomised controlled trials of interventions to improve adherence to acne treatments

Abstract

Acne is very common, affecting over 90% of adolescents. Current UK guidelines recommend topical treatments as the first-line therapy for mild-to-moderate acne, but treatment adherence is low. This is attributed to challenges maintaining consistent application over several weeks and the potential for skin irritation. Interventions to improve adherence include educational interventions, medication reminders, additional appointments and combination products. However, the effectiveness of these strategies is unclear.

To assess the effectiveness of interventions aimed at improving adherence to acne treatments, to inform the Acne Care Online digital intervention supporting self-management of acne.

We conducted a systematic review of randomized controlled trials (RCTs) of interventions to improve adherence to acne treatments. We searched MEDLINE, PubMed, Embase, PsycINFO and CINAHL, without language restrictions, from inception until 2 June 2023. The population included participants aged 13 to 25 with acne. We excluded studies of oral isotretinoin only, or interventions for acne scarring or hyperpigmentation. Eligible interventions included medicinal or behavioural approaches to improve adherence to acne treatment, while comparators included standard care. The main outcome was adherence to acne treatment, and risk of bias was assessed using the RoB 2 tool.

Results

A total of 10 RCTs met the eligibility criteria, comprising 769 participants in 5 countries. Most studies recruited via dermatology clinics (n=5) and primary care clinics (n=1). Acne treatments were topical medications, predominantly adapalene 0.1%/benzoyl peroxide 2.5% (n=4) or adapalene gel (n=2). Adherence interventions included educational interventions (n=5), text message reminders (n=3) and combining products to improve tolerability of the main topical (n=2). Adherence was mostly measured at 12 weeks (n=7), using either medication event monitoring systems (n=5) or self-reported number of days adherent (n=4).

In general, reporting of the design and conduct of the trials was poor, and sample sizes were small. Meta-analysis was not possible due to variation in the interventions and outcome measurement, and the high risk of bias of the studies.

Conclusions

Combining products to improve tolerability of the main topical treatment, and educational interventions, may improve adherence to acne treatments, but higher quality RCTs are needed to confirm this.

Anthony Bell (University of Oxford)

Title

Antibiotic prescribing and use in United Kingdom general practices in socio-economically deprived areas: A Critical Interpretive Synthesis.

Abstract

The overuse of antibiotics is an urgent threat. General Practice is where most antibiotics are prescribed, yet a concerning trend has been observed – higher than expected prescribing/use of antibiotics in socio-economically deprived settings. The objective of this review was to critically interrogate the literature by exploring if prescribing/use of antibiotics in UK general practices is associated with deprivation, and if so, how. Databases searched included: Cumulative Index of Nursing and Allied Health Literature (CINAHL), Embase, Medline, Science Citation Index/Social Science Citation Index, and Scopus. Hand searching was also undertaken. Titles/abstracts and then full texts were screened against pre-defined inclusion criteria. Thematic synthesis was undertaken, with critical commentary being provided in developing the interpretive synthesising argument. Based on screening of titles/abstracts and full text, 1441 papers were removed for not meeting the inclusion criteria, and 23 were included. Twenty-one identified an association between deprivation and antibiotic prescribing/use. From these, 15 utilised prescribing data, with 12 showing that as deprivation increased, so did prescribing. However, three papers found the opposite trend, with increased prescribing among more affluent patients. Four studies utilising self-reported data identified a perceived risk of increased prescribing among deprived patients. Two papers identified mixed results. The remaining two papers identified no association. Author interpretations of the relationship considered (overlapping) clinical and social considerations. These varied from common explanations, like greater susceptibility to infections among patients in deprived areas, to more unique ones, such as prescription fee exemptions or vulnerability to environmental conditions (such as colder temperatures). These interpretations were used to support the final synthesising argument that prescribing variation observed among patients in deprived areas is linked to health inequalities, and therefore could be conceptualised as a form of 'structural violence'. Future research is needed in establishing how exactly inequalities and structural determinants of health may shape the prescribing/use dynamic within general practice and throughout deprived communities. This could involve exploring if case-specific 'whole system' approaches optimise prescribing in these settings.

Liliia Bespala (University of Oxford)

Title

Face-Saving Strategies in Delivering Weight Loss Advice: A Conversation and Discourse Analysis Study

Abstract

Introduction.

Guidelines recommend that general practitioners (GPs) seize every opportunity to provide weight loss advice to patients living with obesity. However, these conversations are often challenging for both GPs and patients. Discussing weight—a sensitive and potentially value-laden topic—risks undermining collaborative doctor-patient relationships, impeding the provision of medical guidance, and negatively affecting patient outcomes. Drawing on sociolinguistic theories of face-work and politeness (Brown & Levinson, 1987; Leech, 2014), this study aims to identify the sources of these communication difficulties and explore how they can be mitigated or addressed.

Materials and Methods.

We analysed 189 consultation recordings from the usual care arm of the Brief Interventions for Weight Loss trial, where GPs delivered opportunistic weight loss advice to patients living with obesity (Aveyard, 2016). Conversation and discourse analyses were applied to examine how GPs navigate the challenges of initiating weight-related discussions and offering recommendations.

Results and Discussion.

When providing weight loss advice, GPs employ strategies aimed at maintaining and protecting both their own and their patients' desired social image, referred to as "face" (Goffman, 1955). To address the "face-threats" of weight loss advice, GPs utilise both positive and negative politeness strategies (Brown & Levinson, 1987):

Positive politeness is achieved mainly through strategies such as attending to the patient's interests, presupposing common ground, and including both the speaker and hearer in the projected activity.

Negative politeness is enacted predominantly through impersonalising the GP and the patient and hedging.

Positive and negative politeness strategies are specifically distributed across sequences. GPs predominantly use negative politeness when initiating the topic of weight. These strategies help not only to reduce the imposition on the patient but also to minimise the GP's own responsibility for broaching the value-laden topic. Positive politeness is typical in the recommendation phase, where it frames weight loss as a joint effort between the GP and the patient.

Conclusion.

By employing tailored face-saving strategies at different stages of weight loss advice, GPs optimise advice-giving, making it more acceptable to both parties. This approach enhances

communication between GPs and patients, fostering collaborative relationships and potentially improving patient adherence to recommendations.

Sarah Bunnewell (University of Warwick)

Title

Discontinuation of hormone replacement therapy (HRT): a systematic review

Abstract

Hormone Replacement Therapy (HRT) is commonly used in menopause symptom management. In England in 2022-23, 2.3million patients were prescribed HRT, a 29% increase from the previous year and anticipated to rise further. Eventually most women will choose to stop HRT. A resurgence of menopausal symptoms upon discontinuation of HRT is common. Some women restart HRT, which if done later in life can increase cardiovascular, stroke and breast cancer risk.

This systematic review addresses the question 'What are the experiences of women stopping HRT and the health care professionals (HCP) advising them and why do women restart HRT?'. Inclusion criteria: any woman or HCP with experience of stopping or restarting HRT. Exclusion criteria: data collection before 2002, participants with hormone sensitive cancers. Quality was appraised using MMAT.

Searches of five major electronic databases identified 9444 reports which, after duplicate removal and screening by independent reviewers, resulted in 74 included reports from 70 studies accounting for 33,543 women (62 studies) and 2943 HCPs (8 studies). The majority of reports were quantitative (90.5%) and most were undertaken in North America (45.1%) or Europe (26.5%).

Average age of participants ranged from 30.7 to 75.5 years. The most reported reasons for discontinuation were fear of risks/side-effects (63.6% of studies), HCP recommendation (39.4%) and experience of side-effects (37.9%). The most common side-effects upon discontinuation were vasomotor symptoms (39.4% of studies, affecting up to 97.1% of participants), psychological symptoms (31.8%) and general menopausal symptoms (30.3%). Four RCTs evaluated tapered versus abrupt discontinuation, the majority found no significant difference at first evaluation after complete withdrawal of HRT. 25 reports included participants who restarted HRT and rate of restarting ranged 2-69%. The most common reason for restarting was symptom recurrence. HCPs commonly cited health risks as the reason to recommend discontinuation and 90-92% recommended a tapered approach although the duration of, and approach to, tapering varied.

This is the first review of its kind to provide insight into the global experience of HRT discontinuation from both patient and HCP perspectives and will guide further research that aims to establish the most acceptable approach to discontinuation that minimises symptom resurgence.

Rebekah Burrow (University of Oxford)

Title

Inclusion of under-served groups in trials: an audit at a UK primary care clinical trials unit

Abstract

Background

Clinical trials need to include patients who are representative of the population who may receive the tested interventions in the future. The importance of inclusivity is recognised by ethical and funding bodies and has strong public support. Appropriate inclusion is required to provide equitable evidence-based healthcare and to comply with ethical principles for research. However, there is little information about inclusivity of most under-served groups in UK clinical trials.

Methods

This audit assesses the inclusion of under-served groups in trials run by the Oxford Primary Care Clinical Trials Unit (PC-CTU). We included trials conducted by the PC-CTU, with ethical approval between 2017 and 2023. We checked protocols, patient-facing information, and selected data collection tools, for information on the under-served groups in the INCLUDE guidance and protected characteristics in the UK Equality Act 2010 to identify explicit exclusions and data collection.

Results

We included 19 trials. They were in a variety of clinical conditions, testing different types of interventions, both Clinical Trial of an Investigational Medicinal Product (CTIMP) and non-CTIMP. Most were non-commercially funded. We reviewed 21 protocols, 29 Patient Information Sheets/Leaflets, and 40 data collection tools.

Common exclusions were based on age (19), sex or gender (11), language (8), capacity to consent (14), pregnancy (11), multiple health conditions (10), and severity of illness (17). Trials most often collected data on age (19), sex or gender (15), ethnicity (16), formal education (11), address (13), mental health conditions (6), who gave consent (19), addiction (6), multiple health conditions (10), severity of illness (17), smoking status (12), and obesity (13).

Conclusions

Often, exclusions were due to the targeting of the trial to a specific group, such as older people, women, or people being treated for a specific type and severity of condition. However, many exclusions may not have been essential, may have reduced the inclusivity of the trials and might limit the applicability of the trial's findings. These include exclusion of people aged under 18 years, people without English language fluency, and people without capacity to consent. All trials could have collected more informative data on under-served group status.

Barbara Caddick (University of Bristol)

Title

Patient experience of an intervention to deliver patient-centred polypharmacy medication reviews: a qualitative study

Abstract

Medication reviews are a key strategy for improving safe and effective prescribing to improve health outcomes. Patient experience is an indicator of quality in care and positively associated with clinical effectiveness. However, little is known about patient experiences of medication review. Here we explore this in the context of an intervention delivering polypharmacy medication review in primary care.

The Improving Medicines use in People with Polypharmacy in Primary Care (IMPPP) randomised trial evaluated a complex medication review intervention against usual care. The intervention included a clinical informatics tool to identify patients aged 18+, receiving ≥5 long-term medications and with potentially inappropriate prescribing. Training was provided to clinicians to support delivery of a four-stage medication review (pharmacist case-note review, interprofessional collaborative discussion between pharmacist and general practitioner, review with patient, and follow-up). As part of the mixed methods process evaluation, patients receiving the intervention were invited to participate in a semi structured interview. Participants shared their views about their review including the mode of delivery, confidence in the reviewer and their involvement in decision making.

Twenty-eight participants were interviewed. Opinions on mode of delivery varied, some preferred telephone reviews for convenience, others preferred in-person meetings regarding these as providing a more thorough assessment. Reviews were considered less helpful when participants received no prior notification from the practice, felt unprepared, or did not gain new information or treatment options. Unexpected telephone reviews made it harder for patients to actively engage, negatively affecting overall experience. While most participants felt their reviewer was empathetic, some felt their concerns or personal context were not fully listened to or understood. Many participants appreciated being involved in medication-related decisions, but some preferred expert-driven decisions. Some resisted medication changes, needing clear justification or fearing disruption to their regimen. Most participants felt their views and preferences were respected and welcomed the opportunity to ask questions and discuss treatment options.

Participants generally valued the review describing an overall positive experience. Findings highlight the value of providing patients with opportunity to prepare for their review and enabling them to engage with decision making. This can significantly improve patient experience and satisfaction.

Mary Carter (University of Exeter)

Title

Prescribing memantine in general practice in England: a survey and interview study

Abstract

THE PROBLEM

Acetylcholinesterase inhibitors (AChEIs) are routinely prescribed for mild-to-moderate Alzheimer's Disease (AD). A 2019 Cochrane review found that adding memantine to an AChEI offers small benefits for moderate-to-severe (MTS) AD, improving cognition, daily activities, and mood/behaviour, with good tolerability.

Although NICE (2018) advises that GPs may initiate memantine for MTS AD patients taking an AChEI, it is not routinely done, potentially depriving patients of this opportunity.

THE APPROACH

To address our research questions, GPs in England completed an online survey and/or interview (April–September 2024):

- To what extent are GPs following guidance on memantine prescribing for MTS AD?
- What are the barriers and facilitators to following the guidance?
- What associated educational needs do GPs have?

The survey collected respondents' demographics, experience of caring for AD patients and practice features. Responses were screened and analysed in StataNow v18.5©.

Survey respondents optionally provided contact information for an interview. Semi-structured, qualitative interviews were conducted remotely. Transcriptions were coded in QSR NVivo v14©. Two researchers coded transcripts and agreed themes.

RESULTS

Survey respondents (n=115) were evenly divided between men and women. Most had 5–19 years' experience and worked part-time. Most referred suspected AD patients to specialists for diagnosis and treatment initiation. A majority had continued but not initiated memantine. 35.6% and 38.3% of respondents were very confident or confident in identifying AD stages and developing care plans for MTS AD, respectively. Over 40% were unaware of current NICE guidance concerning memantine.

Thirteen male and ten female GPs were interviewed. Direction from local formularies does not align with current NICE guidance. Reports about referrals, treatment initiation and continuation concurred with survey findings. A range of training gaps and preferred learning formats were reported. Practice resources and priorities, availability of local support and individual confidence levels influenced GPs' practice.

CONCLUSIONS

Interventions to modify prescribing responsibilities for MTS AD should involve local formularies and consider clinicians' experience within their general practice and the broader healthcare context. Responsibilities for diagnosis should be considered alongside prescribing practice. These diverse factors will be mapped to the Theoretical Domains Framework & Behaviour Change Wheel in the next analysis stage.

Amy Chinner (University of Exeter)

Title

To refer, or not to refer for suspected cancer? A qualitative study with General Practitioners in England

Abstract

Background: National Institute for Health and Care Excellence (NICE) guidelines, NG12, specify which signs and symptoms GPs in England should consider for an urgent suspected cancer (USC) referral. However, research suggests that less than half of patients who present to primary care with symptoms included in NG12 are currently referred.

Aim: We aimed to explore the processes and factors underpinning GPs' decision-making regarding USC referrals for patients presenting with symptoms included in NG12.

Methods: Interviews were conducted with 28 GPs from 20 practices across two NIHR Clinical Research Network areas: Greater Manchester and South West Peninsula. The interviews contained two sections, 1.) "Think-aloud" task (GPs viewed 4/24 videos of staged consultation scenarios, half containing NG12-specified symptoms, and discussed their approach aloud), 2.) semi-structured interviews to further explore decision-making. Interviews were analysed using a thematic qualitative approach employing deductive and inductive coding, underpinned by a critical realist perspective.

Preliminary Results: Think-Aloud: Approximately 1/3 of the time USC referral was not chosen when the scenarios contained NG12-specified symptoms (total 54 viewed), most commonly when patients presented with rectal bleeding (7) or iron deficient anaemia (5). GPs instead proposed faecal immunochemical testing (FIT) either to achieve more decisive information about symptom causation, and so next steps, or because it was a prerequisite for USC referral. Additionally, some GPs did not recommend USC referral for dysphagia (2), post-menopausal bleeding (1) and breast lump (1) due to a perception of the symptoms not indicating cancer, the symptoms indicating an alternative diagnosis, or not having enough information about the patient's preferences.
Semi-structured Interview: GP decision-making was influenced by factors in 5 areas: The GP role, Avoiding Negative Consequences, Organisational Constraints, Sources of Information and General Attitudes to Guidelines. GPs identified multiple factors that influence USC referral from the individual level (e.g. cognitive biases, uncertainty tolerance, guideline familiarity) to the systemic level (e.g. practice culture, continuity of care, healthcare system pressures, and local referral forms not matching national guidance).

Implications: This study highlights key factors impacting on GP decision-making that should be considered when aiming to increase USC referrals in primary care in line with national guidance.

Kiana Collins (University of Oxford)

Title

Prostate specific antigen (PSA) retesting intervals and trends in England: A retrospective cohort study of over 10 million patients between 2000 – 2018

Abstract

Background: The prostate specific antigen (PSA) test is a diagnostic test for prostate cancer. It is unclear whether the benefits of PSA testing outweigh the harms of overdiagnosis and overtreatment. In England there is no guidance that specifies PSA retesting intervals for symptomatic or asymptomatic patients in primary care. Patterns of PSA retesting intervals in these patients without a prostate cancer diagnosis are unknown.

Aim: Characterise how PSA tests are utilised in primary care before a patient is diagnosed with prostate cancer.

Methods: Temporal trends and annual percentage changes were analysed using age-adjusted PSA testing rates. Negative binomial regression models investigated incident rate ratios of PSA testing. Linear mixed-effects models examined the length of PSA retesting intervals. All results were analysed by region, deprivation, age, ethnicity, family history, symptom presentation and PSA value.

Results: A total of 1,521,116 patients had at least one PSA test and together had a total of 3,835,440 tests. Half of patients had at least two PSA tests. Twenty-seven percent of PSA tests were paired with a symptom. The median PSA retesting interval was 1.1 years (IQR 0.5 – 2.3).
PSA testing increased overtime and peaked in 2018. Rates increased more for patients without a record of a symptom and for those with low PSA values. Seventy-three percent of patients who had multiple PSA tests never presented with a PSA value above the NICE NG12 threshold. Region, ethnicity, family history, age and deprivation were significantly associated with the likelihood of PSA testing and the length of the PSA retesting interval. The South of England and areas of lower deprivation had higher rates of PSA testing but similar intervals between PSA tests. Symptoms were associated with the likelihood of PSA testing and retesting intervals but had a smaller effect on the length of the retesting intervals compared to patient ethnic and demographic characteristics.

Conclusion: We observed that PSA testing and retesting happens frequently in primary care for patients without a a record of a symptom and for those with low PSA values. The lack of guidance on PSA retesting, combined with limited consensus on optimal retesting intervals may have inadvertently led to more frequent PSA testing than would be expected in an organised risk-adapted PSA testing strategy. To maximise patient benefit while reducing the risk of over testing there is an urgent need for research to determine appropriate evidence-based PSA retesting intervals.

Alison Convey (University of Oxford)

Title

"Going The Extra Mile": Putting patient stories centre stage to examine relational general practitioner care, educate tomorrow's doctors and imagine ways to mend the NHS

Abstract

"The NHS is broken" (Secretary of State for Health, 2024). General Practice is under scrutiny by professionals, politicians and the public, who question the nature and sustainability of current care provision. Relationships between patients and GPs are fundamental to these issues.

Theatrical approaches are used in medical education in various ways. Verbatim theatre is documentary in style, based on authentic spoken words. The genre has a historical precedent for amplifying diverse and marginalised voices, to instigate conversation and call for change.

Aim

Our aim is to analyse diverse patient narratives of GP care, to co-create a verbatim theatre piece with patient participants and medical students. We seek to evaluate whether performance of this verbatim play is an effective method for sharing knowledge about relational aspects of General Practice, thereby encouraging audiences to conceptualise strategies for the future of Primary Care.

Methods

Patient interviews are sampled from the Nuffield Department of Primary Care Health Sciences' HERG (Health Experience Research Group) archive, representing a diverse range of health conditions, geographical locations, socioeconomic statuses and ethnic backgrounds. Secondary qualitative analysis is conducted on stories pertaining to relationships with GPs, focusing on logistical aspects and the nature of care: what really is "going the extra mile?". Additional perspectives are obtained through narrative interviews with UK GPs.

Patient participants, recruited in partnership with the Point of Care Foundation, collaborate with researchers to co-create a verbatim play from arising themes. Workshops with medical students contribute to script development, whilst simultaneously serving as educational interventions. Performances are collaborative with audiences, facilitating discussion about GP-patient mutual relational care. Audience responses and feedback are evaluated.

Results

We present emerging findings from the secondary analysis of patient stories and impact of co-design workshops. We perform sample extracts from the verbatim script to facilitate knowledge exchange and conversation with members of SAPC.

Conclusions

This study generates knowledge about valued aspects of patient/GP reciprocal relationships, with the aim of informing discussions about the future of Primary Care. It investigates the novel use of verbatim theatre as an educational tool, a means of qualitative research dissemination and a vehicle for knowledge exchange.

Jenny Cooper (University of Birmingham)

Title

Associations between comorbid cardiometabolic and mental health conditions and mortality in 12 million English primary care records

Abstract

Background

There are strong associations between cardiometabolic and mental health conditions. These occur through multiple pathways including shared risk factors such as poverty, social isolation, poor diet and lack of exercise The mental health impact of living with a chronic cardiovascular condition, and vice versa the physiological impacts on the cardiovascular and metabolic system of chronic mental stress confers a direct causal association between these conditions. Antidepressant and antipsychotic medications may also cause weight gain and metabolic adverse effects that predispose to diabetes and cardiovascular conditions. Furthermore, healthcare services are invariably designed to manage single conditions in isolation, which compounds the challenges that people with mental health conditions face in accessing care for their physical health conditions. We examined whether the combined impact on mortality of pairs of cardiovascular and mental health conditions was proportional, amplified or less than the expected risk separately of each condition.

Methods

This was a cohort study of over 12 million individuals registered in the CPRD Aurum primary care dataset. Considering pairs of diagnosed mental health conditions, cardiovascular diseases and diabetes, we used Cox regression to determine the risk of all-cause mortality with age as the underlying time variable. Analyses were adjusted for sex, ethnicity and socioeconomic deprivation.

Results

The study population comprised 6,224,433 female and 6,137,121 male individuals with a median (IQR) age of 39.5 (22.5–58.5). The strongest cross-sectional associations between mental health conditions and cardiometabolic diseases were seen for peripheral vascular disease in those with substance misuse OR 2.67 (95%CI 2.59-2.76) and type 2 diabetes in those with schizophrenia OR 2.89 (95%CI 2.72-3.08). Longitudinal analyses are still ongoing but preliminary results indicate that schizophrenia and bipolar disorder in combination with heart failure or stroke was associated with the highest risk of mortality.

Conclusion

Comorbid mental health and cardiovascular conditions are associated with increased risk of mortality. Prevention and early detection of comorbidities and better understanding of managing cardiovascular risk, particularly in patients with severe mental illness could reduce premature mortality.

Emma Copland (University of Oxford)

Title

Disparities in MenACWY and HPV vaccination uptake in adolescents before and after the COVID-19 pandemic

Abstract

Introduction

Routine childhood vaccinations were disrupted by the COVID-19 pandemic, and coverage has not yet returned to pre-pandemic levels. We estimated uptake of MenACWY and HPV vaccination by ethnicity, deprivation and region in England.

Methods

We used the QResearch primary care database to identify adolescents aged 12-15 between 01/09/2018 and 13/07/2023 and derived HPV (first dose) and MenACWY vaccination status from GP records. We identified those eligible for vaccination in each academic year to estimate vaccine uptake and used Cox regression to identify factors associated with uptake. We don't report HPV vaccine uptake in boys as it was unavailable until 2019.

Results

We identified 1,116,771 eligible adolescents. MenACWY vaccine coverage in 14-year-olds decreased from 50% in 2018/2019 to 39% in 2022/2023. HPV vaccine coverage in 13-year-old girls decreased from 55% to 39% across the same period. London had consistently lower coverage compared with other regions.

White British adolescents generally had the highest coverage for both vaccines across the study period. There was evidence of widening disparities in MenACWY uptake over time, especially in Bangladeshi adolescents, where the hazard ratio (HR) for uptake compared to White British was 0.85 (95%CI 0.76-0.96) in 2018/2019 vs 0.57 (0.47-0.69) in 2022/2023. For HPV vaccination, the widest disparity in uptake was between Pakistani and White British adolescents (HR 0.64 [0.60-0.69] in 2018/2019 vs 0.56 [0.51-0.62] in 2022/2023).

There was also evidence of widening disparities in MenACWY vaccine uptake by quintile of deprivation over time (HR 0.75 [95%CI 0.72-0.78] in 2018/2019 vs 0.55 [0.52-0.58] in 2022/2023 for adolescents in the most deprived compared to the most affluent quintile). This trend was also identified for HPV vaccination uptake (HR 0.86 [0.82-0.90] in 2018/2019 vs 0.57 [0.54-0.61] in 2022/2023 in most deprived compared to most affluent adolescents).

Discussion

This study identified decreasing vaccine uptake for MenACWY and HPV vaccines and widening disparities based on ethnicity and deprivation since the COVID-19 pandemic. Coverage of both vaccines was lower than UKHSA estimates (particularly in London), indicating that school-based vaccinations may not always be added to GP records. Targeted vaccination campaigns are needed to increase vaccine uptake and reduce health inequalities.

Francesca Dakin (University of Oxford)

Title

Technostress, technosuffering, and relational strain: a multi-method qualitative study of how remote and digital work affects staff in UK general practice

Abstract

Since 2020, the use of remote and digital technologies has gone from intermittent use to routine practice. This has driven the development of new routines and working styles. The policy assumption has been that technology-enabled work can improve labour productivity and patient convenience, though studies of remote and digital access to UK general practice have not demonstrated clear efficiency gains, and indicate worsening workforce job satisfaction, stress, confidence, morale, and increased staff turnover.

We aimed to build a more nuanced understanding of the impact of digitalisation on the UK primary care workforce and produce a theoretical framework to understand why many staff are currently so troubled and how this can impact the resilience and effectiveness of the team and the organisation.

A multi-sited, qualitative case study in UK general practice. Using longitudinal ethnography by researchers-in-residence, we followed 12 practices in England, Wales, and Scotland for 28 months (2021-2023). This core dataset was supplemented by workshops and stakeholder interviews. Data analysis applied theories from the sociology of work and socio-technical change, including Ragu-Nathan et al's concept of technostress, Gill's concept of workplace suffering, Edmondson's psychological safety, and elements of Gittell's relational coordination.

Staff made significant efforts to adapt to and embed digital services into their work. When technologies work well, they can offer improved convenience, efficiency, more comprehensive patient care, and workplace fulfilment for staff. However, for many clinical and administrative staff, compromises and frictions embedded in digitalised workplace routines and processes could also lead to job dissatisfaction, worsened wellbeing and misalignments with professional values and identities. We found that this workplace suffering caused relational strain between team members, impacting team cohesiveness and coordination.

Conclusion

The digitalisation of working routines in UK general practice poses a unique challenge to the workforce, risking technostress, technosuffering, and increased relational strain within and between teams. To embed the benefits of digitalisation, we must first improve practice teams' readiness for change by strengthening practices' relational structures, enabling the determination of locally appropriate configurations of digital tools with adequate time and resources to adapt working routines.

Rachel Dewar-Haggart (University of Southampton)

Title

Patients' perceptions of primary care consultations: is empathy under threat? A nested qualitative study.

Abstract

Introduction

Effective communication between primary care practitioners (PCPs) and patients can improve satisfaction with care, reduce symptoms, and enhance quality of life. However, this can be challenging in the current clinical environment. We aimed to explore patients' experiences of primary care consultations, with a focus on the communication of clinical empathy and realistic optimism.

Methods

We interviewed patients attending their PCP who had agreed to take part in a multi-centre cluster-randomised trial of EMPathicO (a brief e-learning package for practitioners on communicating empathy and optimism). Semi-structured telephone interviews were conducted with 71 participants from 29 practices, within 7-14 days of their consultation. Purposive sampling ensured diversity in trial arm (e-learning or usual care – patients and interviewers blinded to allocation), consultation modality, PCP seen, ethnicity, age, gender, and reason for consulting. Participants were asked about their views and experiences of empathy and optimism during their consultation. Interviews were transcribed verbatim and analysed using the Framework Method.

Findings

Mapping and interpretation of the data suggests patients' perceptions of feeling cared for are not just shaped by experiences within the consultation, but by wider systemic factors. Most participants described experiencing positive consultations with their PCP. Behaviours construed as central to convey empathy were active listening and giving time to talk about symptoms, concerns, and expectations. Receiving reassurance and discussion around next treatment steps fostered a sense of optimism that action was being taken to help improve their symptoms and quality of life. However, participants described broader contextual factors that could diminish feelings of being cared for, such as difficulties in accessing appointments, or uncertainties around processes and waiting times for referral to secondary care services. Empathy, optimism and interpersonal continuity of care were highly valued, and participants commonly expressed a preference to wait for longer for a routine consultation with a PCP they had previously seen.

Implications

Patients highly value empathy and optimism in primary care consultations but find this is impinged on by uncertainties and challenges beyond the consultation e.g. around accessing appointments. Future work must consider system pressures that are a threat to maintaining empathy and good communication within primary care.

Tom Diffey (University of Southampton)

Title

Exploring the prevalence and impact of co-existing conditions in people with asthma in primary care: cross-sectional analysis of baseline data from the DEFINE trial

Abstract

The problem

People with severe asthma and co-existing conditions are known to experience more frequent exacerbations, worse symptom control and worse quality of life than those without other conditions. However, the prevalence and impact of co-existing conditions in people with asthma managed in primary care is not well understood.

Approach/methodology

This study summarises baseline data on co-existing conditions from participants recruited to the NIHR-funded DEFINE trial (RP-PG-0618-20002). The DEFINE trial is a pragmatic randomised controlled trial evaluating the effectiveness of a FENO (fractional exhaled nitric oxide)-guided web tool for reducing asthma exacerbations in participants aged 12 or over whose asthma was managed in primary care. This analysis estimates the prevalence of co-existing conditions in participants with asthma and will explore associations between these conditions and asthma severity and control, and quality of life indices.

Key findings

2478 participants were included with a mean age of 56, 60% (n=1499) were female, and 56% (n=1397) had never smoked. Approximately three in five patients with asthma managed in primary care had at least one other long-term condition (61.7%, n=1529). Commonly reported conditions included allergic rhinitis 14.5% (n=359), hay fever 16.9% (n=419), anxiety 11.5% (n=285) and hypertension 10.9% (n=269).

Participants with two or more co-existing conditions were nearly three times as likely to have at least one asthma exacerbation reported in the 12 months prior to study entry (30.0%, 207/691 participants) compared to those with no other conditions (11.4% 108/949 participants).

Symptom control and asthma-related quality of life were similar between those with and without co-existing conditions.

Full analyses including ACT scores, quality of life indices and asthma severity are pending and would be available for the 2025 SW-SAPC Conference.

Implications

Better understanding of the prevalence and impact of co-existing conditions on people with asthma in primary care will inform a more comprehensive, holistic approach to the management of these patients during routine asthma reviews. Early intervention to manage co-existing conditions has potential to prevent subsequent asthma exacerbations in people with asthma managed in primary care.

Sharon Dixon (University of Oxford)

Title

Navigating ‘normal’ menstrual pain; adolescent reflections on dysmenorrhea and healthcare seeking.

Abstract

Background

Over ninety percent of female adolescents experience dysmenorrhoea, with 30% experiencing symptoms impacting on school and activities. Despite available treatments, most don’t seek healthcare. Education encourages young people to seek healthcare if their menstrual symptoms are not normal. However, how adolescents develop understanding about normal menstruation or how they make sense of this guidance is uncertain, nor how this interfaces with primary healthcare consultations.

Method

Qualitative semi-structured interviews about experiences of menstrual pain, N=41, conducted in-person or virtually with adolescents aged 10-19 years living in the UK. Sampling includes diversity across age, ethnicity, location, perceived severity of dysmenorrhea, and healthcare experience (associated conditions, whether seen a health professional, use of medication including hormonal contraception). Interviews were transcribed verbatim and analysed thematically using NVivo12.

Results

Young people explained how school-based menstrual education tended to focus on practical management of bleeding and biology. Menstrual pain, was typically not mentioned or presented as a normal (minor) irritation to be expected and managed, with little guidance about when to seek advice. This perceived triviality and normality of dysmenorrhoea was often augmented by experiences of seeking support, in both school and healthcare. Accounts of these experiences were often shared between young people, widening influences of healthcare expectations beyond individual consultations. Some young people perceived offers of empirical first-line treatments, including analgesia or hormonal contraception, as health professional ‘dismissal’, notably if offered without consideration of underlying causes. This could be influenced by social media and menstrual app chat functions, although these were largely not about or intended for adolescents.

In the absence of other guidance, adolescents turned to peers to make sense of experiences of menstrual pain. This could generate ideas of normality which did not align with education and guidance, with impacts on decision-making about seeking healthcare.

Conclusion

Not equipping adolescents with information about menstrual pain that resonates with the reality of their experiences undermines education to enable care and risks distress and distrust. This has impacts on healthcare access that extends beyond individual encounters. Young people framing treatments that are first-line in guidance as dismissal, with impacts on care-seeking, warrants careful exploration and consideration in consultations and communication.

Julian Elston (University of Plymouth)

Title

Implementing Population Health Management in Primary Care Networks across an Integrated Care System

Abstract

Background: Population Health Management (PHM) is a key policy for Integrated Care Systems (ICSs), supporting services to shift to proactive, preventative, and person-centred care. By integrating health and social care datasets, the aim to redesign and target services to use resources more effectively, improve population health, and reduce health inequalities. Despite its importance, there is limited evidence on effective data linkage and utilization in the UK or elsewhere, particularly in relation to primary care.

Intervention: To implement a PHM programme across 31 Primary Care Networks (PCNs), involving six facilitated multi-stakeholder Action Learning Sets (ALSs) in each of the ICS's four localities over a year, using a health and social care linked dataset and supported by data analysts and PHM coordinators, to identify local health service issues.

Methods: Embedded researchers evaluated the programme, fostering innovation through real-time data analysis and feedback. Data were collected from 25 ALSs, 16 governance meetings, 10 interviews, 4 workshops/events, 10 webinars, 1 conference, and document reviews, with 110 participants consenting. Data were coded using Excel and NVIVO software, deductively using NHS England's implementation framework, and inductively.

Results: Most PHM infrastructure and resources were established, but challenges remained in PCN signup, data governance, and access issues. Resource constraints delayed ALS initiation, reducing support and analytical capacity and momentum. All localities engaged in ALSs, identifying issues, gaining insights, and developing six innovations for vulnerable populations, including children in families with a substance misuse history, rural males at risk of suicide, deprescribing of Z-drugs, and frequent attenders in primary and secondary care. Data literacy, trust, intrinsic motivation, and formal evidence facilitated progress. Engagement reached 198 individuals from various sectors, showing capacity building for PHM. However, involvement of patients, caregivers and community voices was largely absent.

Conclusion: The PHM programme demonstrated significant engagement and conceptual understanding among stakeholders. Nevertheless, challenges in infrastructure readiness, strategic integration, data governance, and resource allocation hindered full implementation, insight generation, innovation and impact, leading to a revision of NHS England's implementation framework. Despite these obstacles, the evaluation highlighted PHM's potential to improve health outcomes through strategic collaboration and systems thinking.

Hazel Everitt (University of Southampton)

Title

Talking in Primary Care (TIP): A cluster-randomised controlled trial in UK primary care to assess clinical and cost effectiveness of communication skills e-learning for practitioners on patients' musculoskeletal pain and enablement.

Abstract

The problem: Effective communication can help optimise healthcare interactions. Few interventions have been tested clinically, subjected to cost-effectiveness analysis or are sufficiently brief for implementation in primary care.

Approach: A cluster randomised controlled trial. ISRCTN18010240. General practices in England and Wales randomised to intervention or usual care control (1:1) stratified by practice size and deprivation. Patients and researchers masked to allocation.
Participants: Primary care practitioners (e.g. GPs, nurse practitioners, first-contact physiotherapists) who routinely saw patients with MSK pain.
Intervention arm practitioners received EMPathicO – a brief digital e-learning resource to enhance practitioner communication of clinical empathy and realistic optimism. Control practitioners consulted patients as usual.
Adult (18+) patients consulting participating practitioners face-to-face, by telephone, or videoconference were recruited into 2 groups: those consulting about MSK pain >/= 4 on 11-point scale, and those consulting for any other reason (All-comers). Practitioners were not told which patients participated.
Primary outcomes: MSK pain group co-primaries - pain intensity and patient enablement. All-comers - patient enablement. Analysis was repeated measures over 6 months. Cost effectiveness assessed over 6 months.

Findings: 53 general practices, 236 practitioners and 1682 patients participated: 806 patients with MSK pain; 876 All-comers. No statistically significant differences were found for primary outcomes: MSK (pain intensity mean difference 0.06, 97.5% CI -0.19-0.31; patient enablement mean difference 0.17, 97.5% CI -0.05-0.40), All-comers (patient enablement mean difference -0.12, 95% CI -0.32-0.07). However, intervention practitioners had significantly higher self-efficacy for communicating empathy and optimism at 8 weeks (empathy mean difference 0.78, 95% CI 0.45-1.10; optimism mean difference 0.98, 95% CI 0.59-1.37) and 34 weeks post-intervention (empathy 0.63, 95% CI 0.32-0.93; optimism 0.75, 95% CI 0.39-1.10). No evidence of harms associated with the intervention. For patients with MSK pain, the incremental net monetary benefit at a willingness-to-pay threshold of £20,000 per QALY was £322 (95% CI -£67-£711), with a 95% probability of being cost-effective.

Implications: Brief e-learning for primary care practitioners is safe for patients, significantly increased practitioner self-efficacy and is likely cost-effective. Statistically significant effects on patient health outcomes were not identified. EMPathicO could be rapidly disseminated widely to support practitioners delivering primary care consultations.

Christian Farrier (University of Oxford)

Title

Diagnosis of Coeliac Disease in Children: a Qualitative Longitudinal Study with Parents

Abstract

Background: Coeliac Disease (CD) is chronic autoimmune condition affecting 1% of the population which often onsets in childhood, although the diagnosis is often delayed or missed. Due to its nonspecific symptoms and variable presentation, parents and children can experience difficulties in navigating care and in receiving a timely diagnosis with CD. Existing qualitative literature predominantly focuses on 'living with CD' rather than the experiences of parents and children surrounding diagnosis.
Aim: This study aimed to explore parents' experiences leading up to and following the diagnosis of CD in their children.

Design, Setting & Methods: A qualitative longitudinal study using semi-structured interviews with parents of children (aged 1–16 years) diagnosed in the preceding 6 months with CD from across the UK. Each parent was interviewed twice spaced 6 months apart. The interviews were audio recorded, transcribed and analysed using a combination of thematic analysis and trajectory approach.

Results: Thirty-eight interviews were conducted with parents of 19 children. A maximum variation sample was obtained for geographic region in the UK, child sex and the age of child at diagnosis. In the early stages following a diagnosis, parents described the emotional distress resulting from the challenges navigating the healthcare system to receive a diagnosis, the period of limbo between having the first positive test and a confirmed diagnosis, and in adjusting to the many changes afterwards including the gluten free diet. Barriers included communication with care providers, healthcare system navigation, conflicting information and cost and accessibility of gluten free foods. Over time, families experienced a shift towards feeling more capable and comfortable managing CD (with occasional triggers for the return of the negative feelings) and identified which resources they found most useful.

Conclusion: The emotional impact of a diagnosis of CD is significant for the entire family. Families experience issues with healthcare system navigation, and how/when information is provided. They also experience challenges with adapting to a gluten-free diet and with children feeling they are different/do not fit in. Provision of support and information at the time of initial testing and at diagnosis is crucial to facilitate adjustment to this lifelong diagnosis.

Susannah Fleming (University of Oxford)

Title

CASNET2: Evaluation of an Electronic Safety Netting (E-SN) cancer toolkit for the primary care electronic health record

Abstract

Introduction

"Safety netting" is a common strategy for managing uncertainty in primary care, particularly where serious diagnoses such as cancer form part of the differential diagnosis. Safety netting includes giving advice on symptom management, when to consult again, and follow-up processes after tests for serious diseases such as cancer, with the intention of minimising delays in diagnosis.

Aim

To assess the impact of an electronic safety netting tool built into the primary care patient record computer system to reduce diagnostic delay in patients with cancer.

Methods

CASNET2 is a pragmatic cluster-randomised RCT, where GP surgeries were randomised to "turn on" a safety netting toolkit within the EMIS patient record system at different time points. The toolkit enabled staff to record safety-netting advice and actions for suspected cancer cases, as well as providing reminders for patient follow-up.

Routinely collected data was used to collect information on cancer diagnoses and referrals, and patient outcomes before and after the toolkit introduction were compared to assess its impact on cancer diagnosis. All analyses were adjusted for socio-demographic variables, and cluster assignment.

Results

We recruited 52 practices to the study, with an eligible population of 442,662 patients, of whom 9,803 received a cancer diagnosis during the study period. The time from first cancer symptom to diagnosis was an average of 25 days (95% CI 20 to 31 days) shorter after the introduction of the safety-netting tool, with the time from first symptom to referral being shortened by an average of 42 days (95% CI 36 to 48 days).

Patients who had the toolkit used as part of their care experienced greater benefits, with time to diagnosis reduced by an average of 32 days (95% CI 25 to 39 days), and time to referral shortened by an average of 53 days (95% CI 45 to 61 days).

Conclusions

The toolkit evaluated in CASNET2 is available to all GP practices using EMIS software. Our initial results show that the introduction and use of the toolkit results in considerable reductions in time to referral and diagnosis for cancer, with consequent potential for improved clinical outcomes.

Tori Ford (University of Oxford)

Title

Accumulative Experiences: Help-Seeking and Help-Providing for Recurrent Vulvovaginal Thrush

Abstract

This presentation examines the care pathways people navigated while seeking and providing help for vulvovaginal recurrent thrush, and the experiences they accumulated along the way. We draw upon interviews with 34 patients and 25 healthcare professionals working across primary care and sexual health services. We begin by outlining existing models for care pathways that may be applicable to recurrent thrush. Current research on healthcare encounters for recurrent thrush is then presented. We then place these experiences within larger gendered narratives around trust, resources, and patient-provider relationships.

In our analysis, we demonstrate how recurrent thrush differs from acute cases not due to symptom presentation, but in its repetitive, cyclical, and accumulative nature that fundamentally alters how patients move through care pathways. We present four main themes: (1) traversing disjointed health systems, (2) handling recurrent thrush seriously, (3) reaching for explanatory gendered narratives, and (4) balancing trust relationships. In the discussion, we place these care journeys within existing models of recurrent thrush help-seeking and present a structural (re)model of how to visualise these encounters.

This presentation emerges out of DPhil research that is being written up for publication. We will also present our online module created for patients and healthcare professional that was created with patient representatives and a professional advisory panel.

Rebecca Franks (University of Oxford)

Title

Who raises the topic of mental health in annual review consultations with patients with multiple long-term conditions: A mixed method analysis.

Abstract

Background:

Multiple long-term conditions-multimorbidity (MLTC-M) is associated with poorer quality of life, higher mortality and an increased likelihood of experiencing mental health conditions. Those experiencing socioeconomic deprivation (SeD) have a higher prevalence and increased severity of MLTC-M, including mental health conditions. NICE guidelines outline that annual review consultations for this population should include discussion of how disease affects wellbeing, how treatments affect day-to-day life, and by an alertness to the possibility of depression and anxiety. However, little is known about how mental health is incorporated into clinical discussions for patients living with MLTC, who raises the topic, and if this is affected by SeD. This is what we aimed to find out.

Methods:

In this mixed methods study we analysed 68 audio recordings of annual review consultations, from 20 GP practices across Britain, for patients living with MLTC, specifically patients living with obesity and hypertension and/or diabetes. Conventional content analysis (CCA) was used to identify and categorise the content of the annual review consultations. We then statistically examined associations between if mental health was discussed, who raised the topic, and (a) SeD and (b) type of consultation (face-to-face vs telephone).

Findings:

Overall, mental health was explicitly discussed in 19/68 (28%) of recordings. Of these, in 8/19 (42%) of cases the clinician raised the topic of mental health and the patient in 11/19 (58%) of cases. Clinicians asked ambiguous questions in 13/68 (19%) of recordings, which could implicitly allude to mental health, such as ‘how are you doing generally?’. However, no patients in this cohort interpreted these questions as relevant to mental health and either responded by talking about physical health, or giving short generic answers (e.g. ‘good, thanks’). Statistical analysis found that neither SeD nor type of consultation affected the likelihood of mental health discussion or by whom it was introduced.

Implications:

Although people living with MLTC are likely to experience mental health conditions, explicit questions about mental health are rarely asked by clinicians. This means people with MLTC are at risk of missing opportunities to discuss mental health or receive support.

Claire Friedemann Smith (University of Oxford)

Title

Cancer, serious disease diagnoses, and clinically significant incidental findings in the first six years of the SCAN pathway

Abstract

Background

Non-specific symptoms present a diagnostic challenge as they may indicate many serious and benign conditions as well as cancer. Patients with non-specific symptoms therefore historically experienced longer diagnostic intervals and poorer prognosis. To improve their care and outcomes, Rapid Diagnostic Centres (RDCs) were rolled out across England. We report the findings of the first 5000 patients accepted to the Oxford SCAN Pathway.

Methods

Data was collected through bespoke forms at different stages of the pathway. Changes to the cohort were assessed using linear regression for continuous patient data and logistic regression for binary patient data, with Pathway year as the input variable, with the impact of the COVID-19 pandemic considered. We derived the positive predictive value (PPV) of referral criteria and blood tests for cancer. A two-sided 5% significance level was used.

Results

Of the first 5,000 patients referred to the SCAN Pathway, 4,823 were included after the national data opt-out was applied. The SCAN Pathway had a cancer conversion rate of 8.8% (n=423), 11.1% (n=535) of patients had a new non-cancer diagnosis and 19.3% (n=933) had a clinically relevant incidental finding. Changes to the Pathway over time included a reducing cancer conversion rate, decrease in the use of GP gut-feeling and nausea/appetite loss and an increase in the use of unexpected weight loss as referral criteria. The mean (95% CI) number of days in the secondary care (8.5 (4.7-12.3) and treatment (4.0 (1.7-6.3)) intervals also increased for cancer cases over the operational years.

When the associations between abnormal blood tests and referral criteria with cancer were considered, the combination of unexplained laboratory results and nausea/appetite loss gave the highest PPV (18.5% (95% CI: 15.1-22.3)). An abnormally high CA125 had the highest PPV among all blood test abnormalities (36.0% (95% CI: 22.9-50.8)).

Implications for practice/policy

While RDCs are generally associated with higher cancer conversion rates than traditional two-week-wait pathways, many differ in their configuration and optimal testing regimens are still a matter of debate. Some configurations may result in higher numbers of incidental findings which might be justified by higher cancer and serious non-cancer disease conversion rates, but will have practice implications, particularly in the light of the recent requirements to accommodate adults under 40 years of age. We will discuss our experience of implementing the SCAN Pathway and the policy implications, drawing on our recent work on implementing cancer detection innovations.

Rebecca Garnett (University of Oxford)

Title

Investigating the factors that influence the willingness of older adults and their informal caregivers to deprescribe medication in primary care: a dyadic interview study

Abstract

Introduction

Reducing inappropriate polypharmacy is a major public health goal and deprescribing medication is considered one potential solution. Healthcare professionals (HCPs) have identified resistance from older adults ('patients') and their informal caregivers as a barrier to deprescribing. Recent research has found that both groups report willingness to deprescribe medication where this is recommended, although informal caregivers are less inclined.

Previous studies investigating the reasons underpinning individuals' willingness (or lack of) to deprescribe have predominately focused on patients, with little consideration for the informal caregiver perspective. This study addresses this gap by seeking insights into both patients' and informal caregivers' views towards, and experiences with, deprescribing.

Method

Semi-structured, dyadic interviews were conducted with patients (age 65+, living in England, prescribed one or more regular medication) and their informal caregivers (age 18+). The topic guide covered: patients' medication regimes, informal caregivers' involvement in patient care/medications, thoughts on deprescribing and previous experiences with stopping/reducing medication. Interviews were transcribed and analysed using Framework Analysis.

Results

Twenty-two interviews were conducted. These took on average 60 minutes (range: 20-119) and were held online (n=19) and in-person (n=3). The average patient was 77 years (range: 65-96) and prescribed four medications (range: 1-9). Most patients were female (55%), of white ethnicity (95%), and educated to degree level (50%). The average informal caregiver was 68 years (range: 45-79), female (55%), white (100%), and educated to degree level (68%). The majority (77%) were spouses or partners of the patients.

Six recurring themes that individuals consider when discussing deprescribing were identified: perceived appropriateness of medications, fear of medication changes, relationship with HCPs, medications' adverse implications on quality of life, shared decision-making and the deprescribing process. These themes can be separated into 'barriers' or 'enablers' of deprescribing. Potential explanations for informal caregivers being less willing to deprescribe than patients included their exclusion from medication-related discussions despite desires to be involved, greater distrust of HCPs than patients and belief that it is the patients' decision.

Conclusion

Views about medications and deprescribing varied between participants. However, the themes identified for both groups were broadly similar, indicating the same barriers/enablers influence their willingness to deprescribe.

Grace Glover (University of Oxford)

Title

Association of Behavioural Factors with HRT uptake: a systematic review and meta-analysis

Abstract

Background

Hormone replacement therapy is widely accepted to be one of the most effective ways to medically manage symptoms of menopause. Recent reports suggest that inequality exists in HRT prescribing within the UK. The aim of our study is to report how HRT prescription varies with lifestyle factors including smoking, alcohol intake, level of physical activity and marital status.

Methods

This study was a systematic review and meta-analysis of prospective cohort studies, case-control studies and cross-sectional studies in women aged 40-60 reporting risk factors for menopause symptoms. Exclusion criteria were surgical menopause, secondary care input and personal cancer history. We searched Medline, Embase and CINAHL databases for studies reporting exposures including lifestyle factors (smoking, alcohol use, physical activity or marital status). The primary outcome was the current or past prescription of HRT. Results were combined for meta-analysis using the Hartung-Knapp-Sidik-Jonkman (HKSJ) random effects model to combine odds ratios (OR) using Stata 18SE.

Results

3,728 papers were identified for title and abstract screening. 136 full texts were screened, 63 met eligibility criteria, of which, 40 reported smoking status, 18 reported alcohol intake, 24 reported level of physical activity, and 29 papers reported marital status.

Being a smoker and having higher levels of physical activity were significantly associated with higher uptake of HRT, (OR 1.21, 95% CI: 1.06–1.38 and 1.20 95% CI: 1.04–1.38 respectively). Alcohol intake (OR: 1.12, 95% CI: 0.75–1.68) and marital status (OR: 1.26, 95% CI: 0.94–1.69) did not show statistically significant associations.

Conclusions

Smokers and more physically active individuals had significantly higher uptake of HRT. There was no significant association between HRT uptake and alcohol or marital status. The positive association between physical activity and HRT uptake may be expected as these women may be more health conscious, and therefore more likely to seek medication for menopausal symptoms. However, the positive association between HRT uptake and smoking is surprising; we hypothesise this relationship may be related to smokers having more severe symptoms. We will explore this hypothesis further in our next systematic review and meta-analysis of menopause

Lucy Goddard (University of Oxford)

Title

Representation Matters: An ongoing exploration of equity in the SNAP2 Trial

Abstract

Background

Around 80,000 women each year are affected by pregnancy hypertension, following which women are at increased risk of short and long-term adverse cardiovascular outcomes. Women from Black and Asian ethnic groups, are more likely to have pregnancy hypertension and face a significantly higher risk of poor postnatal outcomes. The SNAP2 randomised controlled trial is evaluating self-management of postnatal hypertension with health equity a particular focus.

This study aims to monitor participant recruitment and implement strategies to enhance diversity within SNAP2 so that the trial population is representative.

Methods

Methods were informed by NIHR INCLUDE strategy. With limited available data on characteristics of those with pregnancy hypertension, information on the general pregnant population (Maternity Services Dashboard) and the general population (ONS data) was utilised providing national averages to determine the Target Population. Ethnicity, age, education and Index of Deprivation (IMD) were chosen as key characteristics to consider throughout site selection and potential participants along with location and size of hospital.

A Projected Population was calculated informed by size of site, date of opening and recruitment numbers to date. Anonymised information regarding those approached about the trial (Screened population) and consenting participants (Recruited population) were collected from screening logs and RedCap database and compared against the projected and target populations.

Results

At the point of submission, 175 women had been screened from 12 centres of whom 129 were randomised against a target of 628 women. Compared to a projected trial population comprising 65% White, 15% Asian, 6% Black, 4% Mixed or multiple ethnic groups and 6% other ethnic group, the actual recruited population comprised 90 (70%) White, 10 (8%) Asian, 20 (16%) Black, 6 (5%) mixed or multiple ethnic groups and 2 (2%) other ethnic group. The recruited population were 33 years old (SD 6), 39 (30%) had an education up to A-Level or equivalent and 88 (69%) had an undergraduate or postgraduate degree. Data on IMD and basic demographics for the screened population will be presented along with updated recruitment data.

Discussion

Diversity of trial populations is vital in order to provide a generalisable evidence base. Close monitoring of the SNAP2 population data has informed site involvement and will prompt adjustments to recruitment strategies and community and site engagement activities planned.

Anna Gordon (University of Bristol)

Title

"Of course there was stigma"; Experiences of homeless patients in secondary care in Scotland.

Abstract

People experiencing homelessness (PEH) face multi-morbidity and poor health outcomes alongside deep exclusion in accessing health and social care. A large proportion of PEH utilise unscheduled emergency care heavily due to a multitude of barriers to primary care. No existing research in Scotland has explored experiences of PEH in secondary care.
In view of new national guidelines for the care of PEH, we conducted a retrospective study of 230 unscheduled presentations to secondary care, comparing 115 PEH to 115 patients matched by age and sex (July to December 2021). We aimed to profile morbidity, mortality and explore measures of quality of secondary care, particularly the involvement of multi-disciplinary teams (MDTs), readmission rates, attendance at follow up appointments and place of discharge. Following this we conducted 12 semi structured interviews with PEH in inpatient settings.

Our findings demonstrate that the PEH population were young (mean age 43.9), 79% of whom experience multi-morbidity, with a mortality rate of 13% at one year (mean age of death 47.3). 86.09% of PEH experienced additional disadvantages including problematic alcohol use or illicit drug use, and over a third experience two. Despite this, few PEH were seen by relevant hospital MDT members during admission. 8% were discharged to permanent accommodation, 14% were discharged to rooflessness (without shelter) and 8.7% chose to terminate their admission. Significantly less PEHs were offered outpatient follow-up (52% compared to 80%) or attended follow-up (47% compared to 87%), and readmission rates within 1 month were double in the PEH cohort. We believe this study to be the first to qualitatively explore the inpatient experience of PEH in secondary care in the UK. Qualitative findings illustrate the pervasive impacts of dependence, trauma and poverty on experiences of healthcare, and the ongoing existence of dependence-based stigma (both self-stigmatisation, and that from healthcare professionals). Where they occur, positive interactions with healthcare are characterised by compassionate, person-centred care, with continuity of care from trusted individuals.

Data clearly demonstrate the need for specialist trauma informed support for PEH within secondary care during admission and integrated care beyond.

Xinchun Gu (University of Oxford)

Title

Lessons from the English primary care sentinel network's response to the COVID-19 pandemic

Abstract

Introduction

The COVID-19 pandemic highlighted the need for better pandemic preparedness. As one of the world's oldest sentinel networks, the Oxford-Royal College of General Practitioner's Research and Surveillance Centre (RSC) played a major national role during the COVID-19 pandemic. The RSC network expanded to 2,000 practices covering over 19 million patients in England and Wales during the pandemic. In this study we aim to reflect on our experience deploying the RSC in response to COVID-19, and identify gaps for future preparedness.

Method

We reviewed the RSC's responses to the COVID-19 pandemic and summarised the key roles it played during the pandemic. We evaluated the RSC's actions, identifying positive lessons to retain and areas for improvement for future pandemics or outbreaks. We highlighted the strengths of the RSC, as well as the barriers and challenges it faced during the pandemic.

Results

Since detecting the first UK case of COVID-19 not associated with foreign travel, the RSC's pandemic response has been underpinned by responsiveness, collaboration, and technical innovation. The RSC redeployed resources from other research projects and worked with primary care computerised medical record (CMR) system suppliers to create codes that enabled COVID-19 infections to be recorded. Working with UKHSA, the RSC implemented all-year-round virology, direct-to-patient swabs, and a serology programme to investigate population immunity and vaccine waning. RSC processed new data feeds to create a wide range of novel outputs, including a virology dashboard.

The RSC successfully provided support for (1) the epidemiology of COVID-19, including associated disparities and mortality, (2) investigations into vaccine exposure and effectiveness, (3) near real-time assessments of vaccine benefit-risk, and (4) related research. However, challenges included issues with low data quality, slow access to and high costs for linking to national datasets, and shortages of swabs, virology media, and personal protective equipment. These challenges are areas for improvement.

Conclusion

The RSC's pandemic response capability should be regularly tested, spanning the end-to-end process from community sampling to undertaking urgent analyses to inform the pandemic response. This preparedness should be benchmarked against international standards, such as the WHO's Mosaic Framework, to facilitate international collaboration and convergence.

Isabel Hanson (University of Oxford)

Title

Primary care youth mental health hubs in the UK and Australia

Abstract

Background

Youth mental health hubs provide community-based, holistic care aimed at early intervention. This research explores best practice models from Australia's Headspace and emerging approaches in the UK, focusing on innovations that reach young people from marginalised groups who have not previously received adequate mental health care.

Methods

This qualitative comparative study examines four case sites: two in the UK (Liverpool and Norfolk) and two in Australia (Sydney and the rural area of Dubbo). Data collection involved four weeks of site observation and interviews with staff and young people at each location. To capture the lived experiences of young people, go-along interviews were supplemented by creative arts methods, with plans at publication to develop animated narratives depicting stories of recovery for young people overcoming mental health challenges.

Results

Preliminary findings reveal that effective youth mental health hubs share key characteristics: accessibility, cultural safety, and an emphasis on youth empowerment. Australia's Headspace model excels in integrating health, education, and social care services, providing a comprehensive and scalable framework. In contrast, the UK hubs demonstrate unique adaptability to local contexts, addressing the specific needs of marginalised populations in their communities.

Discussion

The research highlights the importance of co-designed, community-driven, and accessible youth mental health services. Lessons from the Headspace model's structured integration could inform the UK's hub development, offering a blueprint for comprehensive service provision. Similarly, Australia's hubs could benefit from the UK's adaptable and diverse approaches, particularly in responding to the unique needs of marginalised populations such as LGBTQIA+ youth, refugees, and asylum seekers.

Take-home Message

Youth mental health hubs must prioritise accessibility, cultural safety, and locally tailored innovations to effectively support young people. Cross-national learning between the UK and Australia presents an opportunity to strengthen these essential services and support the implementation of innovative, inclusive models of care that address the mental health needs of diverse communities.

Emma Harper (University of Oxford)

Title

Point-of-care testing to safely reduce antibiotic prescribing for RTIs in Primary Care: Results from the PRUDENCE Trial

Abstract

Introduction:

Antimicrobial resistance is a major public health concern worldwide. Tackling this threat requires reduced and more efficient use of antibiotics. Point-of-care (POC) diagnostic tests could help target antibiotics to patients in whom they will be effective, especially in community care settings where the majority of antibiotics are prescribed. The PRUDENCE Trial evaluated the effectiveness of a POC testing strategy for respiratory tract infections (RTIs) in Primary Care and Long-Term Care settings in Europe, to assess whether POC testing can reduce antibiotic prescribing without compromising patient recovery.

Methods:

PRUDENCE was a pragmatic, platform, randomised controlled trial of POC tests. The participants were aged ≥1 year, presenting with symptoms of RTI and for whom the GP was considering or had decided to prescribe an antibiotic. Patients were randomised to receive either usual care or a POC testing strategy (including CRP, Group A Streptococcus and Influenza A/B tests). Patients were followed up for 28 days. PRUDENCE had a nested mixed-methods process evaluation, to capture patients' and clinicians' views on the POC tests and to inform uptake and implementation of POC tests in the real world. 2649 patients were recruited from 13 countries (Belgium, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Poland, Portugal, Spain and UK).

Results:

The primary analysis did not indicate an overall effect of the POC testing strategy on the co-primary outcomes (antibiotic prescribing and patient recovery). Patients managed with POC testing were as likely to receive an antibiotic within 28 days compared to those managed with usual care (45.7% vs 47.1%, respectively), and experienced the same recovery time (4 days median in both groups). However, an exploratory analysis demonstrates the potential of POC testing to decrease antibiotic prescribing in certain situations, for example when the clinician has a higher initial likelihood to prescribe. Qualitative analysis has revealed the complex interplay of factors influencing influences at work on prescribing behaviour.

Conclusion:

To maximize the impact of POC testing, it should be integrated into a broader implementation strategy that includes educational and behavioural interventions.

Jacqueline Harris (UCL Centre for Behaviour Change)

Title

Effective Complaint Handling in General Practice Healthcare Staff: a Qualitative Interview Study and Behaviour Change Wheel Analysis

Abstract

Background: Patient complaints of inadequate care are common in healthcare systems and a source of workplace stress for healthcare professionals. Complaints can also highlight areas where patient safety may be compromised. Effective complaint handling seeks to successfully resolve written and verbal complaints, and facilitate service improvement. This study aimed to identify the factors influencing the behaviour of staff working in primary healthcare in response to a complaint and recommend strategies to support consistent effective complaint handling.

Methods: Qualitative study based on semi-structured interviews with six doctors and six administrators working in General Practice in England. Themes in the data were identified and mapped on the Theoretical Domains Framework (TDF). Application of the Behaviour Change Wheel produced recommendations for implementing complaint handling within GP practices.

Results: Effective complaints handling behaviours were identified and included: following a clear process, attempting to resolve the complaint at first contact, avoiding defensive responses, and holding quality improvement meetings that utilise complaints data. Effective complaint handling led to positive changes in service delivery and reconciliation with the complainant.

The principal barriers to effective complaint handling behaviours were the negative emotions (such as anger or anxiety) engendered by receiving a complaint, and lack of time. A belief in positive consequences of effective complaint handling, clear processes, sufficient resources, communication skills and colleague support all facilitated effective complaint handling. Based on these barriers and facilitators, Education, Engagement, Environmental Restructuring, Modelling, Persuasion and Training were proposed as possible behaviour change strategies to enable the implementation of effective complaint handling.

Conclusions: By providing clear complaint handling processes, sufficient time, colleague support, communication skills training and activities that enhance staff members' belief in the positive outcomes of complaint handling, GP practices can support staff to effectively resolve and learn from patient complaints, despite the negative emotions staff experience on receiving a complaint. These findings may be used in the design of strategies that support the implementation of complaint handling processes, such as the NHS Complaints Standards, in GP practices.

Ishbel Henderson (University of Oxford)

Title

Co-designing an intervention for older adults with multiple long-term conditions, using changes in physical activities to predict decline

Abstract

Introduction

Multiple long-term conditions (MLTCs) are common in the population, which increase with age and are associated with increased hospital admissions. Identifying early signs of decline, such as restricted physical activity, could help improve patient outcomes, however it is not clear how best to do this. This research explores the context, and potential applications of an intervention monitoring changes in physical activity.

Aim

Co-designing with patients, caregivers and healthcare professionals (HCPs), an intervention aimed at identifying changes in activity in order to recognise decline in older adults with MLTCs.

Methods

The Person-Based Approach was followed to plan and develop this intervention. Qualitative interviews were conducted with older patients with MLTCs, caregivers, and HCPs to examine perspectives, understand context, and design an intervention measuring changes in physical activity.

A prototype app was developed using these results and patient and public involvement. This was further optimised through iterative think-aloud interviews with patients, caregivers, and HCPs.

Results

Thirty-six interviews were conducted comprising of 17 patients (mean age 79-years, 23% female), eight caregivers and 11 HCPs (GPs, nurses, occupational therapists, and pharmacists). Interviews were recorded, transcribed, and thematically analysed.

Findings highlighted the importance of restricted activity as an indicator of decline. Patients often described their experiences of decline through non-specific symptoms, including changes in physical activity. HCPs emphasised the value of knowing about such changes to clinical decision-making. Different technology options for measuring activity were explored, considering data quality, and acceptability of passive/active data collection.

The initial prototype was optimised through two rounds of think-aloud interviews, with five patients, five caregivers, five HCPs in each round. This generated changes to enhance acceptability for the users, and practicality for the HCPs.

Conclusion

This study highlights the utility of measuring changes in activity in older patients, and some benefits and lessons learned from co-design. A proactive approach to detecting early decline within community settings may provide opportunities to reduce unplanned hospital admissions and improve patient outcomes, along with increasing the knowledge and confidence a patient has in managing their own health.

Rovinya Hettiarachchi (University of Southampton)

Title

Views of Healthcare Professionals and Patients on Delayed Antibiotic Prescriptions: A Systematic Review of Qualitative Studies

Abstract

Background: Approximately 70% of antibiotics are prescribed in primary care however overprescribing contributes to the rising rates of antibiotic resistance. Delayed prescriptions have been proven to reduce antibiotic use – approximately less than 40% of patients end up using it. According to the Cochrane review, although proven safe and effective, many prescribers have doubts on using this method in practice. Some patients are wary after being accustomed to receiving immediate antibiotics.

Aim: This systematic review aims to explore the views of healthcare professionals and patients on delayed antibiotic prescriptions to develop an understanding on strategies to effectively implement delayed prescriptions within the healthcare system.

Methods: 4 databases: MEDLINE, EMBASE, CINAHL and Web of Science were searched. Articles were deduplicated then screened around the inclusion criteria to focus on qualitative studies of patients, healthcare professionals and parents of children's view of delayed antibiotic prescriptions. All papers underwent a quality assessment and key data were extracted. Thematic analysis was conducted inductively to generate themes.

Results: 15 studies met the criteria, exploring the views of 373 professionals and 97 patients in total. The studies were conducted in primary care practices and a community pharmacy in the UK, Malta, Spain, Australia, Norway, Ireland, New Zealand and France. 5 main analytical themes were derived: (1) Concerns about safety, (2) Maintaining clinician-patient relationship whilst compromising with patient expectations, (3) Communication, (4) Decision making and patient autonomy, and (5) Access and convenience. Clinicians and some patients themselves were concerned the patient may misunderstand when to use the antibiotic, since the clinician does not make the final decision. Therefore, it is vital the clinician communicates clear instructions to patients. Some clinicians were worried that patients may not have access to antibiotics in case they worsen.

Conclusion: Although there are concerns related to delayed prescriptions, for example around safety and misuse of antibiotics, when accompanied with strong communication and patient education, delayed prescriptions appear to be a sustainable method to reduce antibiotic use whilst managing patient expectations. To execute this method sufficiently, training and clearer guidelines should be implemented for clinicians to reassure the safety of delayed prescriptions.

Jennifer Hirst (University of Oxford)

Title

Inequalities in hormone replacement therapy prescribing in UK primary care – An analysis of electronic health records of 2 million women 2013-2023

Abstract

Introduction Hormone replacement therapy (HRT) is effective at treating menopausal symptoms and recommended in guidance. In the UK, general practices in areas of highest social deprivation have the lowest HRT prescribing rates, but there is little evidence on how HRT prescribing differs by individual characteristics, which could inform tailored interventions.

We described HRT prescribing by ethnicity, social deprivation and region and identified factors associated with HRT prescribing.

Methods

We identified females aged 40-60 years between 2013-2023 using the QResearch primary care database to determine prescriptions of any HRT and different HRT formulations. We used logistic regression to identify factors associated with HRT prescriptions including ethnicity, socioeconomic status and region in England. Results were reported as adjusted odds ratios.

Results

The cohort comprised 1,978,348 women with a median age of 49 years, (IQR 44, 54) and 54% with documented white ethnicity. 19.2% of women received at least two HRT prescriptions, which varied from 3.9% in women from Black African ethnic groups to 22.6% in white women. HRT prescribing rates were 24.4% for women living in the most affluent neighbourhoods and 11.0% in the most deprived neighbourhoods. Similar prescribing patterns were seen across all HRT formulations. Logistic regression analyses adjusting for age confirmed that women across all minority ethnic groups had significantly lower proportions of HRT prescribing compared to white women, with odds ratios ranging from 0.18 (95%CI 0.17-0.19) in Chinese women to 0.49 (95%CI 0.47-0.51) in Caribbean women. HRT prescribing significantly decreased for each increase in quintile of social deprivation with an odds ratio of 0.61 (95%CI 0.60-0.61) for the most deprived compared to the most affluent quintile. HRT prescribing rates were significantly higher in all regions of England in comparison to London.

Conclusions

This study is the first to quantify individual level inequalities in HRT prescribing in England. It identified disparities in HRT prescribing by ethnicity, social deprivation and region, with fewer women prescribed HRT in non-white ethnic groups and in areas with the highest social deprivation. There is a critical need to explore how these differences arise and factors underpinning them, to consider opportunities to mitigate against these inequalities.

Janice Hoang (University of Oxford)

Title

Blood cancer survival and inequalities in England, Northern Ireland and Scotland

Abstract

Background

Blood cancers are among the most commonly diagnosed cancer types and rank as the third leading cause of cancer-related deaths in the UK, affecting over 40,000 people each year. Blood cancer survival varies significantly by subtype and is not routinely reported within the UK nations. This study estimated survival for haematological malignancies in England, Northern Ireland and Scotland stratified by time period, and demographic factors.

Methods

Three retrospective cohort studies were undertaken, including all patients aged 15-99 years old with haematological malignancies diagnosed between 01/01/2009 and 31/12/ 2019 within the English, Northern Ireland (NI) and Scottish cancer registration datasets. In England, the QResearch database, which incorporates the most recent dataset from the National Cancer Registration Analysis Service, was employed. Net survival analysis was conducted overall, by major subgroups (leukaemia, lymphoma, myeloma), and by finer subcategories where numbers permit, using the 25 internationally agreed HEAMACARE groups.

Results

Across all nations, the highest five-year survival was for Hodgkin lymphoma with nodular lymphocyte predominance (England: 95.4%, 95% CI 93.6-96.7; NI: 92.6%, 95% CI: 84.5-96.6; Scotland: 97.0, 95% CI: 87.2-99.3), while the lowest five-year survival was for acute myeloid leukaemia (England: 22.5%, 95% CI: 22.0-23.0; NI: 23.0, 95% CI: 19.9-26.2; Scotland: 21.7, 95%CI: 20.0-23.4). The survival for all blood cancers combined increased between the time periods 2009 to 2014 and 2015 to 2019 in England and NI (England: 60.5% to 64.3%; NI: 61.3% to 66.4%) but did not change significantly in Scotland (64.7% to 65.3%). Young people and females generally had higher survival rates in all three nations. This observation was consistent across nearly all subtypes, but the magnitude of the sex differences varied. Non-white groups generally exhibited better survival rates than the White population. The patterns varied across blood cancer subtypes, and were not often statistically significant in England. Overall, higher age-standardsed net survival was for those in the least deprived quintile than those in the most deprived quintile across nations.

Implications for practice/policy

These findings are part of the 2024 Blood Cancer UK Action Plan, presented to the UK Parliament to promote policies for better blood cancer survival and reduce disparities.

Sian Holt (University of Southampton)

Title

Creative conversations in PPI: Lessons learned from co-designing a game with underserved groups about the challenges of living with health conditions.

Abstract

Why is this important?

Members of lower socioeconomic status and diverse ethnic backgrounds are often not included in research studies despite having poorer health outcomes. We wanted to engage these underserved groups by co-designing a game together. The game aimed to encourage important conversations about the challenges of living with health conditions, and the co-development process aimed to break down barriers to inclusion and amplify the underserved voices of this community.

What we did

We conducted 4 Listening Cafe events in two Family hub settings within the most deprived areas of Southampton. These Family hubs provide support for families with play sessions, healthcare support, employment support, and more. The Listening Cafes involved using creative methods to encourage conversations about the challenges of living with health conditions. Together, we identified priorities, brainstormed ideas, and collaborated with an artist to co-create a game called “Understanding Me: Inside and Out”. The game has two elements:

1) Understanding how people cope best with daily challenges and discussing their coping strategies with others, enabling those around them to provide support.
2) Myth-busting common misconceptions about what it’s like to live with health conditions to improve support and understanding from others.

Lessons learned

Learning from these Listening Cafes can help other researchers and PPIE collaborators to design and facilitate engaging and successful PPIE activities that build positive working relationships and result in tangible impact. This is important to improve the value of research, ensure the inclusion of underserved voices and strive towards diversity. Research inclusion and diversity is an NIHR strategic priority, and this learning would benefit others in achieving this.

Examples of some of the insights to share include:

- Building sustainable relationships between researchers and the public
- Raising awareness and involvement in research
- Cultural considerations
- Achieving meaningful and positive engagement
- Creating safe spaces

Next steps

We are planning on publishing our findings from this PPI co-design work, with our PPI collaborators as joint first authors. We are submitting a grant application to refine and evaluate the use of the game with more underserved groups.

Phuong Hua (Bristol Medical School)

Title

Real-world Use of Topical Treatments for Children with Atopic Eczema: A Systematic Review

Abstract

We are conducting the first systematic review of real-world studies related to topical treatments, especially emollients and topical corticosteroids (TCS), for childhood eczema.

This review, registered on PROSPERO (CRD42024538853), seeks to identify studies primarily focused on patterns of use (e.g., frequency, quantity, duration).
We searched six databases in February 2024 and identified 12,155 publications, with 34 studies meeting the inclusion criteria. Most studies were from Europe, Asia, and North America. They showed that emollients, TCS, and topical calcineurin inhibitors (TCI) were the most commonly used topical treatments for eczema of all severities (mostly mild). Emphasis on TCIs may reflect their relatively recent introduction and research funded by manufacturers.

In primary and secondary care, regular use of emollients was reported for mild to moderate eczema in the first five years of life, although authors did not define 'regular' frequency. For TCS, undertreatment or underuse was a recurring theme reflected in potency and duration, with patients ceasing their use as soon as possible. Patients may also rely on topical treatments for reactive use (flare control) rather than regular proactive use (weekend therapy). There was limited evidence of good disease control using TCSs and TCIs, as the effectiveness of real-world use has not been commonly studied.

Patient- and provider-related characteristics appear to affect use. Contributing factors include the severity of eczema, sex of children and parents, age of children, socioeconomic circumstances, knowledge of side effects, prior experience of TCS use, social and financial resources, and sources of information for topical treatments. TCS phobia, insufficient knowledge, aberrant use, or dissatisfaction with treatments may explain this. There are likely to be considerable differences in prescription patterns between different health care systems and clinicians (general practitioners compared with dermatologists; publicly funded versus private practice). As secondary care patients tend to have more severe eczema, the potency of topical treatments prescribed is higher. The findings have implications for therapeutic education around topical treatments and parental or self-treatment management skills. However, we need to consider different treatment guidelines across international healthcare systems and the need for standardised scales/measures of frequency, quantity, and duration of topical treatment use.

Nicola Ivins (University of Cardiff)

Title

Diversity and Inclusion in Primary Care Research: Lessons from Three Decentralised Trials

Abstract

Ensuring equitable access to research participation is vital for the success and relevance of study findings. Here we share insights from three community-based decentralised trials — PANORAMIC, LISTEN, and TIPTOE—that employed remote self-registration strategies to enhance inclusivity.

The PANORAMIC trial, conducted during the COVID-19 pandemic, investigated treatments using a UK-wide community outreach strategy. By allowing participants to self-enroll remotely via a website or phone, the trial streamlined recruitment and facilitated participation for underserved populations. This approach attempted to reduce barriers for individuals in rural or socially deprived areas, although challenges remained in engaging specific groups such as people with learning disabilities.

Similarly, the LISTEN trial, which tested a co-designed support package for individuals living with long COVID, used support strategies to recruit participants from underserved, rural, and socioeconomically deprived communities. The complex intervention was co-designed with people living with long COVID and aimed to improve confidence, knowledge and life skills whilst navigating the unpredictable day to day life of long COVID. Although, the demographic data suggested that the consented population were working age adults, more digitally literate and actively looking for trials online, this approach did reach individuals in areas of England and Wales where research participation is typically limited. Work is now ongoing to explore what can be done to further improve inclusion.

Building on these experiences, the TIPTOE trial opened in 2024 to test a support package for individuals aged 65 and older living with knee or hip osteoarthritis alongside another health condition. While decentralised methods facilitated broader access, this trial revealed new challenges. Older participants often required additional support and personalised assistance to navigate the self-registration process, highlighting the importance and need for human support alongside technological innovations.

These trials collectively illustrate the critical role of decentralised approaches in enhancing participation and representation. However, they also highlight the ongoing need to address specific barriers, particularly for older adults and other ‘vulnerable’ groups. By taking time to develop community strategies involving representation from all primary care communities, researchers can better design studies that ensure diverse populations are represented, ultimately contributing to more inclusive and impactful primary care research.

Lucy-Jane Davis (University of Plymouth)

Title

Another lost tribe? When, how and why do Neurodivergent GPs seek diagnosis?

Abstract

Introduction

This study investigated the experiences of diagnosis for neurodivergent (ND) GPs. Given the increasing recognition of neurodivergent medical students (including ADHD, autism, dyslexia, dyspraxia), MRCGP applicants requesting reasonable adjustments for exams, and personal observation, we postulated there is a 'hidden' group of qualified GPs who may have always been ND, but not been identified earlier in their careers. Identifying needs and implementing reasonable adjustments is important as there is an increased incidence of burnout and suicide observed in neurodivergent populations.

Methods

A national online survey recruited doctors working in General Practice in the UK, who had a formal or suspected diagnosis of neurodivergence. Recruitment was via adverts on social media and professional networks. Ethics approval was granted by the University of Liverpool IPH-REC ref. 12172. Reflexive thematic analysis was used to analyse free text responses.

Results

In total, 80 doctors responded. Findings included:

- many doctors sought diagnosis of neurodivergent conditions post-CCT, with a large proportion in the age range 40-49
- a substantial number were either autistic or ADHD, or both.

"Earlier support and diagnosis would have had positive impact on my medical education and career. It would also have helped me avoid burn out." [ADHD, female, 40-44, salaried GP]

- long waiting times for diagnosis, or even a lack of local NHS service, resulted in some respondents deciding to seek private assessment
- other respondents had decided not to seek formal diagnosis, sometimes due to waiting times, or perception that a diagnosis would not be useful at their stage of career, or might even be actively harmful

Discussion

Screening for dyslexia is now recommended at several stages of medical education, including entry to medical school and start of GPVTS. However, we suggest this strategy should be revisited: are educators screening for the right things at the right time, and could better support be implemented for doctors throughout their careers, thereby reducing stress and burnout?

Moreover, given the need for timely support, diagnostic pathways for GPs who suspect they are neurodivergent should be reviewed. Greater pressure should be placed on policy makers to improve access to occupational health support in General Practice.

Tomazo Kallis (University of Exeter)

Title

How do pharmacists navigate clinical uncertainty when reviewing polypharmacy in general practice? A critical literature review.

Abstract

Background: A key role of pharmacists within general practice is to review patients with polypharmacy. The inherent clinical uncertainty associated with polypharmacy review can make decision-making difficult and encourage pharmacists to 'maintain the status quo' and make no changes to a patient's medication regimen. Understanding the modifiable factors and available interventions that could mitigate clinical uncertainty could improve polypharmacy medication reviews delivered by pharmacists in primary care.

Aim: To explore how primary care clinical pharmacist decision-making can be improved when reviewing polypharmacy in the context of clinical uncertainty.

Method: A critical literature review was undertaken of CINAHL, PsycInfo, MEDLINE and Embase databases. Articles exploring polypharmacy, clinical uncertainty, medication review and deprescribing by primary care clinical pharmacists were included. Results were thematically analysed. Novel conceptual models were produced exploring the factors which affect pharmacists when navigating clinical uncertainty in polypharmacy medication reviews and how the decision to either deprescribe or make no changes (clinical inertia) is made.

Results: Pharmacists express cognitive, emotional and behavioural characteristics when reviewing polypharmacy, with general feelings of self-competence occurring alongside fear of judgement from patients or colleagues. Relationships with patients, including shared decision-making, continuity of care and engagement, can support the medication review process. Drugs initiated in secondary care, prescribed for prophylaxis, or prescribed for disease control encourages clinical inertia. On the other hand, increasingly frail patients and the presence of adverse drug factors encourages pharmacists to proactively deprescribe. Decision making is also impacted by environmental factors, with poor working relationships within organisations, working across several sites and time pressures contributing to clinical inertia, thus hindering deprescribing. The absence of clear clinical and deprescribing guidelines for multimorbid patients also contributes to clinical uncertainty. Opportunities exist to facilitate decision making: multidisciplinary working mitigates clinical uncertainty, and training interventions can support pharmacists to proactively deprescribe.

Conclusion: Pharmacist, patient and environmental factors can influence pharmacists' decision-making when reviewing polypharmacy in the context of clinical uncertainty. Appropriate clinical education, peer support and multidisciplinary working may have a role in reducing clinical uncertainty and thus optimising pharmacists' reviews of polypharmacy.

Debasish Kar (University of Plymouth)

Title

Young onset diabetes poses a greater risk of end-stage renal disease than adverse cardiovascular events and stroke: insights from UK Biobank

Abstract

Background: Diabetes is a major risk factor for end-stage renal disease (ESRD), cardiovascular events and stroke. Better management of cardiometabolic risk factors in primary care has significantly improved cardiovascular and stroke outcomes. In contrast, the number of people requiring dialysis due to diabetic nephropathy (DN) has been creeping up. Between 2011 and 2019, the number of people requiring dialysis due to DN increased by 9%, putting an enormous financial burden on the NHS. The precise cause for the disparity in renal versus cardiovascular and stroke outcomes remains unclear. However, the incidence of type 2 diabetes mellitus (T2DM) in young adults has surged by 50% in the last three decades. This study explores whether young-onset diabetes is a greater risk for ESRD compared to cardiovascular events and stroke.

Methods: This retrospective study leveraged data from UK Biobank (n=502,408) participants recruited between 2006 and 2010. We analysed diabetes diagnosis and outcomes (myocardial infarction, stroke and ESRD), with age of diabetes diagnosis as the primary exposure variable. Univariable and multivariable logistic regression models were fitted to assess odds ratios (ORs) and 95% confidence intervals (CIs). Model performance was evaluated using receiver operating characteristics (ROC) analysis.

Results: Among 26,206 (5.26%) participants with diabetes, 1.2% (n=303) had ESRD, 8.6% (n=2250) had a myocardial infarction, and 2.9% (n=771) had a stroke. Compared to those diagnosed with diabetes after 60, the odds of ESRD were significantly higher for those diagnosed at younger ages: <20 years (aOR 5.26), 20-40 years (aOR 7.78), and 41-60 years (aOR 2.33). The odds of myocardial infarction were higher for those diagnosed at >60 years (aOR 1.23), lower for those diagnosed <20 years (aOR 1.14). The odds of stroke did not show significant variation across age groups. Multivariable models adjusted for sex and albuminuria confirmed the increased odds of ESRD in people with younger onset and longer duration of diabetes.

Conclusion: Young onset diabetes and prolonged hyperglycaemia may contribute to the rising surge of DN and ESRD. Early screening for diabetes and albuminuria in high-risk children and adolescents could help detect renal complications early and prevent the increasing burden of ESRD.

Judit Konya (University of Exeter)

Title

Early cancer detection in community pharmacies in deprived areas – an online survey

Abstract

Background

One in two people are diagnosed with cancer during their life and early detection improves clinical outcomes. Many early symptoms of cancer share characteristics with symptoms of benign diseases and patients may self-medicate using over-the-counter treatment options. Community pharmacies are accessible, and their staff are well placed to provide advice. With community pharmacies delivering increasing and more diverse patient care, they have a potential role in early cancer detection.

However, in England, there is limited evidence regarding the usual practice of community pharmacy staff when offering over-the-counter medication to treat potential red flag symptoms.

Aim

To explore the current practice of community pharmacy staff across England when dispensing over-the-counter medication to customers for the treatment of symptoms that could indicate potential gastrointestinal, urinary tract, prostate or lung cancer.

Methods

An online survey was designed using Qualtrics software (Qualtrics, Provo, UT). Eligible participants were community pharmacy staff in customer-facing roles. The recruitment strategy was revised following the initial survey distribution within three Local Pharmaceutical Committees and was extended to all community pharmacies in England (n=10216). Survey distribution was supported by professional organisations and social media presence.

Demographics and characteristics of respondents and employing pharmacies will be described. Mixed effect logistic regression will be used to examine the degree to which different approaches are clustered by pharmacy. Further models will examine variation in respondents propensity to ask about symptoms and actions taken according to the characteristics of the responders (for example job role) and their respective community pharmacy (for example deprivation profile).

Results

There are 366 submitted survey responses. The survey was closed at the end of November 2024, and data cleaning has been started.

Conclusion

The survey findings will be presented in full at the conference and will inform future research directions. The recruitment process experience reflects the literature on low participation of community pharmacy staff in clinical research.

Stella Kozmer (University of Exeter)

Title

Identification and Management of Bulimia Nervosa & Binge Eating Disorder in Primary Care: a systematic review of qualitative research

Abstract

Aims

Binge eating disorder (BED) and Bulimia Nervosa (BN) are the second and third most common eating disorders with serious physical and mental health consequences. Despite this, their identification is often overlooked, and support for their management is lacking in primary care. Hence, this systematic review aims to understand how identification and management practices of BED and BN in primary care settings are perceived by both patients and healthcare professionals to identify how we may improve the rates of identification and referral to quality support.

Method

A systematic review of qualitative research was conducted following standard PRISMA guidelines. From conception to February 2023, searches were completed in five databases. The included studies were not restricted to the year of publishing or language. The quality of articles was assessed using the Critical Appraisal Skills Programme checklist. Following Thomas and Harden's three steps, thematic synthesis was used to synthesise the data. Stakeholders, patients, and the public were involved in interpreting the data and integrating the perspective into one narrative.

Results

2043 articles were identified and screened for inclusion by two independent reviewers and checked by a third independent reviewer. Seventeen articles were included. Three articles were of high quality with a low risk of bias; the rest were medium. Seven articles were from the UK, four from the US, and the rest from Canada, Norway, France, Australia, and New Zealand. Ten articles focused on HCPs' perspectives, and seven on patients'. This review found that the main factors that influence the identification and management of BED & BN are knowledge and understanding of BED & BN, communication skills regarding eating disorders and limited communication amongst different HCPs, attitudes towards BED & BN and the healthcare system, and the existence, accessibility and clarity of treatment and referral pathways. This review also identified directional relationships among these factors and their impact on each other.

Conclusions

The review discusses how the identified factors interact and highlights gaps in current research and clinical practice, offering insights that could help inform the development of strategies to improve the identification and management of BED & BN.

Joseph Kwon (University of Oxford)

Title

Efficiency and equity of community-based falls prevention pathways: a model-based health economic evaluation

Abstract

Background: Three parallel pathways exist for community-based falls prevention: reactive (R) – after a fall requiring medical attention; proactive (P) – after professional referral of high-risk individuals; and self-referred (SR) – voluntary intervention enrolment. The UK guidelines recommend the scale-up of all three ('recommended care' (RC)), but the scale-up of none ('usual care' (UC)), one (R, P, SR) or two (R+P, R+SR, P+SR) are potential options. This study aims to compare the options in terms of efficiency and equity.

Methods: A previously validated health economic model of community-based falls prevention was used. Cost-utility analysis from the societal perspective over a 40-year horizon sought to identify the optimal strategy among the above options based on efficiency alone. Probabilistic sensitivity analysis accounted for parameter uncertainty. Efficiency and equity were jointly evaluated by distributional cost-effectiveness analysis. Equity was conceived as reduction in the relative and absolute per-capita societal net health benefit differences across socioeconomic status quartiles. Alternative scenarios assessed the impacts of changes in frailty level and progression, cognitive impairment incidence, intervention demand and GP access.

Results: The public sector cost-effectiveness threshold would have to increase above £30,000 per quality-adjusted life year (QALY) gained for RC to have the highest probability of being cost-effective, the next best strategy being R+SR. However, if decision-maker had relative health inequality aversion of the same level as that of the English general public, RC would be the optimal strategy in terms of efficiency and equity at the threshold of £30,000 per QALY gained. R+SR consistently remained the optimal strategy when absolute health inequality aversion was considered. Scenarios of worse geriatric health (increased frailty level/progression and cognitive impairment incidence) favoured RC such that it was the optimal strategy at threshold of £20,000 per QALY gained and at lower relative inequality aversion levels. Other scenarios had little impact on strategy rankings.

Conclusion: Concurrently scaling up all three community-based falls prevention pathways as recommended by the UK guidelines would be optimal only if equity regarding relative health inequality is considered alongside efficiency. This is a case of equity consideration making a concrete difference to the decisional recommendation generated by a health economic model.

Lukman Lawal (University of Oxford)

Title

Adiposity and risk of infectious disease mortality in Mexican adults

Abstract

Background

Global obesity rates have doubled between 1990 and 2022. While causal associations of obesity with vascular-metabolic mortality are well established, evidence for infective deaths is emerging (mostly from COVID-19 studies) but remains limited. This study aims to investigate the associations of general and central adiposity markers with the risk of premature mortality from overall and site-specific infections among Mexican adults.

Methods

From 1998 to 2004, 159,517 adults aged ≥35years were recruited from Mexico City and followed-up until January 2022 for cause-specific mortality. Cox regression analyses yielded adjusted hazard ratios (HR) for deaths from any infectious disease and six specific types (septicemia; respiratory; urinary; gastrointestinal; skin, bone and connective tissue; and other infections) associated with measures of adiposity (body mass index [BMI] and waist circumference [WC]).

Findings

Among 132,518 participants aged 35–74 and without known prior disease other than diabetes at recruitment, the mean BMI and WC were 29.2 (4.9) kg/m2 and 94 (11) cm, respectively. During a mean follow-up of 19 (4) years, 2764 infectious deaths were recorded at ages 35-74. Respiratory infections accounted for approximately two-thirds of these deaths. And >50% of premature deaths could be attributed to overweight and obesity. Among participants without previously diagnosed diabetes and with HbA1c <7%, BMI and WC were positively associated with infectious mortality. Each SD higher BMI above 25kg/m² and WC above 86cm was associated with HRs of 1.37 (95% CI 1.32-1.43) and 1.31 (1.26-1.37), respectively. Strong associations were found with deaths from infections of the skin, bone, and connective tissue (BMI: 1.74 [95% CI 1.43–2.12]; WC: 1.57 [1.33-1.87]), with more modest associations with death from other site-specific infections. These associations were stronger at younger ages and similar among men and women at all ages. Among participants with previously diagnosed diabetes, there was no clear association between BMI and WC and deaths from infections.

Interpretation

Excess adiposity is linked to higher risks of infectious disease mortality in Mexican adults. The findings suggest some focusing of prevention efforts, including better implementation of existing vaccination policies, particularly against respiratory pathogens, among individuals with high levels of adiposity might be particularly valuable.

Kayley McPherson (University of Oxford)

Title

‘Hello Doctor’: Developing and trialing a collaborative and creative approach to PPI

Abstract

Background

Patient and public involvement (PPI) typically involves group meetings where people are asked to share their experiences and opinions. Although the public broadly welcomes the opportunity to contribute in this way, this approach can inadvertently exclude some (including non-English speakers, people with disabilities, and carers unable to attend long meetings). However, their experiences are still important, and we critically considered how to develop a more inclusive approach.

Methods

We aimed to support members of the public to inform our research and share their priorities through a novel, creative, and collaborative approach. A group of nine diverse people living with obesity participated in workshops led by artists (Libby Wilcox-Pierce, Ameal Wolf) and a poet (Grace Copeland). These workshops developed skills in poetry and art and used these to focus on the experience of communicating with healthcare professionals for those living with obesity, and what research priorities should be to address common challenges.

We prioritised flexibility and accessibility, offering 2 online and 1 face-to-face workshop based on the group’s preferences. Materials were provided for the in-person workshops and mailed to online participants without access. We reimbursed time, travel, and offered to cover carer costs, (including replacement carer costs for those who were carers).

Those attending could create their own pieces or guide the artist/poet’s work that they were creating based on people’s experiences. This enabled people to participate in whatever way they felt comfortable. As creatives, rather than researchers led the workshops, the setting facilitated informal dialogue between group members and researchers.

Results

The workshops were well received, with one person saying ‘It would be great to have a part two! I am very proud of my work and writing with others’. The pieces created have been collated into a booklet called ‘Hello Doctor’.

Conclusion

‘Hello Doctor’ successfully supported members of the public to inform our research and share their priorities through a novel, creative, and collaborative approach. It was well received by those who participated, the creatives, and the research team. The pieces created shaped our research agenda and we plan to expand this creative PPI approach in future projects.

Emma Mi (University of Bristol)

Title

Adaptive risk stratification for liver cancer – preliminary findings

Abstract

Background: Liver cancer is diagnosed at late stage in 80% of cases and has high mortality (13% 5-year survival). Previous risk prediction models for liver cancer have focused on specific cohorts with liver disease and current cancer risk assessment tools, e.g. QCancer, only include binary symptoms or most recent tests, and do not consider pattern of symptoms/tests over time. Research indicates predictive value of such trends up to 5 years prior to diagnosis of colorectal and pancreatic cancer. This study aims to determine longitudinal trends in primary care symptom presentations and blood tests associated with liver cancer in a large population-based cohort, to improve early diagnosis.

Methods: Individuals aged 20-100 years without prior liver cancer in the QResearch database between 1/1/2014 and 1/10/2021 were included in the cohort. Liver cancer during follow-up was defined as diagnosis of hepatocellular carcinoma, intrahepatic cholangiocarcinoma or other specified/unspecified primary liver cancer in GP record, Hospital Episode Statistics, National Cancer Registration and Analysis Service, and/or ONS death registry. Symptoms and blood tests associated with cancer identified in literature and clinical guidelines were evaluated. Trends in symptoms and blood tests are modelled with multivariate mixed-effect models with fractional polynomials, and a Cox sub-model used to predict risk of liver cancer diagnosis.

Findings: The total cohort included 3,372,432 individuals (median age 44 years, 51.2% female). 1548 patients were diagnosed with primary liver cancer during follow-up (median 4.58 years), with median age 70 years and 35.1% being female. In liver cancer patients (vs whole cohort), 26.9% were in the most socioeconomically deprived quintile of the population (vs 23.9%), 4.8% were heavy drinkers (>7 units/day) (vs 1.2%), and mean BMI was 28.75 (SD 5.77) (vs 26.53 (SD 5.82)). 1360 (87.9%) and 1339 (86.5%) liver cancer patients had ≥1 FBC and LFT tests respectively during follow-up, with a median of 4 test events per person for each. The most frequently presenting symptom among liver cancer patients was abdominal pain (354 patients, 22.9%), with median time 5.2 months from first presentation to cancer diagnosis.

Interpretation: The study cohort is representative of the general and liver cancer population. Model development is ongoing.

Paul Mitchell (University of Bristol)

Title

Clinician preferences related to rapid microbiological point-of-care-testing in primary care for respiratory tract infections: a discrete choice experiment from the RAPID-Test trial

Abstract

Background

To help achieve the objective of reducing unnecessary antibiotic prescribing, the use of rapid microbiological point-of-care-testing (POCTRM) in primary care is seen as a promising option. A key challenge with the possible introduction of POCTRM would be the initial budget impact for a primary care system already under significant resource pressure. Therefore, an important consideration before the introduction of any such POCTRM will be to develop a greater understanding to the benefits it offers to clinicians.

Methods

A discrete choice experiments (DCE) - a health economics stated preference survey method, primarily drawing from qualitative interviews conducted as part of the RAPID-TEST trial (NIHR131758). The RAPID-TEST trial is investigating the impact of POCTRM on antibiotic use and clinical outcomes in primary care. Qualitative interviews with clinicians involved in the trial have also taken place to better understand their views on such technology being used in primary care.

From an initial preliminary thematic analysis of the qualitative interviews, the DCE research questions and candidate attributes were developed, with an iterative process where draft DCEs were discussed with the research team of health economists, qualitative researchers and clinicians, alongside other members of the RAPID-Test trial management group, including PPI representatives.

Questions on the clinician DCE ask clinicians to consider two patients who may benefit from a POCTRM in their treatment and diagnosis plan, choosing the patient who would benefit most, or a neither option if they think neither patient would benefit from a POCTRM. An initial list of eight attributes were considered, with four attributes chosen (vulnerable patient; patient anxiety; test helpful in managing clinician-patient relationship; clinical uncertainty of diagnosis and treatment plan). The DCE was developed using REDCap (https://project-redcap.org/) and will be completed by participants online.

Results

Pilot data collection, targeting 54 clinicians involved in the RAPID-Test trial, will be completed in December 2024.

Discussion

Pilot results will be presented at the meeting, which will provide initial indications on clinician preferences related to the use of POCTRM in primary care. We would welcome feedback on our work in progress findings from attendees at the SW SAPC meeting.

Abi Moore (University of Oxford)

Title

Urinary biomarker analysis in asymptomatic and symptomatic urine samples from care home residents: early results from the DISCO UTI study

Abstract

The problem

The diagnosis and treatment of urinary tract infection (UTI) is particularly common for care home residents. However, establishing an accurate diagnosis is challenging in this population because: (i) symptoms and signs can be non-specific; (ii) histories can be unreliable due to cognitive impairment; (iii) obtaining an uncontaminated urine sample can be difficult; and (iv) there is a high prevalence of asymptomatic bacteriuria (ASB), estimated at 30-50% in this population. The aim of the DIagnoSing Care hOme UTI Study (DISCO UTI) is to assess feasibility and acceptability of conducting a prospective cohort study of urinary tract infections in care home residents and explore potential future diagnostic or prognostic strategies.

The approach

Care home residents in England were recruited to the cohort, with up to one year follow up. Urine samples were collected from all participants when asymptomatic at baseline and repeated weekly for 4 weeks from a subset. If a participant had a possible UTI during follow up, data and three further urine samples were collected (at onset, day 14 and day 28). Urine samples were analysed in terms of appearance, microscopy and significant growth on culture. The study also involved exploratory work on urinary biomarkers: asymptomatic and symptomatic samples were tested for a panel of biomarkers with evidence of association with UTI.

Findings

81 participants have been recruited from 8 care homes to the cohort. 69% participants are female, mean age is 85.4, 46% lack capacity. Follow up is currently ongoing. 27 (33.3%) had asymptomatic bacteriuria (ASB) at baseline. There have been 22 symptomatic episodes to date from 18 participants. Urine biomarker analysis will be undertaken after participant follow up is complete in January 2025. At the conference we will be able to compare biomarker results in asymptomatic and symptomatic samples.

Implications

We hope to identify if any biomarker shows promise at being to differentiate UTI from ASB; this would be a gamechanger for UTI diagnosis in this setting. Our results will be useful in exploring possible candidates for a future diagnostic accuracy study.

Wema Mtika (University of Oxford)

Title

Inequalities in COVID-19, Pertussis, and Influenza Vaccine Uptake in Pregnant Women using the QResearch Primary Care Database in England

Abstract

Introduction

COVID-19, influenza and pertussis vaccinations protect pregnant women and their babies from infection complications. Although pregnant women were added to the COVID-19 vaccination priority list in December 2020, uptake during pregnancy remained lower than the general population despite pregnant women bearing a higher risk of severe COVID-19 outcomes. We quantified uptake of COVID-19, influenza and pertussis vaccines during pregnancy during early COVID-19 pandemic and identified social and ethnic factors associated with vaccine uptake.

Methods

We used the QResearch® primary care database linked to COVID-19 vaccination and SARS-CoV-2 testing data. We included females aged 15-50 years with at least one pregnancy between December 2020 and September 2022. We described COVID-19, influenza and pertussis vaccination uptake prior to, during, and after pregnancy by characteristics including age, ethnicity, deprivation, and geographic region of England. Cox proportional hazards regression was used to identify factors associated with vaccine uptake.

Results

In our cohort of 266,758 women with 279,027 pregnancies, 195,180 (73%) women received at least one dose of the COVID-19 vaccine, and 41% of the pregnancies were protected through receiving at least one vaccine any time prior to or during their pregnancy. Uptake of vaccines during pregnancy for pertussis anytime during follow-up was 36%, and influenza during the September 2020 to March 2021 season was 34%.

Caribbean and Black African women had the lowest COVID-19 vaccination rates (17% and 29% respectively) compared with 42% in white women. 48% of women in the most affluent quintile of deprivation received a COVID-19 vaccine compared with 34% in most deprived areas. In the adjusted models, COVID-19 vaccination was lowest in Black African (HR 0.60, 95%CI 0.58-0.61) and Caribbean (HR 0.60, 0.57-0.64) women compared to white, and the most deprived group compared to the most affluent (HR 0.89, 0.87-0.90).

Conclusion

Our study identified that the number of pregnancies protected by COVID-19 vaccination was higher than pertussis and flu vaccination. Caribbean and Black African women had the lowest COVID-19 vaccination rates, and vaccination uptake decreased with increasing social deprivation. This will help clinicians and policy makers to provide evidence-based advice and pregnant women to make informed decisions on vaccination.

Guan Naijie (University Birmingham)

Title

Sickness absence in the working age population in England before and during the latter part of the COVID-19 pandemic: a retrospective cohort study using primary care medical certificate data

Abstract

Problem: Economic inactivity in the UK rose to 22.2% in 2024, driven largely by an increase in long-term sickness. The economically inactive due to sickness is higher than Europe or the US. Our study uses primary care data to describe the frequency and economic costs of fit notes issued to the working-age population (aged 18 to 65).

Approach: A population-based retrospective cohort study was undertaken, including individuals aged 18 to 65 and registered with a general practice contributing to the Clinical Practice Research Datalink (CPRD) Aurum database, for at least 12 months before the study start date. We included those registered from 1 January 2017 to 31 December 2019 and from 1st March 2022 to 27th February 2023. We defined fit notes using SNOMED-CT codes for sickness certification (also known as Statement of Fitness for Work or Med 3 Form); calculated annual rates of issuing fit notes; and described the health problems which led to most sickness absence. We explored the relationship between fit notes and patient-characteristics age, sex, ethnicity, poverty, smoking, body mass index (including obesity), health condition, number of consultations, and region using negative binomial regression models. We also estimated the economic cost (productivity losses) due to sickness absence.

Findings: The age-standardised fit notes rate was 25.83 per 100 person-years before the pandemic (2017-2019) and 26.32 per 100 person-years in 2022. The number of fit notes issued was significantly higher among females, at older age, in Black ethnic groups, in lower income groups, in those with obesity, smokers, or more prior consultations. Depression and anxiety were the leading reasons for issuing fit notes. Before the pandemic average annual cost of sickness absence per patient was £296.6 (95%CI: £295.5-£297.7) and afterwards was £365.0 (95%CI: £363.6-£366.5). Before the pandemic the total annual cost of sickness absence in England was £10.4bn (95%CI: 10.4bn-10.5bn) and afterwards was £12.8bn (95%CI: £12.8bn-£12.9bn).

Consequences: The findings provide a granular understanding of fit notes and demonstrate the substantial economic cost of sickness absence. They have implications for policy formation and further research in relation to sickness and economic activity due to sickness in the UK.

Immaculate Okello Ajok (University of Southampton)

Title

Type 2 Diabetes Mellitus self-management among people of black African ethnic background in high-income countries: A systematic review of qualitative studies

Abstract

Background: Type 2 Diabetes (T2D) is an escalating global health concern, with approximately 100,000 new diagnoses annually in the UK. In many high-income countries, black African people have a higher prevalence of T2D compared to local white populations. In England, black Africans are 2 to 3 times more likely to develop T2D compared to white British people. Despite several financial investments to improve T2D outcomes, glycaemic control is still poor and often worse among black African patients leading to diabetes complications and worse outcomes.

Objective: To understand the experiences and views of black African people self-managing type 2 diabetes and the contextual factors and mechanisms that facilitate or hinder diabetes self-management.

Methods: We conducted a comprehensive search across 7 electronic databases without language or date restrictions to identify papers that qualitatively explored T2D self-management among people from black African backgrounds living in high-income countries. At least 2 reviewers screened and appraised the methodological quality of the included studies. We used thematic synthesis to derive descriptive themes and a realist approach to understand the context-mechanism-outcome configurations of self-management.

Results: We retrieved 12,472 papers, of which 30 articles involving 872 participants from 6 countries were included.
A supportive social and healthcare network underpinned good self-management and better outcomes. Mechanisms for these outcomes included receiving reassurance and knowledge in a stigma-free environment allowing openness and acceptance of T2D diagnosis and self-care. For some people, the fears of death and complications also supported higher self-efficacy and better decision-making.
Suboptimal self-management was common in several contexts and fuelled by different mechanisms like the prioritisation of others to fulfil societal expectations of gendered roles like cooking. Mistrust of the health system also underpinned a fear of being harmed by medical advice/ treatments. The cultural stigmatisation of diabetes led to avoidance of overt self-care practices like administering insulin, and the lack of culturally appropriate resources led to feelings of “no control” over making practical changes to one’s diet.

Conclusion: For effective self-management, we need to account for the influence of cultural beliefs and norms on T2D self-management by developing more targeted interventions and culturally appropriate resources.

May Ee Png (University of Oxford)

Title

Cost-Effectiveness of Home-Based COVID-19 Treatments: Findings From the PRINCIPLE Trial

Abstract

Background: The PRINCIPLE (Platform Randomised trIal of treatmeNts in the Community for epidemic and Pandemic iLlnEsses) trial is a community-based clinical trial designed to identify treatments for managing acute COVID-19 symptoms in higher-risk populations (e.g., individuals aged 18+ with comorbidities or aged 65+ without comorbidities). The population was largely unvaccinated at the trial's start with azithromycin, remaining so until favipiravir and ivermectin were introduced. While the trial evaluated clinical effectiveness of six treatments, their cost-effectiveness remains unexplored.

Aim: To assess the cost-effectiveness of six COVID-19 treatments (azithromycin, doxycycline, inhaled budesonide, colchicine, favipiravir, and ivermectin) compared to usual care for home-based recovery.

Methods: Within-trial cost-effectiveness analyses were conducted among participants testing positive for SARS-CoV-2 in the PRINCIPLE trial's primary analysis population. Incremental cost-effectiveness ratios (ICERs) were calculated for mean costs versus two co-primary outcomes: hospitalisation/death avoided and day saved until recovery. The base case analysis, from an NHS and personal social services perspective, evaluated costs and outcomes over 28 days post-randomisation, using multiple imputation for missing data. Sensitivity analyses were conducted.

Results: Findings indicated that inhaled budesonide was cost-effective, with an ICER of £6,386 per hospitalisation/death avoided and -£821 per day saved until recovery (south-east quadrant). Colchicine had the most favourable ICER for hospitalisation/death avoided at £2,858, but its ICER for day saved until recovery (£283) suggested limited cost-effectiveness in accelerating recovery. Azithromycin and doxycycline were cost-saving in terms of day saved until recovery but had high ICERs for hospitalisation/death avoided (£27,490 and £21,278, respectively), indicating limited cost-effectiveness for preventing severe outcomes. Favipiravir, with an ICER of £136 per day saved until recovery, showed a dominated ICER for hospitalisation/death avoided. Ivermectin exhibited the least favourable ICERs for both outcomes, making it unlikely to be cost-effective relative to usual care. Sensitivity analyses largely supported these findings.

Conclusions: Inhaled budesonide is a cost-effective option for home-based management of acute COVID-19 symptoms, reducing hospitalisations and accelerating recovery compared to usual care.

Implications for policy and practice: These findings offer insights for policymakers regarding resource allocation in community-based COVID-19 management. Future research should explore strategies for implementing cost-effective treatments and addressing post-acute COVID-19 symptom management.

Sarah Price (University of Exeter)

Title

Exploring the barriers and facilitators to attending cancer testing appointments for patients with anxiety and/or depression

Abstract

Background

Pre-existing anxiety and/or depression confers a higher 30-day mortality after cancer diagnosis and lower odds of diagnosis via an urgent referral route. Anxiety and/or depression may present barriers to attending cancer testing appointments, leading to poorer outcomes.

Aim

Preliminary exploration of the attitudes, needs, and priorities that people with anxiety or depression consider when deciding to attend urgent referrals for cancer tests.

Methods

People (n=24) with anxiety and/or depression were recruited from five rural, urban or coastal general practices in the Southwest Clinical Research Network. Semi-structured interviews used hypothetical scenarios to explore decision-making around appointment attendance. Interviews were transcribed and coded deductively and inductively in NVivo drawing on the Theoretical Domains Framework (TDF) capturing determinants of behaviour to support intervention design. Results were synthesised narratively.

Results

Six TDF domains emerged as barriers or facilitators to appointment attendance, acting within a meta-theme of how an individual's experiences and situation influence decision-making. Personal Identity could reinforce decisions to attend appointment or be a barrier. Knowledge (of cancer, cancer testing or the logistics of attending) could reassure or exacerbate anxiety about attendance. Social influences, particularly support while waiting for the appointment, were important. Some people stated they needed someone to support them through the process, whereas others felt they would be better on their own. Beliefs about consequences and current emotions were linked with fatalistic tendencies and increased thoughts of non-attendance. The Environmental context highlighted barriers such as taking time off work, getting to appointments (including parking) and the waiting room environment. How the referral was communicated was important (Resources), including the mode (letter or phone call) and the amount of detail provided.
Inductive themes of avoidance, continuity of care and responsibilitisation arose.

Implications for practice/policy

Anxiety and/or depression influence decision-making around urgent referral attendance in variable and nuanced ways. Barriers and facilitators to attendance ranged from lack of social support, emotions and avoidance, as well as previous general experiences of healthcare. The study lays the groundwork for developing interventions to facilitate the uptake of referrals from the initial referral letter through to attending the appointment.

Melany Rabideau (United Health Group/ Optum)

Title

Enhancing Healthcare with Compatibility Based Matching

Abstract

The lack of strong relationships between patients and clinicians in primary care leads to high attrition rates and negatively impacts patient health. Patients often face challenges in finding a compatible primary care provider (PCP). Research shows that 50% of a provider's panel is willing to leave their doctor for a better fit. This frequent switching disrupts continuity of care, increases costs, and causes clinician burnout.

Traditional tools like directories and rating systems fail to provide the nuanced information needed for effective matches. Factors such as race, ethnicity, cultural understanding, languages spoken, and specific provider knowledge (e.g., veterans' health needs, body-positive care) are crucial for improving compatibility. Compatibility builds trust, improves outcomes, increases patient retention, engages clinicians, and advances health equity.

Our pilot study, involving 189 patients and 11 clinicians, revealed that higher compatibility scores were associated with increased patient satisfaction and a lower risk of attrition. We found that 85% of patients could have been matched with a more compatible doctor. Testing our patient-clinician matching tool in a primary care setting showed high engagement, with 74% of providers and 84% of patients participating. The tool effectively measured compatibility, identifying 19.4% of patients at risk for attrition and significantly reducing this risk.

We developed a patient-clinician matching tool to address these issues by intelligently matching patients with providers based on shared values for long-lasting relationships. This tool uses a compatibility-based decision support system, leveraging over 120 determinants across five domains: personal demographics (e.g., gender identity, religious affiliation), clinical preferences (e.g., alternative medicine, vaccination philosophy), identity-centered care (e.g., body positivity, gender-affirming care), bedside manner (e.g., approachability, communication style), and clinic amenities (e.g., online scheduling, house calls).

This tool is expected to bring significant health equity benefits to both patients and clinicians. By focusing on compatibility, it improves patient satisfaction and retention, enhances clinician engagement, and promotes health equity. These findings offer a scalable solution to a widespread problem in healthcare, with the potential to transform patient care and operational efficiency. Explore how this innovative approach can be implemented in your practice for better health outcomes and success through culturally appropriate, person-centered care.

Katie Read (University of Southampton)

Title

Patient and primary care practitioner's perspectives of primary care consultations relating to menstrual problems: A meta-ethnography.

Abstract

Background: Effective patient-practitioner communication improves outcomes. Unfortunately, patients commonly perceive consultations about menstrual problems to be sub-optimal. Separate qualitative research into patient and practitioner perspectives indicates they both value and want effective patient-practitioner communication, but that misunderstandings and barriers remain. An overarching in-depth synthesis of both literatures could provide alternative interpretations and a deeper understanding of areas potentially amenable to change to improve communication for menstrual problems in primary care.

Objective: To synthesise qualitative research on PCPs' and patients' perspectives of primary care consultations for menstrual problems.

Methods: Menstrual problems were defined as menorrhagia, dysmenorrhea or gynaecological conditions where menorrhagia and dysmenorrhea are key presentations (i.e., endometriosis, fibroids). Database searches were supplemented with citation and website searching for studies with findings concerning primary care interactions for menstrual problems. Identified records were screened by one reviewer and a proportion (20% title and abstract, 10% full text) checked by a second, as were data extraction and quality assessment of the included studies (20%). Patient and PCP perceptions were synthesised using a meta-ethnographic 'line of argument' synthesis.

Results: 28 studies were identified and synthesised. Generated concepts related to specific stages of the primary care consultation. Comfort and openness in discussing menstrual problems shaped patients' information sharing and PCPs' enquiry. Scepticism surrounding menstrual problems influenced patients' information sharing as well as discussions regarding explanations or potential diagnoses. Knowledge of menstrual problems also shaped discussions regarding explanations or potential diagnoses. Both trivialisation and normalisation of menstrual problems and perceptions of the role of patient self-advocacy influenced patients' sharing of their concerns, discussions surrounding potential explanations and actions from the consultation. PCPs' enquiry, explanations for menstrual problems and actions related to these were influenced by patient and PCP expectations. PCP-patient power and control was an overarching concept throughout the consultation.

Conclusions: Synthesising patient and PCP perspectives highlighted the complexity of patient-practitioner communication in primary care consultations for menstrual problems. Interventions and practitioner communication training should be grounded in this deeper understanding of patients' and PCPs' perspectives to increase relevance and the potential to improve clinical practice.

Saminah Shareef (Keele University Medical School)

Title

The remote assessment of breathlessness in calls to NHS 111 about COVID-19: A retrospective qualitative study

Abstract

Background: During the first wave of the Covid-19 pandemic in England NHS 111, a 24/7 telephone service for urgent medical problems, became the gateway for members of the public seeking medical care. Most patients were assessed over the telephone and managed remotely with advice on symptomatic treatment. Deterioration in respiratory function was a key concern. However, at the time no validated tests for the assessment of breathlessness in remote acute care were available.

Objective: This project examines the communication-based strategies used by NHS 111 health advisors and clinicians during the pandemic to assess breathlessness over the telephone.

Methods: 128 adults who had contacted NHS 111 in April 2020 with concerns about COVID-19, and received a clinician call-back, were retrospectively recruited by staff working for four different providers in the South and West of England. All available call recordings and associated case records linked to those individuals were accessed with consent and the voice recordings transcribed verbatim. 210 voice recordings and transcripts were screened for talk about shortness of breath or difficulty breathing. 125 included calls were then analysed and categorised for how breathlessness was assessed.

Preliminary Findings: Initial observations indicate that health advisors' questions regarding breathlessness were fairly consistent, suggesting a standardised screening process. In contrast, clinicians asked more detailed and variable questions, reflecting a range of approaches to clinical assessment. These included speech-based assessments (e.g., checking the caller's ability to 'speak in full sentences') where the outcome was sometimes contested by callers. Other approaches, such as counting tests, seemed to create confusion for callers, possibly due to the complexity of the methods. This could impact the accuracy of the assessments.

Conclusions: Although the project is ongoing, early findings indicate that the methods used for the remote assessment of breathlessness during the pandemic, and the way they were being implemented may have influenced call outcomes. Further analysis is required to refine these findings. Future work will focus on enhancing the implementation of remote breathlessness assessments.

Sara Shaw (University of Oxford)

Title

How practices make triage work

Abstract

Triage involves sorting and prioritising patient requests for care. While not new, it has assumed a pivotal position at the point of access to primary care. The aim is to prioritize care demands and make more efficient use of scarce resources, enabling access to the right care, provided by the right person at the right time. With technology and increased digitalisation a plethora of triage systems, tools and processes are in play. And collaboration is distributed across practice staff. It's a complex process.

In this paper we present ethnographic research undertaken in three general practices in England to ask 'how do practices make triage work?' Drawing on observations, staff and patient interviews, tracking of patient requests and practice activity data collected over 15months (2022-2023), we explore how the organisation of the GP practice itself and ways of working within it interact with triage systems to variably shape the prioritisation of care demands, by who, and when. We show how (i) practice values and ways of working (including propensity for experimentation and 'tinkering' with old and new technologies) differentially inform the on-going design and development of triage systems and processes, (ii) how triaging involves complex collaborative work and relational coordination, which often requires surfacing and acknowledging to enable systems (and therefore also patient requests) to flow, and (iii) how the capacity of individuals and organisations to manage system pressures, especially in the face of extreme demand, shapes what triage systems can be and how they can be made to work effectively.

We conclude that, contrary to contemporary discourse, there is no 'off the shelf' triage system offering efficiency for all. Rather practices conduct significant, continuous and often invisible work to design, operationalise, adapt and manage triage systems and processes in ways that work for them. This inevitably requires trade-offs, and appreciation of the ways staff, practice organisation and technology use come together to shape access and triage. By acknowledging these trade-offs and ways of organising, policy makers, commissioners, industry representatives and practices can better enable contextually appropriate, effective and efficient triage systems that safely prioritize care demands and use resources wisely.

Vincent Singh (University of West England)

Title

Heart failure and participation in physical activity (The HAPPY + study): Health professional support and availability of community physical activity services.

Abstract

Background

Nearly 1 million people in the UK are living with heart failure (HF). Most people diagnosed with HF are managed in primary care. Physical activity can increase wellbeing, reduce hospitalisation and improve mortality rates for patients with HF (PWHF). Studies indicate that PWHF want their community health care practitioners' reassurance and guidance about physical exercise, but practitioners may lack confidence, or training, on what advice to give or where to refer patients. This study sets out to understand the experiences of GPs and primary care nurses in discussing physical activity with PWHF, and the barriers and enablers to doing so. This work will inform an existing logic model based on the experiences of PWHF, and development of an intervention development to support PWHF to participate in physical activity.

Methods

Qualitative interview study with healthcare practitioners in primary care. This study was included on the NIHR Research Delivery Network (RDN) Portfolio and advertised to practices in their regions. We purposively sampled practices and participants to achieve a range of practice location, area deprivation level, professional role and experience.

Semi-structured qualitative interviews were based on a topic guide devised, piloted, and agreed by the research team and patient and public involvement (PPI) members. Interviews were conducted on TEAMS and informed consent was audio recorded. This study has ethical approval from the NHS Health Research Authority and Health and Care Research Wales.

Preliminary results

We have interviewed 11 GPs, 10 primary care nurses, two HF specialist nurses and one urgent care practitioner. These data have been preliminarily coded by team members and our PPI members before formal theme development in NVivo. Completed analysis will be presented.

Emerging themes include: (1) Prominence of physical activity in general patient lifestyle discussions; (2) Heart Failure's low profile; (3) Practitioner uncertainty and constraints; (4) Perceptions of challenges to HF patients. This study will identify constructive ways in which primary healthcare practitioners can productively discuss PA with PWHF.

Andrew Snelling (University of Oxford)

Title

Uptake and safety of Sotrovimab for prevention of severe COVID-19 and its safety in the community in England: cohort and self-controlled case series study

Abstract

Background: Sotrovimab is a neutralising monoclonal antibody (nMAB) currently available to treat extremely clinically vulnerable COVID-19 patients in England. Trials have shown it to have mild to moderate side effects. However, the risk of rare adverse outcomes is less well documented as clinical trials recruiting several hundred people are likely to lack the necessary statistical power to be able to detect very rare events. As a result, evidence regarding its uptake and safety in real-world settings remains limited.

Methods: Patients eligible for and those treated with Sotrovimab were identified using the national specialised commissioning database for England (Blueteq) and linked to mortality, SARS-CoV-2 infection, hospital admission, and COVID-19 vaccination data. Descriptive and multivariable logistic regression analyses were conducted to evaluate uptake and compare it between sociodemographic groups. A self-controlled case series analysis was performed to measure the risk of hospital admission (hospitalisation) associated with 49 pre-specified suspected adverse outcomes in the period 2-28 days post-Sotrovimab treatment among eligible patients treated between December 11, 2021 and May 24, 2022.

Results: During the study period, 172,860 COVID-19 patients were eligible for Sotrovimab treatment. Of the 22,815 people who received Sotrovimab, 21,487 (94.2%) had a prior positive SARS-CoV-2 test and 5,999 (26.3%) were not on the eligible list. Among treated and untreated eligible individuals, the mean ages (54.6 years, SD: 16.1 vs 54.1, SD: 18.3) and sex distribution (women: 60.9% vs 58.1%; men: 38.9% vs 41.1%) were similar. There were marked variations in uptake between ethnic groups, which was higher amongst Indian (15.0%; 95%CI 13.8, 16.3), Other Asian (13.7%; 95%CI 11.9, 15.8), White (13.4%; 95%CI 13.3, 13.6), and Bangladeshi (11.4%; 95%CI 8.8, 14.6) groups; and lower amongst Black Caribbean individuals (6.4%; 95%CI 5.4, 7.5) and Black Africans (4.7%; 95%CI 4.1, 5.4). We found no increased risk of any of the suspected adverse outcomes in the period 2-28 days post-treatment.

Conclusion: We found no safety signals of concern for possible adverse outcomes in the period 2-28 days post treatment with Sotrovimab. However, there was evidence of unequal uptake of Sotrovimab treatment across ethnic groups.

Sophie Spitters (University of Birmingham)

Title

Slipping through the net? How digital triage shapes access to care for patients in general practice

Abstract

Background: General practice in the UK is suffering the consequences of chronic underfunding, rising healthcare demand and high administrative burdens. Staff face unsustainable workloads and patients struggle to access the care they need in a timely fashion. We explore the practical implications of one of the recent innovations intended to relieve this situation, digital triage. On the face of it, digital triage is a simple mechanism to improve the distribution of care based on patient needs. However, it risks exacerbating healthcare inequalities by making access to care easier for some patients to navigate, while more difficult for others, especially those experiencing multiple disadvantages. We focus on the ways patients can 'slip through the net' during digital triage, and how practices can mitigate and manage these risks.

Methods: Case study of digital triage across three general practices (Dec-22 to Feb-24), involving ethnographic observation and interviews with staff and patients. Data were analysed using the Functional Resonance Analysis Method (FRAM) to (i) map how patients and staff organise, deliver and access care, (iii) compare digital triage across practices, (iii) identify how and where it creates risks for patients to 'slip through the net'.

Results: Digital triage changed the way consultations are organised. We observed how this has become a complex asynchronous negotiation between patient and triage doctor that is mediated by technology and supported by receptionists in different ways. Digital triage created new opportunities to manage simple problems quickly without a formal consultation. However, its complexity introduced risks for patients to drop out or be excluded from care. E.g. some patients, especially when anxious or unwell, could not access online forms or wait for a triage decision. Practices engage in ongoing learning and improvement to identify and mitigate such risks.

Conclusion: Digital triage has transformed the way patients access care in general practice. It creates new opportunities, while simultaneously introducing risks for some patients to 'slip through the net'. Practices have made significant progress in identifying and mitigating risks associated with digital triage throughout their implementation journeys. These efforts need to be further supported to ensure all patients can access the care they need.

Subhashisa Swain (University of Oxford)

Title

TRENDS OF VTE AFTER TOTAL JOINT REPLACEMENT IN THE UK AFTER INTRODUCTION OF NICE GUIDELINES.

Abstract

Background

Joint replacement (JR) surgery is one of the preferred management for end-stage arthritis. Venous Thromboembolism (VTE) is one of the major post-surgical complications after JR. However, trends of the VTE after JR in the UK and whether the guideline updates resulted in a shift in VTE rates has not been studied yet.

Objective

The aim of the study was to explore if and how rates of VTE after JR have changed in the UK over the last 12 years since the year 2007.

Methods

We used routinely collected primary care data Clinical Practice Research Datalink (CPRD AURUM) and linked hospital episode statistics (HES) and Office of National Statistics (ONS) for the study(1). We included all adult patients who had primary knee, hip or shoulder replacement surgery between October 2007 and September 2019. The outcome for the study was the recording of VTE within 6 months of JR date (index date). The outcome was reported as overall and separately for hip, knee, and shoulder joints. VTE rate estimated during the study period was compared with respect to different intervention introduced by National Health Services (NHS) in the year 2010(2), 2012(3), and 2018(4). Trends of the VTE rates for all the joints and examined using the Cox-Stuart trend test, and the seasonality and impact of the interventions (NHS guidelines) was examined using logistic regression with a polynomial function.

Results

A total of 476,620 joint replacement records were found to be eligible for the study during the study period 1st Oct 2007 and 30th Sep 2019 (both dates inclusive). More than half of the JR was done on knee joint (50.3%) followed by hip joint (45.7%). Nearly 1.5% of total population had recording of VTE within 6 months from the date of the procedure. The prevalence was higher for knee joints (1.6%) followed by hip (1.4%) and shoulder (1%). The incidence rate of VTE after 6 months was 16.85 per 1000 person-6months for knee, 14.81 per 1000 person-6months, and 10.35 per 1000 person-6months. A decline in overall VTE incidence rate was seen until end of the year 2016, followed by a rise in the trend (p trend = 0.02). A significant decline in VTE was reported within 6 months for hip (p = 0.04) and knee joints (p trend = 0.008). The trend test of VTE for shoulder joint was not statistically significant. (Figure 1)

Adjusted logistic regression with a fifth degree orthogonal polynomial showed the seasonal pattern for the VTE in three joints separately. For shoulder joints, procedures done in the month of February had 2.3 times higher (95 % CI 1.23-4.16) risk of having VTE within 6 months compared to January after adjusting for the regions. In knee joints procedures done in the month of February (OR 1.26, 95% CI 1.07-1.48), April (OR 1.23, 95% CI 1.04-1.45), July

(OR 1.27, 95% CI 1.08-1.50), October (OR 1.19, 95% CI 1.02-1.40), and November (OR 1.29, 95% CI 1.10-1.52) had higher risk of developing VTE within 6 months of the JR. Hip JR done in the month of March, June, and July had 20% less risk of developing VTE. The three months after effect of three interventions (CG92 in January 2010; TA245 in January 2012; NG89 in March 2018) was examined in the polynomial model after adjusting for the seasonality and regions. No significant step change was seen because of the intervention in the trends of VTE for any joints other than Shoulder joint. After the third intervention the rate of VTE in shoulder JR decreased by 9% (95% CI 3-29%).

Conclusion

There was no significant change in the rate of VTE after the NICE guidelines introduced. Further study is needed to explore the economic benefits of the change in NICE guidelines.

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Emma Teasdale (University of Southampton)

Title

Primary care practitioners' views and experiences of completing and implementing EMPathicO training in everyday practice: a qualitative study.

Abstract

Background

Effective practitioner-patient communication can help enhance healthcare interactions, improve self-management and patient outcomes. EMPathicO is a rigorously developed, evidence-based brief (30-120 min) e-learning package for primary care practitioners to enhance communication of clinical empathy and realistic optimism. The Talking in Primary care (TIP) cluster-randomised controlled trial assessed effectiveness and cost-effectiveness of EMPathicO on patients' musculoskeletal pain and enablement. Qualitative interviews with intervention arm practitioners explored their views and experiences of completing and implementing EMPathicO training in subsequent consultations.

Methods

We conducted 23 semi-structured interviews (MS Teams/telephone) with a purposive sample of primary care practitioners across 15 practices (16 initial and 7 follow up interviews), including new and experienced GPs, nurses and physiotherapists. Interviews typically lasted 29 minutes (range 15 to 48). Interview data were thematically analysed to explore views and experiences of completing EMPathicO training during the trial and making changes to subsequent consultations i.e., implementing goals around showing empathy and optimism in everyday practice.

Findings

Completing EMPathicO was perceived as convenient, manageable, informative, and relevant to primary care consultations. Practitioners felt persuaded to make changes to their consultations following the training as they appreciated having the autonomy to set personal goals; felt showing empathy and optimism plays an important role in effective practitioner-patient communication; found their chosen empathy and optimism goals feasible to incorporate into everyday practice without lengthening the consultation, and felt making such changes incurred benefits for both patients and themselves. A dominant viewpoint was that EMPathicO would be particularly helpful to less experienced practitioners and work well embedded into existing training programmes e.g., GP training. Practitioners also reflected on the challenges of showing empathy in everyday practice, finding it more difficult in telephone consultations due to limitations on non-verbal communication. They also felt showing optimism was challenging in some situations.

Implications

Primary care practitioners found completing EMPathicO positive and worthwhile, helping enhance their communication skills. They perceived it provided benefits for patients and themselves. They also felt exploring the feasibility of implementing EMPathicO within GP training and medical education settings would be valuable. If rolled-out, EMPathicO is likely to be well-received by primary care practitioners.

Eve Tranter (University of Oxford)

Title

Association of Education and Ethnicity with HRT uptake: a Systematic Review and Meta-Analysis

Abstract

Background

Hormone replacement therapy (HRT) is widely accepted to be one of the most effective ways to medically manage symptoms of menopause. Recent evidence suggests that inequality exists in HRT prescribing within the UK. The aim of our study is to report how HRT prescription varies with demographic factors including ethnicity, income, and education.

Methods

We conducted a systematic review and meta-analysis of studies in women aged 40-60 reporting factors associated with HRT use. Exclusion criteria were surgical menopause, secondary care and personal cancer history. We searched Medline, Embase and CINAHL databases to identify studies reporting association between ethnicity and education and current or past prescription of HRT. Results were combined for meta-analysis using the Hartung-Knapp-Sidik-Jonkman (HKSJ) random effects model using Stata SE18 to report odds ratios for ethnicity and education (school vs higher education).

Results

3728 papers were identified for title and abstract screening. 136 full texts were screened, 63 met eligibility criteria, of which 15 reported ethnicity and 40 reported education. 8 studies reported black versus white ethnicity, whilst 9 studies reported any ethnicity versus white (24 ethnic groups).

Any ethnicity group had significantly lower HRT uptake rates compared with white women(OR 0.67, 95% CI 0.59-0.77). When restricted to black versus white groups only, there was 34% lower odds for HRT uptake in black versus white women (OR 0.66, 95% CI 0.56-0.78).

Twenty-two papers were included in the meta-analysis of university or college degree compared with school education level. HRT uptake was lower in the school education group; however, this result was not statistically significant, (OR 0.86, 95% CI 0.67-1.10).

Conclusions

We have established that all other ethnic groups have lower HRT uptake compared with white women. Disparities in HRT prescribing in relation to ethnicity could be due to difficulty in accessing services or difference in attitude towards HRT between the different groups of women. There was no significant association between educational levels and HRT use. The lack of association between education and HRT uptake might relate to heterogeneity between study cohorts, particularly given differences in education systems between countries, and differences in recording educational outcomes.

Katherine Tucker (University of Oxford)

Title

An evaluation of the implementation of a novel digital intervention for hypertension management: The Self-monitoring and management service evaluation in primary care (SHIP) study

Abstract

Background

Lowering blood pressure (BP) significantly reduces cardiovascular risk, and interventions to support self-monitoring of BP are both clinically and cost-effective. However, few studies have assessed their impact on daily practice. The SHIP study evaluated the implementation of a novel digital intervention 'Hypertension Plus' designed to support patients with hypertension by combining self-monitoring of BP with clinical prompts for appropriate medication titration.

Methods

The Oxford-Royal College of GP Clinical Informatics Digital Hub (ORCHID) database of pseudonymised patient data from practice clinical systems was used to select individuals in England with a clinical code for hypertension between April 2020 and December 2022. Those invited to use the Hypertension Plus intervention were compared to those who were not. The primary outcome was systolic BP comparing 12 months before implementation with 12 months after. Workload was measured by consultation numbers.

Mixed linear models and Difference-in-Differences (DiD) analysis were used to describe changes in BP over time and the effect of introducing the Hypertension Plus system. The analysis adjusted for; clinic/home measure, age, sex, ethnicity, BMI, baseline total cholesterol, smoking status, antihypertensive use, myocardial infarction, stroke/transient ischemic attack, chronic kidney disease, and type 1 diabetes. The number of primary care consultations before and after implementation were analysed using a negative binomial model.

Results

The study included 15,373 patients, of whom 939 were invited to use the digital intervention. Overall, mean age was 70 years; 7,839 (51%) were women, and 620 (4%) were from an ethnic minority. Patients invited to use the intervention showed a reduction in clinic systolic BP of -7.9mmHg (-10.2 to -5.7 mmHg) and diastolic BP of -3.1mmHg (-4.5 to -1.8mmHg) and a reduction in home systolic BP of -5.2 (-6.7 to -3.7) and home diastolic BP of -2.2 (-3.1 to -1.3) compared to those continuing usual care; Workload showed no significant change between the groups (0.1 (-0.1-0.3) adjusted mean difference in consultations per-patient per-year).

Conclusion

A novel digital intervention to support self-management of hypertension in primary care was associated with significant reductions in BP compared to usual care. Workload was not significantly affected. The findings support further implementation into routine primary care practice.

Amadea Turk (University of Oxford)

Title
Understanding Social Prescribing in areas with Double Disadvantage

Abstract
Background:
Social prescribing (SP) is a key area of policy interest and has been implemented on a large scale in primary care through the employment of link workers. It recognises the social determinants of health and allows primary care professionals to refer patients to non-clinical services and support in their communities. This explored how link workers operate in doubly disadvantaged areas - neighbourhoods with poor social infrastructure (civic assets, connectedness, and engaged communities) and high material deprivation. SP relies on the availability of local community infrastructure into which patients can be referred. It is not clear how social prescribing may operate in these areas, and this lack of understanding risks that SP becomes an intervention that inadvertently increases health inequalities by disproportionately benefitting areas with better service provision. This work aimed to understand how SP operates in areas with double deprivation to inform the sustainable and equitable delivery of SP.

Methodology:
We undertook mixed-method longitudinal case studies with three SP link workers working in areas with double disadvantage. Taking a focused-ethnographic approach, we undertook 240 hours of fieldwork, visiting each case study site for a week at two time points 7-9 months apart. We interviewed the link workers about their experiences and collected social network data about the interactions link workers have with professionals in primary care and the voluntary and community sector. We also interviewed 23 patients (5-10 per link worker) about their experiences of SP, 14 patients took part in follow-up interviews. Qualitative interview data was analysed thematically and descriptive statistical approaches were applied to the network data.

Findings: Link workers play a crucial role in acting as bridges between primary care and community organisations. A key theme across the data was how link workers created a sense of stability and trust for patients in an unstable environment who feel like the system has let them down. The data also speaks to the different ways in which link workers are being implemented across the NHS and the impact these different implementation models may have on link workers' ability to form and sustain social prescribing pathways.

Ellen Van Leeuwen (Ghent University)

Title

"'I Have My Doubts About Stopping': Caregivers' Role in the Decision to Discontinue Antidepressants in Older Adults"

Abstract

Background

Long-term use of antidepressants (ADs) is common, particularly among older adults who are at greater risk of adverse effects and drug interactions due to age and polypharmacy. Informal caregivers often play a role in managing care and medication, making their perspectives crucial to the discontinuation of unnecessary long-term AD use in older adults. This study examines caregivers' views on discontinuing long-term ADs, including facilitators and barriers.

Methods

Eleven semi-structured face-to-face interviews were conducted with caregivers of individuals aged 75+ who had been using ADs for over a year for depression, were clinically stable, and whose general practitioners (GPs) considered discontinuation feasible. Data saturation was achieved, and interviews were transcribed and thematically analyzed.

Results

The 11 participants (9 females; aged 49–75 years) were all family members (e.g. partners, children). Caregivers identified several factors influencing their perspectives. Many were hesitant to discontinue ADs due to perceived benefits for the older adult's quality of life and fears of relapse, which they believed could negatively affect the older adult's well-being as well as increase their own caregiving burden. Limited knowledge about ADs, depression, and their side effects contributed to their preference for maintaining the status quo. Caregivers emphasized the importance of a stable social network and living conditions as facilitators of discontinuation but noted that these factors were often lacking in older adults. While some caregivers preferred leaving decisions to the GP and the older adult, others expressed a desire to be actively involved in the process. Moreover, they saw themselves as potential facilitators by monitoring mental health changes during discontinuation and providing support. GPs were viewed as central to initiating and guiding the discontinuation process, yet most caregivers were unaware of any prior evaluations of AD use by GPs.

Conclusion

Caregivers' perspectives on discontinuing long-term AD use are shaped by limited knowledge, concerns about relapse, and a desire to support the older adult. Their involvement could enhance the discontinuation process. Improved education and support from other healthcare providers are essential to address barriers and enable caregivers to act as effective partners in facilitating successful discontinuation.

Marta Wanat (University of Oxford)

Title

How do Point-of-care Tests in European primary care influence antibiotic prescribing? A mixed methods process evaluation with patients and clinicians

Abstract

The problem: Point-of-care tests (POCT) can potentially support diagnosis of patients with community acquired acute respiratory tract infections (CA-RTI) in primary care by reducing uncertainty about potential benefit antibiotics may offer. The PRUDENCE clinical trial aimed to examine the value of having a POC testing strategy, including C-reactive Protein, Influenza, and STREP A, available during decision making in primary care in Europe. The trial showed no statistical difference in antibiotic prescribing between usual care and the POCT strategy arms. To understand the underlying mechanisms, it is vital to examine patient and clinician experiences.

Approach/methodology: We have conducted an embedded mixed-methods process evaluation in ten European countries involving surveys and interviews with both patients and clinicians who took part in the trial. Data has been analysed using descriptive statistics and thematic analysis.

Key findings: Surveys with 1266 patients and 91 clinicians, and interviews with 56 patients and 32 clinicians across all countries showed that the use of POCTs are acceptable to both patients and clinicians. Clinicians highlighted their value when dealing with diagnostic uncertainty, as a way to confirm their working diagnosis or a way to manage patient expectations. In contrast, seeing patients presenting with 'textbook' symptoms of bacterial infections, trust in one's experiential knowledge, or worrying about relevance of test result in relation to day of presentation meant that POCT had limited guiding value. This, and the trial outcome, contrasts the survey results showing clinicians' belief that POCTs will help them reduce antibiotic prescribing. Patients valued the test when it aligned with their views but also accepted evidence from the test that antibiotics were not needed when they initially expected antibiotics.

Implications: The study demonstrates acceptance of POCT use within GP consultations while highlighting complexity of the impact of POCT results on antibiotic prescribing. While many policy documents promote POCTs as a key strategy to tackle unnecessary prescribing, it is evident that GPs may give limited weight to the test in some scenarios. Consequently, AMR strategy must be more comprehensive, addressing the complex behavioural factors which link to patient care, knowledge, communication and antibiotic stewardship in addition to POCT results.

Marta Wanat (University of Oxford)

Title

Shazam for airways disease detection? Patient and clinician views and experiences of Smartphone app-based technologies for screening, diagnosing and monitoring airways disease

Abstract

Background:

Airways disease, including asthma and COPD, is important to detect early to start treatments and prevent lung decline. However, diagnosis can be difficult: early-stage disease may lack noticeable symptoms, patients might delay seeking help, and spirometry, the current diagnostic standard, requires patient effort and skilled interpretation.

For this reason, there is interest in novel technologies to help screen, diagnose and monitor airways disease, particularly those which can be used by patients directly. Eupnoos is a novel system which uses acoustic biomarkers of exhaled breath recorded via a user's Smartphone microphone combined with machine learning techniques to identify potential airway limitation. This study aims to explore patient and clinician views of Eupnoos and other potential Smartphone app-based technologies to diagnose and monitor airways disease.

Methods:

We are conducting semi-structured interviews with 15-20 clinicians providing care to patients with airways disease, and 15-20 public contributors who either have airways disease or are at risk of airways disease. The interviews are audio-recorded, and analysed using thematic analysis.

Results:

Ongoing interviews with public contributors (8 so far) showed that there was enthusiasm for mobile technologies especially in relation to screening for lung conditions. Participants appreciated the potential for such tools to empower individuals by enabling them to take charge of their health. Mobile technologies were also valued for allowing users to access information from the comfort of their homes, bypassing the need for initial contact with healthcare professionals. However, opinions varied on whether healthcare professionals should be notified if a risk of poor health was identified, as discovering such risks could cause anxiety. Participants emphasized the importance of simplicity in the presentation of information, with a "traffic light system" being widely perceived as easy to understand.

Implications/conclusions:

The findings highlight the potential of mobile technologies to empower individuals and improve accessibility in airways disease screening, diagnosis and monitoring, particularly where access to services may be difficult. However, there is a need user-friendly designs and support in the light of anxiety that health risk notification can bring. Further interviews will incorporate clinician viewpoints to plan further research and potential implementation.

Ariel Wang (University of Oxford)

Title

The management of clinical risk during contacts with more vulnerable patients in urgent primary care: an analysis of GP OOH case record data.

Abstract

Out-of-hours (OOH) clinicians often consult with patients who are acutely unwell and may be at risk of deterioration. Yet little research has focused on how the clinical risks associated with episodic care are managed, particularly with more vulnerable patient groups. The aim of this study was to explore the extent to which, and how, strategies for the management of clinical risk were documented in contacts with more vulnerable patients.

This study is based on 120,537 patient contacts comprising 12 months case records data (April 2019 - March 2020) from one regional OOH service. Four patient groups were identified: children and young people (aged 0-17); people living with mental health conditions; terminally ill patients; and older patients (aged 65+). A random selection of contacts based on case priority level (routine or urgent, 1:1 ratio) was made within each group. An existing coding scheme was revised and applied to pseudonymised free-text entries. Summary statistics will be calculated and associations between patient characteristics and documentation of safety-netting advice explored.

Coding is currently underway for 800 contacts: 200 for each patient group. We will report sample characteristics and the extent to which safety-netting advice and follow-up plans were documented overall, within and across each group. We will also present findings on the nature of the advice documented and the extent to which, and how, responsibility was shared with patients and family members/caregivers.

Analysis of free-text notes from urgent primary care contacts allows unique insights into how OOH clinicians manage clinical risk during one-off assessments with more vulnerable patients. As well as highlighting potential service-level quality/safety indicators, at a wider systems-level such analyses reveal the key role played by these services in keeping patients safe when GP surgeries are closed.

Kay Wang (University of Southampton)

Title

Using fractional exhaled nitric oxide to guide clinical decision-making during routine asthma reviews: a qualitative interview study

Abstract

The problem

Fractional exhaled nitric oxide (FeNO) is a non-invasive breath test measuring steroid-responsive airway inflammation. Clinical practice guidelines already recommend that FeNO should be used to inform diagnosis of asthma, but highlight the need for more evidence to inform its use in monitoring asthma. Previous studies have found that healthcare professionals (HCPs) do not adhere to FeNO-guided asthma management recommendations in around 1 in 4 cases. This leads to worse clinical outcomes and unnecessary medication prescribing.

Approach/methodology

This study explores the views and experiences of HCPs when using FeNO to guide clinical decision-making during routine primary care asthma reviews. We conducted a qualitative interview study with eleven HCPs from ten general practices in the Thames Valley and South Midlands Clinical Research Network. HCPs received training in how to measure and interpret FeNO and were asked to video- or audio-record around five patient consultations each. Semi-structured telephone interviews exploring HCPs' views and experiences of using FeNO to guide their clinical decision-making were conducted, informed by clips from recorded consultations. Interviews were audio-recorded, transcribed verbatim and analysed using inductive thematic analysis.

Key findings

HCPs valued FeNO as an objective measure of airway inflammation but felt it should be interpreted as part of a wider clinical assessment and not in isolation. FeNO results which were consistent with the HCP's clinical impression helped them feel more confident about their management decisions and how to communicate these to patients. Raised FeNO results (indicating raised levels of steroid-responsive airway inflammation) were perceived as a strong indication to step up treatment, even in patients with well-controlled symptoms and suboptimal medication adherence. However, normal FeNO results were interpreted with greater caution, even in patients with well-controlled symptoms, and considered alongside other risk factors for exacerbations before stepping down treatment.

Conclusion

FeNO testing has potential to inform more personalised treatment decisions in patients with asthma in primary care. FeNO-guided asthma management interventions should support HCPs to interpret FeNO in the context of a patient's overall clinical assessment, particularly in relation to step-down treatment decisions and cases where there is discordance between FeNO results and patient-reported symptom control.

Zhang Xiaowen (University of Southampton)

Title

Experience of treatment choices for childhood acute upper respiratory tract infections: a qualitative study in China and UK

Abstract

Objective

To explore factors influencing the treatment choice for pediatric acute upper respiratory tract infections (URTIs), and the facilitators or barriers to using traditional Chinese medicine (TCM) instead of antibiotics.

Methods

A qualitative study used semi-structured interviews involving TCM physicians and Chinese-origin parents in China and UK who had experience prescribing or choosing Chinese herbal medicine (CHM) for pediatric URTIs. Participants were purposively sampled to ensure diversity in gender, education, experience in practice/caring for children, followed by convenience sampling to meet enough recruitment. Based on literature review and previous studies, interview questions focused on medication selection and why, types and dosages of selected medication and feedback after administration, knowledge and attitudes on the impact of CHM on antibiotic use. Interviews were conducted through online meetings or face-to-face with audio recording. The framework method was used to analyse the qualitative data.

Results

A total of 21 participants were interviewed, including 9 TCM Physicians (8 live in China, 1 UK) and 12 parents (7 China, 5 UK). The transcriptions were currently under analysis, and some preliminary narrative categories were summarized. (1) Treatment choice: in China, standardised herbal medicines are often prescribed alone or alongside NSAIDs and antibiotics. In UK, antipyretics or NSAIDs are primary treatments. (2) Views on TCM: parents had various attitudes, either favouring or having a neutral position on TCM, with main considerations of side effects and lack of reliable practitioners. (3) Views on antibiotics: physicians can prescribe antibiotics after test result followed local antibiotics stewardship policy, while parents had limited knowledge on antibiotics resistance, but negated concerns. (4) Reasons for medication selection, including symptoms, examination-physicians selectively prescribed antibiotics after blood routine test, and reliability of medication-parents favoring well-known medication. (5) Facilitators and barriers to alternative treatment: facilitators included effectiveness, safety, government support, and insurance coverage, and main barrier of antibiotic stewardship is that parents can easily retain antibiotics through pharmacies or online if they want.

Conclusions

Medication choices for pediatric URTIs are influenced by effectiveness, safety, and popularity of medication. Evidence-based alternatives to antibiotics, supported by policy measures, could encourage broader acceptance.