NHS
National Institute for
Health Research

School for
Primary Care
Research

A decade of research

Contributing to the evidence base for primary care

PROGRAMME

Wellcome Collection
22 November
2016

NIHR
at 10
improving the health and
wealth of the nation
through research

Wellcome Collection

The Wellcome Collection was established by eminent pharmacist, entrepreneur and philanthropist Sir Henry Wellcome in 1936. The exhibition of historic and scientific art and artefacts is housed in the original Wellcome Building (below) built in 1932. The Wellcome Collection explores connections between medicine, life and art in the past, present and future and provides professionals and the public with a place to learn about the development of medicine and medical science.

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A decade of research: Contributing to the evidence base for primary care

Welcome

The School for Primary Care Research is delighted to be part of the NIHR's ten year anniversary celebrations, and indeed to celebrate our own tenth birthday! The School was established by the NIHR in 2006 to increase the evidence base for primary care practice. Looking back over the past ten years, it is hard not to be impressed by the far-reaching impacts made through research engagement and outputs as well as by individual awards and achievements.

The School's reputation to produce evidence with a patient-centred approach has influenced the development of policy, general practice, patient and public involvement and academic endeavour. Sound partnerships have strengthened the School over the years and collectively we offer a wealth of experience from a wide range of specialties and disciplines.

We warmly welcome all delegates to the ten year anniversary and hope you are inspired by the showcase of School funded work. We thank the partner departments at the Universities of Birmingham, Bristol, Cambridge, Keele, Manchester, Newcastle, Nottingham, Oxford, Southampton and UCL, for their unstinting hard work and co-operation without which much of the research impact achieved to date would not have been possible.

Professor Richard Hobbs
Director

10.00 - 11.00	Registration, refreshments and poster hanging			
11.00 - 11.10	**WELCOME** **Richard Hobbs** Henry Wellcome Auditorium			
11.10 - 11.30	**KEYNOTE** **Martin Roland** **How far has primary care research come and how far does it have to go?** Henry Wellcome Auditorium			
	PLENARY SESSION **Chair: Richard Hobbs** Henry Wellcome Auditorium			
11.30 - 11.50	Patricia Apenteng Incidence of Venous Thromboembolism in Care Home Residents			
11.50 - 12.10	Gail Hayward Oral Corticosteroids for symptom relief of sore throat: a double-blind randomised controlled trial in UK primary care TOAST			
12.10 - 1.10	**PARALLEL SESSION 1**			
	1A CHRONIC CONDITIONS Henry Wellcome Auditorium **Chair: Louise Robinson**	**1B MENTAL HEALTH** Burroughs Room **Chair: Carolyn Chew-Graham**	**1C DIAGNOSIS AND SAFETY** Steel Room **Chair: Tim Coleman**	**1D CLINICAL TRIALS** Dale Room **Chair: Greta Rait**
	Multimorbidity: A NIHR SPRC funded research programme *** **Chris Salisbury**	Impact of long-term conditions on the effectiveness of collaborative care for depression: An individual participant data meta-analysis *** **Maria Panagioti**	The MoleMate Trial: Outcomes and impact *** **Fiona Walter**	Patient direct access to NHS musculoskeletal physiotherapy in primary care: The STEMS pilot cluster randomised trial **Annette Bishop**
	"It's just a great muddle when it comes to food": Exploring patient decision making around gout and diet *** **Jennifer Liddle**	Predicting dementia risk in primary care: Development and validation of the Dementia Risk Score (DRS) using routinely collected data **Kate Walters**	Preventing acute kidney injury in primary care: A qualitative study exploring 'sick day rules' implementation **Rebecca Morris**	HeLP-Diabetes RCT: Randomised controlled trial of a web-based self-management programme for people with type 2 diabetes **Elizabeth Murray**
	Determinants and burden of differing health trajectories in the very old: The Newcastle 85+ study **Rachel Duncan**	Alcohol misuse and injury outcomes in young people aged 10-24: A cohort analysis using linked primary care and secondary data in England **Louise Lester**	Improving prescribing safety in general practices in the East Midlands through the PINCER intervention **Sarah Rodgers**	Oral steroids for acute cough (OSAC): A UK multi-centre, placebo controlled, randomised trial **Alastair Hay**
	An open-label randomised pragmatic trial comparing naproxen and low-dose colchicine for the treatment of acute gout in primary care: The CONTACT trial **Edward Roddy**	Process evaluation of a feasibility randomised controlled trial comparing a web-based alcohol treatment programme against face-to-face treatment **Fiona Hamilton**	Development and implementation of a Patient Safety Toolkit for general practice **Tony Avery**	Inconsistencies in Patient-Reported Outcome (PRO) data collection in clinical trials: A potential source of bias? **Derek Kyte**
1.10 - 2.20	**Lunch and poster viewing** Williams Lounge and Franks Room			

*** top-ranking starred parallels

2.20 - 3.20	PARALLEL SESSION 2			
	2A CARDIOVASCULAR Henry Wellcome Auditorium Chair: Jonathan Mant	**2B WOMEN/CHILD HEALTH** Burroughs Room Chair: Jo Protheroe	**2C INVOLVING PATIENTS** Steel Room Chair: George Lewith	**2D HEALTH SERVICES RESEARCH/ OTHER** Dale Room Chair: Harm van Marwijk
	'It's not really an illness as we understand': patient and clinician experiences of early stage chronic kidney disease diagnosis in primary care **Jeremy Horwood**	Blood pressure self-monitoring in pregnancy **Katherine Tucker**	A conversation analytic examination of Cancer Helpline Talk **Catherine Woods**	Economic Evaluation of Oral Steroids for Acute Cough: The OSAC study **Sandra Hollinghurst**
	How effective are interventions to support shared decision making for hypertension? A systematic review **Rachel Johnson**	Maternal depression and anxiety and the risk of injuries in children aged 0-4 years **Ruth Baker**	One in a Million: A study of treatment recommendations in primary care consultations **Rebecca Barnes**	Interventions to prevent burnout in physicians: A systematic review and meta-analysis **Jenny Lund**
	Investigating views of smokers and smoking cessation advisors on a data sharing and communication facility within a cessation smartphone app (Q Sense) **Felix Naughton**	Development of an online resource for families of children with otitis media with effusion in primary care **Jane Vennik**	Towards person-centred care: Development of a patient support needs tool for patients with advanced Chronic Obstructive Pulmonary Disease (COPD) in primary care **Carole Gardener**	Optimising outcome prediction in primary care: Use of longitudinal data in prognosis research **Gemma Mansell**
	Missed opportunities for primary prevention of stroke and transient ischemic attack in primary care **Grace Turner**	Effectiveness of regular weighing and feedback by community midwives in preventing excessive gestational weight gain: randomised controlled trial **Amanda Daley**	Where next for patient and public involvement (PPI) in the NIHR School for Primary Care Research? **Steven Blackburn**	Geographical epidemiology of health deprivation in England, 2004-2015, and its association with primary care spending in 2015 **Evan Kontopantelis**
	PLENARY SESSION Chair: Rupert Payne Henry Wellcome Auditorium			
3.20 - 3.40	Hazel Everitt What is the evidence for Antidepressants for Insomnia? Results of a Cochrane Systematic Review			
3.40 - 4.00	Richard McManus Targets and self-management for the control of blood pressure in stroke and at risk groups (TASMIN-SR): a randomised controlled trial			
4.00	**Closing comments and prize-giving** Henry Wellcome Auditorium			

We would like to thank the Scientific Programme Committee and Peer Reviewers for their contributions to the development of the programme and the reviewing of submitted abstracts.

All abstracts were peer reviewed by two reviewers. Abstracts were scored (1-5) on the following criteria: Importance and originality; clarity of aims; methodological rigour; results; conclusion/discussion.

The highest scoring abstracts are presented as plenaries and starred parallels.

Peer Reviewers

Annette Bishop
Amy Blakemore
Carol Coupland
Rachel Duncan
Kate Dunn
Robbie Duschinsky
Aneez Esmail
Cathering Exley
Adam Geraghty
Toby Helliwell
Julia Hippisley-Cox
Alyson Huntley
Clare Jinks
Eileen Kaner
Evan Kontopantelis
Mark Lown

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Kamal Mahtani
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Richard Morris
Ricky Mullis
Felix Naughton
David Nunan
Amanda Owen-Smith
Greta Rait
David Reeves
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Waquas Waheed

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Lower Ground 1

Lower Ground 2
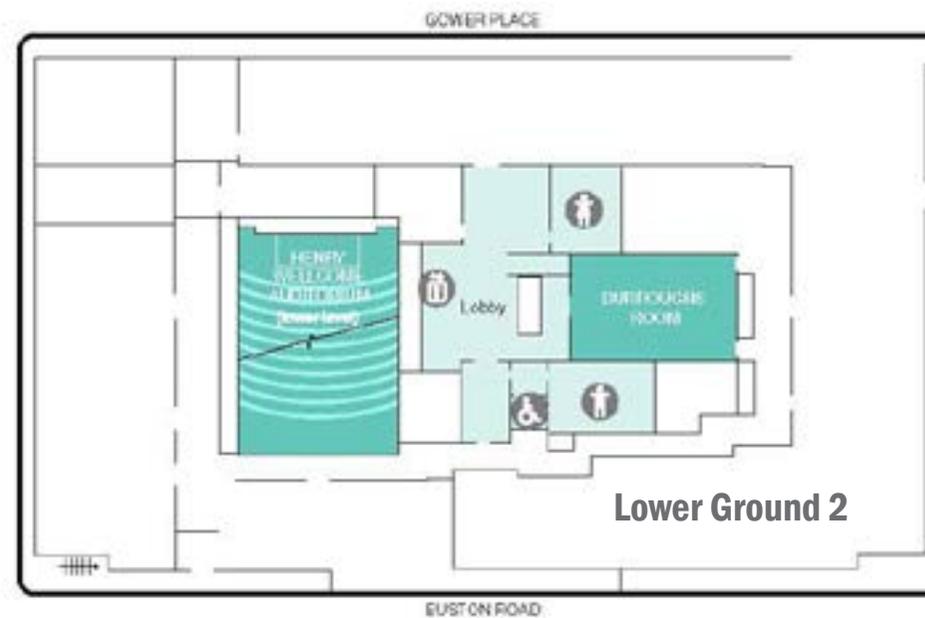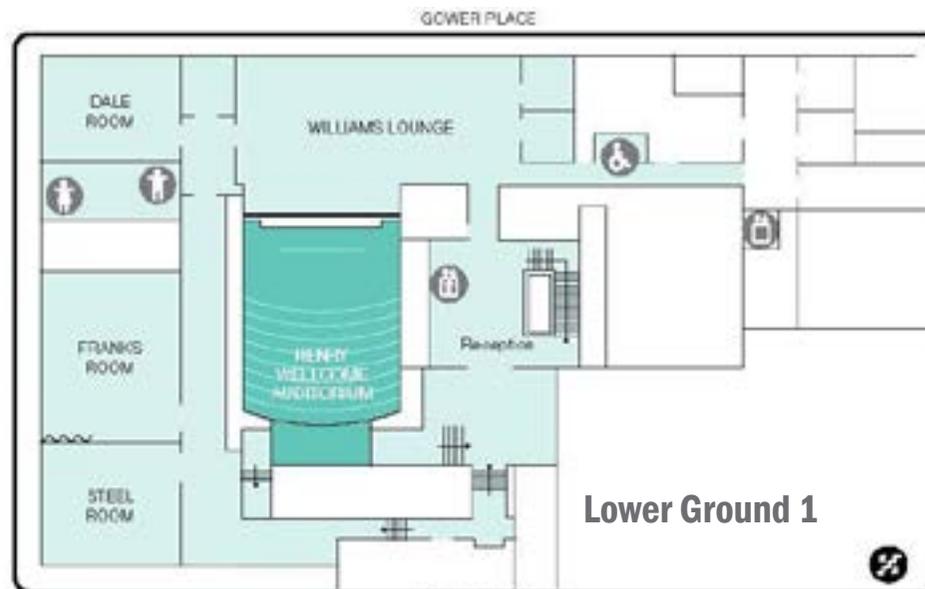
Programme

10.00 - 11.00	**Registration, refreshments and poster hanging**	
	Williams Lounge	
11.00 - 11.30	**Welcome and Keynote address:**	
	Richard Hobbs & Martin Roland	
	Henry Wellcome Auditorium	
11.30 - 12.10	**Plenary session 1**	
	Henry Wellcome Auditorium, overflow in the Steel Room	
12.10 - 13.10	**Parallel session 1**	
	Auditorium, Steel, Dale and Burroughs Rooms	
13.10 - 14.20	**Lunch and poster viewing**	
	Williams Lounge and Franks Room	
14.20 - 15.20	**Parallel session 2**	
	Auditorium, Steel, Dale and Burroughs Rooms	
15.20 - 16.00	**Plenary session 2**	
	Henry Wellcome Auditorium, overflow in the Steel Room	
16.00	**Closing comments**	
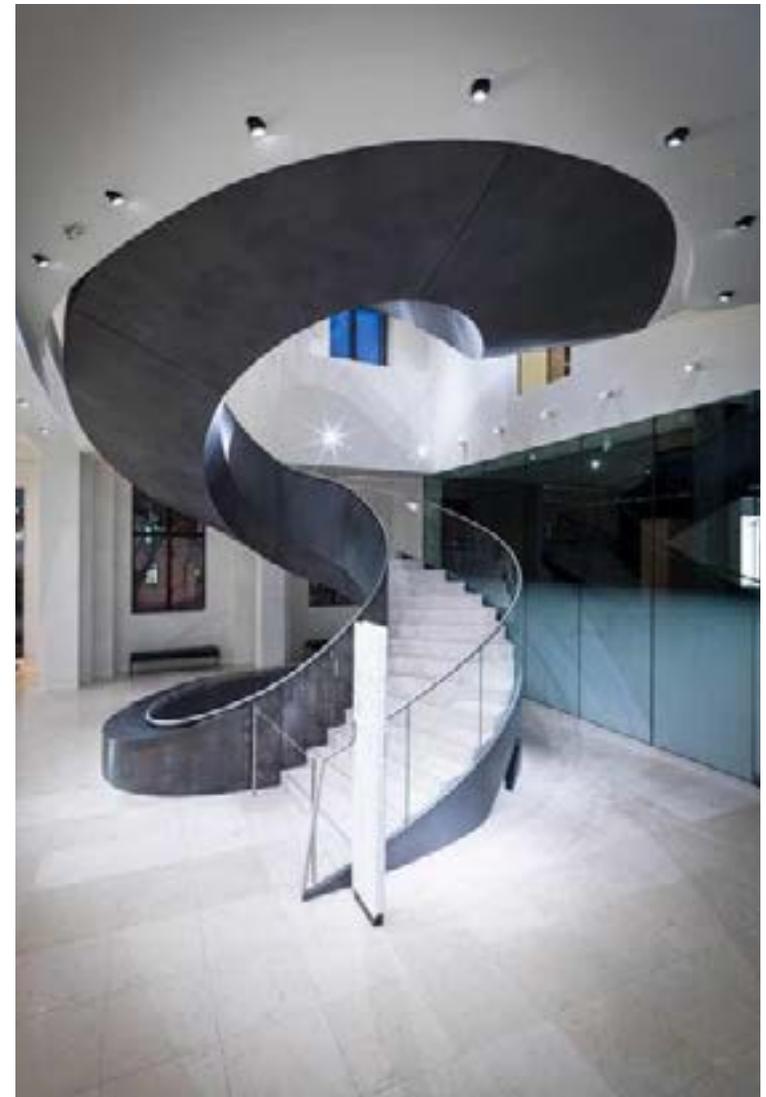
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Incidence of Venous Thromboembolism in Care Home Residents

Patricia Apenteng[1], Ellen Murray[1], Richard Hobbs[2], Andrea Roalfe[1], Muhhamad Usman[1], Carl Heneghan[2], David Fitzmaurice[1]
[1]University of Birmingham [2]University of Oxford

Introduction

Venous thromboembolism (VTE) risk significantly increases with advancing age, immobility, acute medical illness and comorbidities. These risk factors are common in care home residents; however, the epidemiology of VTE in care homes is unclear. We conducted a prospective cohort observational study to determine for the first time the incidence of VTE in UK care homes.

Methods

Care home residents were enrolled from a random selection of care homes in Birmingham and Oxford and followed up for 12 months. Temporary residents and residents with a life expectancy ≤ 6 months were excluded. The primary endpoint was development of VTE during the study period. All potential VTE events were extracted via case notes review and adjudicated by an independent committee according to three measures of diagnostic certainty: definite VTE (radiological evidence), probable VTE (high clinical indication but no radiological evidence) or possible VTE (VTE cannot be ruled out).

Results

1011 participants were enrolled; the mean age (SD) was 85.1 (8.6) years, 71.6% were female and 52.7% had dementia. The mean follow up period was 312 days (SD=98).
Six definite VTEs and one probable VTE occurred, providing an incidence of 0.83 per 100 person-years of observation (95% CI 0.33-1.71), and an incidence of 0.71 per 100 person-years (95% CI 0.26-1.55) for definite VTE.

Discussion

The VTE incidence in our study population is seven times higher than the community incidence of 0.117 per 100 person-years. This highlights a need for methodical identification of care home residents at risk, plus evidence of prophylactic benefit.

What is the evidence for Antidepressants for Insomnia? Results of a Cochrane Systematic Review

Hazel Everitt[1], David Baldwin[1], Beth Stuart[1], Gosia Lipinski[2], Andrew Mayers[3], Andrea Malizia[4], Christopher Manson[1], Sue Wilson[5]
[1]University of Southampton [2]University of Cape Town, South Africa, [3]Bournemouth University [4]Frenchay Hospital, Bristol. [5]Imperial College London.

Introduction

6-15% of adults report significant sleep problems. Hypnotics have problems with addiction and tolerance. Psychological therapy availability is very limited. Antidepressants are prescribed despite being unlicensed for insomnia.

Methods

Cochrane systematic review procedures including RCTs in adults with a primary diagnosis of insomnia comparing any antidepressant as monotherapy to: placebo; other insomnia medications (e.g. benzodiazepines); different antidepressants or treatment as usual. Primary outcome measure: subjective improvement in sleep (quality or quantity)

Results

4245 studies identified; 220 screened in full text; 20 included.
3 studies (n=135) compared Selective Serotonin Reuptake Inhibitors (SSRI) with placebo. 2 paroxetine studies showed improvement in subjective sleep measures at 6 (p=0.03) and 12 weeks (p<0.001), a fluoxetine study showed no difference. Paroxetine improved subjective sleep measures over alprazolam (n= 60, p <0.05), one study. 3 studies of SSRIs with another antidepressant (n = 489) revealed no significant differences in sleep quality (SMD 0.97, 95% CI -0.91 to 2.85; I2 = 99%). 6 studies (n = 812) compared Tricyclic Antidepressants with placebo. Four (n=518) could be pooled, showing improvement in subjective sleep quality over placebo (SMD -0.39, 95% CI -0.56 to -0.21; I2 = 0%). Six studies compared other antidepressants with placebo. Three combinable trazodone studies (n=370) indicated improved subjective sleep outcomes for trazodone over placebo (SMD -0.34, 95% CI -0.66 to -0.02).

Discussion

Few studies were identified. Analysis produced some support for short-term use for some antidepressants, but no evidence for amitriptyline, or to support long-term antidepressant use. Current evidence does not support current practice.

Oral Corticosteroids for symptom relief of sore throat: a double - blind randomised controlled trial in UK primary care TOAST

Gail Hayward[1], Alastair Hay[2], Michael Moore[3], Paul Little[3], Matthew Thompson[4], Rafael Perera[1], Sena Jawad[1], Nicola Williams[1], Merryn Voysey[1], Johanna Cook[1], Julie Allen[1], Kim Harman[3], Carl Heneghan[1]
[1]University of Oxford [2]University of Bristol [3]University of Southampton,[4]University of Washington, Seattle, USA

Introduction

Management of acute sore throat poses a significant burden on primary care, and is a source of inappropriate antibiotic prescribing. Corticosteroids may offer an alternative symptomatic treatment; a single dose increased the chance of resolution of sore throat in our systematic review, but all included trials also used antibiotics. We aimed to assess the clinical effectiveness of oral corticosteroids for acute sore throat in the absence of antibiotics in primary care.

Methods

A double-blind placebo controlled trial which randomly allocated 565 adults with acute sore throat not requiring immediate antibiotics to receive a single oral dose of 10mg dexamethasone or matched placebo. Our primary outcome was complete resolution of symptoms at 24 hours. Secondary outcomes included resolution at 48 hours, duration of moderately bad symptoms, healthcare, medication usage and adverse events.

Results

Complete resolution of symptoms at 24 hours was not significantly different between dexamethasone and placebo arms, RR 1.28 (95%CI 0.92 to 1.78, p =0.144), At 48 hours the proportion experiencing complete resolution of symptoms was greater in the dexamethasone group both overall and in those not offered a delayed antibiotic prescription. We found no significant differences in duration of moderately bad symptoms, further healthcare attendance related to sore throat, use of over-the-counter or prescription medications or adverse events.

Discussion

Oral dexamethasone improved symptoms at 48 but not at 24 hours with no benefit on duration of moderately bad symptoms. These results do not justify the routine use of corticosteroids for sore throat in the primary care population.

Targets and self-management for the control of blood pressure in stroke and at risk groups (TASMIN-SR): a randomised controlled trial

Richard McManus[1], Jonathan Mant[3], M. Sayeed Haque[2], Emma Bray[2], Sheila Greenfield[2], Miren Jones[2], Sue Jowett[2], Paul Little[5], Claire O'Brien[2], Christina Penaloza-Ramos[2], Claire Schwartz[1], Helen Shackleford[2], Jinu Varghese[2], Bryan Williams[4], Richard Hobbs[1]
[1]University of Oxford [2]University of Birmingham[3]University of Cambridge [4]University College London [5]University of Southampton

Introduction

Self-monitoring of blood pressure with self-titration of antihypertensives (self-management) results in lower blood pressure in hypertension but there are no data in high risk groups. This trial assessed the added value of self-management in people at high cardiovascular risk compared to usual care.

Methods

Pragmatic primary care, unblinded, randomised controlled trial of self-management of blood pressure (BP) versus usual care. Eligible patients had a history of stroke, coronary heart disease, diabetes or chronic kidney disease and were individually randomised to usual care or self-management. Self-management comprised self-monitoring of BP combined with an individualised self-titration algorithm agreed at baseline. A target of 130/80mmHg adjusted for home measurement was used in all groups. The primary outcome was the difference in office systolic (SBP) between intervention and control at 12 months. Secondary outcomes included self-efficacy, lifestyle behaviours, health-related quality of life and adverse events.

Results

552 patients were randomised from 58 UK General Practices. After 12 months, primary outcome data were available from 450 patients (82%). Baseline blood pressure was 143.1/80.5mmHg(intervention) and 143.6/79.5mmHg(control). After 12 months this dropped to 128.2/73.1mmHg(intervention) and 137.8/76.3mmHg(control), a difference of 9.2 mm Hg (95% CI, 5.7-12.7, SBP) and 3.4 mm Hg (95% CI, 1.8-5.0, diastolic BP) following correction for baseline BP.

Discussion

Self-monitoring with self-titration of antihypertensive medication is feasible and effective for those at high risk of cardiovascular disease through co-morbidities. Patients with stroke and other high risk conditions whose blood pressure is above target should be offered self-management to control their blood pressure.

Maternal depression and anxiety and the risk of injuries in children aged 0-4 years

Ruth Baker, Elizabeth Orton, Denise Kendrick, Laila J. Tata
The University of Nottingham, Nottingham, UK

Introduction

Maternal depression and anxiety are common in the early years following childbirth. The impact of maternal mental illness on childhood injuries is underexplored, with existing studies relying on maternal reporting of injury occurrences. We aimed to assess the association between episodes of maternal depression and/or anxiety and the incidence of three common childhood injuries.

Methods

We conducted a prospective cohort study of 207,048 mother-child pairs who had linked primary care and hospitalisation data from the Clinical Practice Research Datalink and Hospital Episode Statistics, 1998-2013. Episodes of maternal depression and/or anxiety were identified using diagnostic codes, prescriptions and hospitalisation records. Adjusted incidence rate ratios (aIRR) for the risk of child poisonings, fractures and burns during episodes of maternal depression and/ or anxiety were estimated using Poisson regression.

Results

54,694 children (26.4%) were exposed to one or more episode of maternal depression and/or anxiety between birth and their fifth birthday. During follow-up 2,614 poisoning, 6,088 fracture and 4,202 burn events occurred. Child poisoning rates were increased during episodes of maternal depression (aIRR 1.55, 95% confidence interval 1.33-1.81), depression with anxiety (2.26, 1.87-2.72) and anxiety alone (1.60, 1.07-2.38). A similar pattern was seen for burns, with rates highest during episodes of depression with anxiety (1.56, 1.31-1.85). There was no association between maternal depression and/or anxiety episodes and child fractures.

Discussion

Prompt identification and treatment of maternal depression and anxiety and provision of safety advice (e.g. safe medication storage) to mothers with depression and/or anxiety may reduce the risk of child poisonings and burns.

One in a Million: A study of treatment recommendations in primary care consultations

Rebecca Barnes, Marcus Jepson, Ludivine Garside, Matthew Ridd, Chris Metcalfe, Chris Salisbury
University of Bristol, Bristol, UK

Introduction

Around one million primary care consultations happen in NHS England every day resulting in recommendations for a wide range of treatments. In the context of low treatment adherence and policy calls to improve patient self-care our prospective observational study aimed to systematically investigate how recommendations for different treatments get made and responded to.

Method

Consultation video-recordings with linked survey and medical records data were collected from 23 self-selecting GPs and 327 unselected adult patients. Conversation analytic methods were applied to detailed transcripts and recordings to derive interaction variables for a comprehensive coding scheme. Co-variates included number and types of recommendations, immediate GP and patient recall post-consultation, patient recall at 10 days, and documentation in the patient's medical record.

Results

263/327 patients received 644 recommendations for a wide variety of treatments. Focusing on 159 consultations with complete post-visit data, 117 patients received 248 treatment recommendations: 128 for POMs, 25 for OTC medicines, and 78 for self-care. In 89 consultations, patients immediately recalled medical recommendations, with doctors agreeing in 82 of those consultations and recalling a further six. At 10 days, 88 (75.2%) patients recalled a POM or OTC, only 53 (45.3%) recalled a self-care recommendation. Only 39 (68.4%) self-care recommendations, compared to 78 (95.1%) POMs, were documented in patient records.

Discussion

GPs in our sample recommended a wide range of treatments. However recommendations for drug treatments were more likely to be recalled than those for self-care. A systematic bias was observed in the types of recommendations documented in medical records.

Patient direct access to NHS musculoskeletal physiotherapy in primary care: The STEMS pilot cluster randomised trial (ISRCTN23378642)

Annette Bishop[1], Reuben O Ogollah[1], Sue Jowett[1,2], Jesse Kigozi[1,2], Stephanie Tooth[1], Joanne Protheroe[1], Elaine M Hay[1], Chris Salisbury[3], Nadine E Foster[1]
[1]Keele University, Keele, UK, [2]University of Birmingham, Birmingham, UK, [3]University of Bristol, Bristol, UK

Introduction

GPs are facing record demand from patients. Musculoskeletal conditions count for around 25% of consultations and are set to rise as the population ages. Patient direct access to physiotherapy provides one solution, yet uptake in the NHS in England has been slow. The STEMS pilot trial was conducted to inform future research in this area.

Methods

In a pilot cluster RCT, 4 general practices were randomised to provide GP-led care as usual or to also offer patient direct access to NHS physiotherapy for adults with musculoskeletal conditions. Data were collected at baseline, 2, 6 and 12 months and from physiotherapy and medical records. Analyses focused on main trial feasibility and exploration of clinical and cost outcomes.

Results

Of 2,696 patients invited to take part, 978 (36%) participated. Recruitment was completed in 6 months. Follow-up rates were 78% (6m) and 71% (12m). No evidence of selection bias observed. Despite active marketing of direct access, referral numbers and waiting times (28 days before, 26 days after introduction of direct access) for physiotherapy did not increase. Patient satisfaction was good. No safety issues were identified. Clinical and cost outcomes were similar in trial arms at all follow-up time-points.

Discussion

Patients readily adopt to direct access yet physiotherapy services are not overloaded. Record demand in primary care means care provision by physiotherapists should be investigated. Further research should test whether patient direct access can reduce burden on GPs, provide improved access for patients and lead to cost-savings. A future main RCT is feasible.

Where next for patient and public involvement (PPI) in the NIHR School for Primary Care Research?

Steven Blackburn[1], Sarah McLachlan[2], Paramjit Gill[4], Sue Jowett[3], Philip Kinghorn[3], Fiona Stevenson[5], Adele Higginbottom[1], Carol Rhodes[1], Robert Taylor[1], Krysia Dziedzic[1], Clare Jinks[1]

[1]Research Institute for Primary Care and Health Sciences, Keele University, Keele, UK, [2]Department of Physiotherapy, Kings College, London, UK, [3]Health Economics Unit, School of Health and Population Sciences, University of Birmingham, Birmingham, UK, [4]Primary Care Clinical Sciences, Institute of Applied Research, University of Birmingham, Birmingham, UK, [5]Research Department of Primary Care and Population Health, University College London, London, UK

Introduction

The NIHR Going the Extra Mile report highlighted the need to improve the quality of PPI in research. Based on the findings from a SPCR funded study investigating the scope and impact of PPI in SPCR, we describe the co-production of recommendations to improve PPI across the SCPR.

Methods

Seven PPI members attended a workshop with the research team (including two lay co-applicants) to discuss the study findings and draft recommendations. For consistency with national guidelines, the recommendations were aligned to the NIHR 'Going the Extra Mile' report, INVOLVE's "Values and Principles Framework' and the SPCR PPI strategy. A later workshop was held with PPI leaders and members from across the SPCR for wider feedback.

Results

Fifteen recommendations were co-produced. Twelve were related to improving PPI practice in research: promote PPI as a core research function; share good practice and resources; create dedicated PPI champions; establish a best practice framework; improve skills; routine rewards and recognition for PPI; improve PPI recording and reporting; improve accountability; raise awareness of time commitment for PPI; showcase and celebrate PPI impact. Three recommendations were related to SPCR system and processes: facilitate improvements to the amount, range, and good reporting of PPI activity.

Discussion

PPI involvement was embedded in interpreting study findings and co-producing recommendations to improve PPI in primary care research. If adopted by the SPCR, the recommendations will improve the quality of PPI in SPCR funded research and help to standardise recording, reporting and evaluation of PPI activities.

Development and implementation of a Patient Safety Toolkit for general practice

Tony Avery[1], Kate Marsden[1], Brian Bell[1], Umesh Kadam[2], Jose Valderas[3], Stephen Campbell[4]
[1]University of Nottingham, Nottingham, UK, [2]University of Keele, Keele, UK, [3]University of Exeter, Exeter, UK, [4]University of Manchester, Manchester, UK

Introduction

Patient safety is a complex, multidimensional concept encompassing many different dimensions, including diagnostic and prescribing safety, communication, organisational safety culture, and patient reported problems. Each of these dimensions requires different methods and tools of assessment and improvement. The aim was to develop and implement the first ever Patient Safety Toolkit (PST) for general practice.

Methods

A multi-centre mixed method study consisting of three phases that in turn developed, piloted and implemented a combination of six tools designed to deliver safer care across a number of domains, conducted in 46 practices across five geographic areas in England.

Results

The PST includes an aid to rapid retrospective note review to detect patient safety incidents; an on-line survey to assess the safety climate amongst staff; a questionnaire to gauge patients' experiences of safety in primary care; a software based intervention to prevent medication related injury; a tool to assess medicine reconciliation for recently discharged patients and a concise safe systems checklist. The Patient Safety Toolkit, hosted on the RCGP's website (http://www.rcgp.org.uk/clinical-and-research/toolkits/patient-safety.aspx) was launched successfully in August 2015 and there have been >5000 page views. The patient safety regional workshops attracted a range of general practice staff (n>110).

Discussion

The PST has had an impact on members of the practice team such as GPs, practice managers and other practice staff involved in patient safety initiatives. The launch of the Toolkit is s one of the top 10 achievements for the School for Primary Care Research over the last 10 years https://gallery.mailchimp.com/c031c9cc29b4b899935088b4a/files/Winter_05.pdf

Effectiveness of regular weighing and feedback by community midwives in preventing excessive gestational weight gain: randomised controlled trial

Amanda Daley[1], Kate Jolly[1], Susan Jebb[2], Lucy MacKillop[4], Amanda Lewis[3], Andrea Roalfe[1], Sue Clifford[1], Sara Kenyon[1], Christine MacArthur[1], Paul Aveyard[2]

[1]University of Birmingham, Birmingham, UK, [2]University of Oxford, Oxford, UK, [3]University of Bristol, Bristol, UK, [4]John Radcliffe Hospital, Oxford, UK

Introduction

About 40-60% of pregnant women exceed current Institute of Medicine guidelines for gestational weight gain, increasing health risks to mother and baby. This study assessed the effectiveness of a very brief midwife-delivered intervention in routine antenatal care to prevent excessive weight gain.

Methods

Low risk pregnant women were recruited from four maternity centres (Birmingham, Dudley, Oxford and Warwick) at their 10-14 week dating scan, and the primary outcome was the proportion gaining excessive weight at 38 weeks of pregnancy.

Intervention

103 community midwives were trained to deliver the intervention which involved setting maximum weight gain thresholds, weighing women at antenatal visits, and providing feedback. Women were provided with weekly maximum weight gain thresholds and encouraged to monitor their own weight each week. Brief messages about the importance of eating healthily and physical activity during pregnancy were given at appointments. The control was usual maternity care.

Results

322 healthy weight and 334 overweight/obese women were recruited. 27% were of non-White ethnicity. Participants' adherence to weekly self-monitoring at home was good (50.1% fully adherent, further 16.6% partially adherent). Provisional analysis indicated that the intervention was ineffective in preventing excessive gestational weight (28.9% vs 27.6%; adjusted OR=0.84, 95% CI: 0.53 to 1.33).

Discussion

An intervention focused on community midwives setting maximum thresholds for weight gain and weighing women at antenatal visits was acceptable to women, but ineffective in preventing excessive gestational weight gain.

Determinants and burden of differing health trajectories in the very old- the Newcastle 85+ study

Rachel Duncan, Louise Robinson, Andrew Kingston, Barbara Hanratty, Stuart Parker, Carol Jagger
Newcastle University, Newcastle upon Tyne, UK

Introduction

The Newcastle 85+ study is the largest study in the UK conducted in the very old - those aged 85 years and over. The study was established in 2006 to study the complex clinical, biological and psychological factors affecting the very old, generating information about an age group where information is lacking.

Methods

A prospective observational cohort study of people born in 1921. Data was gathered by a general practice record review and a multidimensional health assessment conducted in the participants' usual residence. Following baseline assessment, participants were re-assessed at 18, 36 and 60 months.

Results

Multimorbidity was the norm with all participants having at least one disease and with the average disease count being 4 for men and 5 for women. The most prevalent diseases were hypertension (58%) and osteoarthritis (52%). 73% had normal cognitive functioning, 20% had no difficulty with any of the 17 everyday activities and 9% of men remained independent between age 85 and 90. Frailty is a prominent emerging syndrome and 22% of participants were classified as frail and 60% as pre-frail at baseline. Overall, 78% of participants rated their health compared with others of the same age as good, very good, or excellent.

Discussion

Few studies include people aged 95 and the SPCR funded 10 year follow up study will increase our understanding of how health trajectories change at advanced ages. Developing more effective and timely primary health and social care services is paramount in the face of this growing population.

Towards person-centred care: development of a patient support needs tool for patients with advanced Chronic Obstructive Pulmonary Disease (COPD) in primary care

AC Gardener[1], G Ewing[2], M Farquhar[1]
[1]Department of Public Health & Primary Care, University of Cambridge, Cambridge, UK, [2]Centre for Family Research, University of Cambridge, Cambridge, UK

Introduction

Patients with advanced COPD have difficulty reporting their support needs to health care professionals, undermining person-centred care and support. A new approach, the Support Needs Approach for Patients (SNAP), informed by, and modelled on, the evidence-based Carer Support Needs Assessment Tool (CSNAT), may enable patients to express their support needs and start person-centred conversations. SNAP is underpinned by an evidence-based tool to help patients consider and express their support needs. This study aims to develop the SNAP tool, suitable for use in clinical practice.

Methods

Two-stage qualitative study. 1) Domains of need in advanced COPD were identified through a rapid review of the literature, analysis of data from the Living with Breathlessness Study (n=20 purposively sampled patients with advanced COPD) and patient focus groups. 2) A draft SNAP tool was developed based on the identified domains of need, then reviewed and refined in stakeholder workshops to ensure acceptability and suitability for clinical practice.

Results

The study is ongoing but preliminary findings indicate that the tool will consist of a brief set of questions which ask patients to consider whether they need more support in relation to a range of broad areas (domains) of need such as practical help in the home, knowing what to expect in the future, understanding their condition and managing symptoms.

Discussion

The tool has the potential to help patients with advanced COPD identify and express their support needs to enable delivery of person-centred care. Future work will test tool validity and feasibility.

Process evaluation of a feasibility randomised controlled trial comparing a web-based alcohol treatment programme against face-to-face treatment

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Introduction

Over seven million adults in England drink alcohol at "hazardous or harmful" levels, but only a small proportion access alcohol treatment, due to stigma and cuts to community alcohol services. Web-based treatment may improve access, and may be effective, but most previous trials have compared online programmes against assessment only rather than face-to-face treatment, and few studies have qualitatively explored the views of participating patients or counsellors.

Methods

Mixed methods process evaluation:

1. Feasibility RCT in north London comparing a web-based alcohol treatment programme against face-to-face treatment, collecting quantitative data on recruitment, retention and online data collection.

2. Qualitative interview study with thematic analysis exploring the views of alcohol counsellors and study participants.

Results

Alcohol counsellors screened 1253 patients but only 64 were eligible for our study. 1189 were ineligible (579 dependent drinkers; 548 with complex mental or physical health problems; 62 for other reasons). Of eligible patients, 54 declined to participate, 10 consented to participate, 7 continued to randomisation and 4 provided follow up data.

Interviews with five alcohol counsellors have been conducted so far. Emerging themes include: lack of buy-in and support from senior staff; structural difficulties such as service reorganisation; concern about clients being randomised to the website. Ethical approval to undertake the study with participants is still ongoing.

Discussion

These results show the importance of conducting feasibility studies and process evaluations prior to definitive phase 3 RCTs. Findings will provide useful insights into the enablers and barriers to recruitment and retention to web-based alcohol studies.

Oral steroids for acute cough (OSAC): a UK multi-centre, placebo controlled, randomised trial

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Introduction

Acute bronchitis is a common, expensive problem managed by primary care services internationally. Antibiotics are ineffective for most patients and their use contributes to antimicrobial resistance. Corticosteroids are known to be effective for acute asthma, which has similar symptoms to acute bronchitis. The OSAC trial sought to demonstrate 'proof of concept' effectiveness of oral prednisolone for acute bronchitis.

Methods

We randomised 401 consenting non-asthmatic adults with acute ($\leq$28 days) cough, without COPD or lung cancer, presenting to 54 GP practices in England. Patients received 2x20mg prednisolone tablets or matched placebo for 5 days. The two primary outcomes were: duration of moderately bad or worse (MBW) cough (348 needed for a priori beta 0.9, two-sided alpha 0.05); and average severity of all symptoms days 2 to 4 (beta 0.89, adjusted alpha 0.001).

Results

Primary outcomes were available in 333 for duration of MBW cough and 367 for symptom severity. Median duration of MBW cough was 5 days in both groups (IQRs 2-8 and 3-8 for prednisolone and placebo), adjusted HR 1.11 (95% CI 0.89 to 1.39, p= 0.36). Mean symptom severities were 1.99 and 2.16, adjusted difference -0.20 (95% CI -0.40 to 0.00, p= 0.05).

Discussion

For adults with acute LRTI not requiring immediate antibiotic treatment, a moderately high dose of oral corticosteroid does not reduce the duration of MBW cough, or symptom severity in the early phase of the illness (when symptoms are usually worst). Clinicians should not prescribe oral steroids to this group.

Economic Evaluation of Oral Steroids for Acute Cough: the OSAC study

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Introduction

A considerable amount of primary care resources are used in managing acute cough. There is also a cost to patients and society. The OSAC study aimed to determine the clinical and cost-effectiveness of the corticosteroid prednisolone compared with placebo for adults with acute cough.

Methods

The economic evaluation was carried out alongside a randomised controlled trial from a societal perspective. Data were collected using patient self-report and primary care notes; resources were valued using national unit costs. The trial medication was costed to accurately reflect the true cost to the NHS. Outcomes were (i)symptom-based and (ii)quality-adjusted-life-years (QALYs). Follow-up was four weeks.

Results

Analysis was carried out on 331 (83%) patients (171 intervention, 160 placebo). The trial medication cost £1.96 per patient but £4.18 per patient was recouped through prescription charges. The largest single item of cost was primary care consultations, at £57 per patient. Costs to the patients were higher in the intervention group (£8.89 vs £6.11) but they had less time off work (0.95 vs 1.38 days).

There was no evidence of a difference in duration or severity of cough but there was a small QALY gain by the intervention patients, representing a little over ½ day of 'best imaginable' health.

Discussion

Set against the long term effects of repeated use, there is insufficient evidence to recommend the use of oral steroids for acute cough. The dominance of consultation costs suggests more research should be targeted at methods of self-management in order to avoid inappropriate primary care consultations.

'It's not really an illness as we understand': patient and clinician experiences of early stage chronic kidney disease diagnosis in primary care

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Introduction

GPs have been incentivised to record and monitor patients who have early stage chronic kidney disease (CKD) to enable early identification of those at risk of further decline. However, relatively few people with early stage CKD will progress to the later stages of kidney disease, so some patients may be unduly medicalised. The study aimed to explore clinicians' and patients' experiences of discussing early stage CKD in primary care.

Methods

Interviews were conducted with a purposive sample of 45 patients and 25 clinicians. Data were digitally recorded, transcribed verbatim and analysed thematically.

Results

The introduction of 'CKD' as a new disease construct conflicted with many clinicians' values and personal understandings of general practice medicine. Clinicians often avoided using 'CKD' when talking to their patients with early stage kidney impairment to avoid causing unnecessary anxiety. Patients' accounts echoed the phrases described by health professionals. However, patient interpretations showed some phrases to be unhelpful, raising further questions and leaving patients concerned and wanting to know more about possible causes, the meaning of test results, the implications for them and whether they could do anything to prevent further decline.

Discussion

Some clinicians' strategies for delivering diagnostic information to patients with early stage CKD do not help patients understand their condition. Attempting to reassure patients that their kidney impairment was nothing to worry about, without providing further explanation, can add to, rather than diminish, patient concerns. Our findings contribute to understandings of non-adherence to clinical guidelines for virtuous and complex reasons.

How effective are interventions to support shared decision making for hypertension? A systematic review

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Introduction

Hypertension is a common risk factor for cardiovascular events. Increasing the involvement of patients in healthcare choices through shared decision making (SDM) has been proposed as a mechanism for improving hypertension control. We aimed to systematically review primary studies evaluating the effect of interventions to support SDM for hypertension.

Methods

A systematic review of controlled studies. Searches in six databases without language or publication restrictions. References were screened independently by two reviewers; disagreements were resolved by discussion. Data from included studies were extracted by one reviewer and checked by a second. Risk of bias was assessed independently by two reviewers. Meta-analysis was considered appropriate where studies were at low risk of bias and reported similar interventions and outcomes.

Results

5402 references were identified for title and abstract screening; 7 reports of 6 studies (4 RCTs) were included in the final review. All studies were based in primary care. The interventions were heterogeneous. Outcomes assessed were heterogeneous and meta-analysis was not appropriate. We found little high quality evidence of an effect of SDM on clinical outcomes including prescribing of anti-hypertensives and blood pressure. Three of six studies reported the effect of the intervention on SDM; the effect was inconsistent.

Conclusions

There is little high quality evidence to inform use of interventions to support SDM for hypertension. The assumption that SDM should be a tool for improving hypertension treatment concordance, rather than an end in itself, is problematic.

Geographical epidemiology of health deprivation in England, 2004-2015, and its association with primary care spending in 2015

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Background

There are known links between deprivation and both obesity and type-2 diabetes mellitus (T2DM). However what we know is based on small regional studies or aggregated data at a high geographical area. We do not know if these associations have changed over time, especially in this challenging post-recession period. Infromation at a low geographical area may help to shed light into the socioeconomic mechanisms that contribute towards these conditions.

Methods

We will use health informatics to manipulate numerous freely available databases to make available, for the first time, adult type-2 diabetes and obesity prevalence at a very low geographical level (Lower Super Output Area (LSOA) level, approximately 1500 households on average) for the whole of England from 2011 to 2015. This database will allow us to:

1) Spatially map T2DM and obesity in England and metropolitan areas (e.g. Greater London, London, Greater Manchester, West Midlands) for 2010 and 2015

2) identify LSOAs with the largest increases in T2DM and obesity over time and unpick their socioeconomic characteristics (overall deprivation, green space availability, fast-food outlets).

3) Identify clusters of LSOAs with high T2DM or obsesity, or a steep increase over time (And again examine their socioeconomic characteristics)

4) Identify clusters of deprivation for 2015 and cluster of steepest deprivation increase

5) Quantify association between deprivation and fast food availability (and changes over time)

6) Quantiy association betwen T2DM/obesity and both deprivation and fast-food availability (and changes over time)

7) Investigate temporal trends in fast-food availability and T2DM/obesity in an attempt to hypothesise on causality

Inconsistencies in Patient-Reported Outcome (PRO) Data Collection in Clinical Trials: A Potential Source of Bias?

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Introduction

Patient-reported outcomes (PROs) are increasingly used in clinical trials as a measure of effectiveness. PRO trial results inform patient/clinician decision-making, support labelling claims and influence health policy, particularly decisions surrounding cost effectiveness. This SPCR-funded research aimed to investigate reported inconsistencies in the collection and management of PRO data in clinical trials.

Methods

First, qualitative work was conducted with 26 staff involved in the collection of PRO data in UK clinical trials. The findings were used to inform a national cross-sectional survey of 767 UK-based trial personnel. In addition, a systematic evaluation of the PRO content of n=75 NIHR HTA trial protocols and a systematic review of n=54 PRO-specific guidance documents for trial protocol developers was undertaken.

Results

Qualitative/survey findings revealed inconsistencies in the way PROs are currently collected and managed in UK trials; in particular, regarding the management of PRO alerts, which could lead to co-intervention bias.

The PRO content of HTA clinical trial protocols was suboptimal. PRO guidance for protocol writers lacked consistency and was difficult to access.

Discussion

The study findings - disseminated in high impact peer-reviewed journals including JAMA, the Lancet and PLoS One - highlighted a need for the development of comprehensive consensus-based PRO guidelines. The study team are currently developing SPIRIT-PRO guidance aimed at facilitating improvements in PRO protocol content and PRO assessment, whilst protecting the interests of trial participants, to enhance the credibility of PROs as an important trial outcome and optimise their ability to inform patient care and policy.

Alcohol misuse and injury outcomes in young people aged 10-24: A cohort analysis using linked primary and secondary data in England

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Introduction

The burden of disease attributed to alcohol consumption is a global and national problem. Alcohol misuse is a risk factor for injury in young people though few studies describe this relationship in detail. This study assesses the risk of hospitalisation due to injury in young people with a medical record of alcohol misuse, describing injury type and mechanism in detail.

Methods

We conducted a cohort study of young people aged 10-24 registered at a Clinical Practice Research Datalink practice between 1997-2013 who had linked hospitalisation data from Hospital Episode Statistics. Cases had an alcohol-specific hospital admission, defined using ICD10 codes. Controls did not have an alcohol-specific admission, frequency matched by age(±5years) and general practice using a ratio of 10:1. Incidence rates (events per person years) and hazard ratios (Cox regression) of the first injury-related hospital admission were calculated.

Results

The cohort comprised 121,926 10-24 year olds; 11,056 cases, 110,870 controls. A total of 4,944 injury-related admissions occurred (2,092 (19%) in cases, 2,852 (3%) in controls). Cases were more deprived, more likely to be male, and had longer follow-up time. The most common injury mechanism was poisoning (1,694 in cases, 683 in controls) and the most common intent was 'self-harm' in cases and 'accidental' in controls. Injury rates and adjusted hazard ratios for injury will be presented.

Discussion

This study increases our understanding of injury risk in young people that have misused alcohol. This may have important implications for targeted injury prevention and harm minimisation programmes.

"It's just a great muddle when it comes to food": exploring patient decision making around gout and diet

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Robust evidence that dietary modification effectively improves clinical manifestations of gout or lowers serum uric acid levels is lacking, yet patients commonly initiate dietary changes as a self-management strategy. Little is known about why, and how, patients choose to modify their diets after developing gout.

The data set comprised transcripts of one-to-one interviews (43 individuals) and four focus groups (17 individuals) conducted with gout patients in the United Kingdom. All data relating to gout and diet were identified and analysed thematically.

Patients engaged dietary modification to look for patterns and explanations, with the aim of reducing attacks. For some patients, the intensity and frequency of attacks led to feelings of desperation and willingness to 'try anything'. Patients reported that the content of different information sources was often inconsistent and it was difficult to determine whether information was 'myth or reality'. Beliefs that diet could potentially explain and modify the timing of attacks gave patients a sense of control over the condition, but this appeared to be a barrier to acceptance of management with urate lowering therapy (ULT).

Perceptions about gout and diet play a large role in the way patients make decisions about how to manage the condition. There is a need to build an evidence-base around the impact of diet on gout in order that patients can make informed choices. Understanding an individual patient's view of the role of dietary factors in gout, and how this influences their willingness to accept ULT, could improve gout management in primary care.

Interventions to prevent burnout in physicians: A systematic review and meta-analysis

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Background

Burnout consists of feelings of emotional exhaustion, depersonalization and reduced professional accomplishment. It is highly prevalent in physicians and can have a negative influence on career continuation, patient care and safety. We conducted a systematic review and meta-analysis to evaluate the effectiveness of interventions to improve burnout in physicians. The influence of certain types of interventions (organizational or individual) and physicians (based in primary or secondary care) on the overall treatment effect were examined.

Methods

Medline, Embase, PsycINFO, Cinahl, and Central, were searched up to January 2016. Randomized controlled trials and pre/post intervention studies targeting burnout in physicians were included in this review. The core outcome was burnout and its key components including emotional exhaustion, depersonalization and professional accomplishment. Meta-analyses using random effect models were performed.

Results

Twenty-one independent comparisons from 19 studies were included in the meta-analysis. Burnout interventions were associated with medium reductions in total burnout (Hedge's SMD=-0.34, 95% CI=-0.44 to -0.22, I2 =32.1%). Subgroup analyses showed that only organizational interventions were associated with significant improvements on emotional exhaustion subcomponent of burnout (SMD=-0.36, 95% CI=-0.58 to -0.11, I2=13.7%). No differences in the treatment effect between physicians in primary and secondary/intensive care were found.

Conclusion

This is the first systematic review and meta-analysis of interventions targeting burnout in physicians. Evidence was acquired that particularly organizational interventions have the potential to significantly improve burnout in physicians. This finding provides support to the view of burnout as a problem of the whole healthcare system rather than individuals.

Optimising outcome prediction in primary care: Use of longitudinal data in prognosis research

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Introduction
Research investigating prognosis in musculoskeletal conditions has only been moderately successful in predicting which patients are unlikely to recover, perhaps because the majority of prognostic studies only include information on factors assessed at baseline. This study explored how clinical decision making could be improved by combining information taken at baseline and re-consultation.

Methods
Data was obtained on four cohort studies of patients with back or shoulder pain assessing long-term disability at 6 or 12 months and including baseline and 4-6 week assessments of pain and disability. We compared performance to predict long-term disability of: (i) baseline versus repeated short-term assessments of pain and disability; (ii) previously validated multivariable prediction models compared to baseline pain score only; and (iii) a hypothetical clinical scenario making efficient use of both baseline and repeated assessment to identify patients likely to have a poor prognosis and decide on further treatment.

Results
Repeat short-term assessment of pain and disability was more predictive of long-term outcome than baseline scores only or short-term changes. Short-term repeat assessment was more predictive than a multivariable prognostic model, but only in one of two cohorts presenting a model. Combining optimal prediction at baseline with short-term repeat assessment of pain in those with uncertain prognosis in a hypothetical clinical scenario resulted in only 17% being inappropriately reassured or referred.

Discussion
Prediction of long-term outcomes in musculoskeletal pain populations can be improved by incorporating a short-term repeat assessment of pain into prognostic models, which could optimise the clinical usefulness of prognostic information.

Preventing Acute Kidney Injury in Primary Care: A qualitative study exploring 'sick day rules' implementation

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Background
In response to growing demand for urgent care services there is a need to implement more effective strategies in primary care to support patients with complex care needs. Improving primary care management of kidney health through the implementation of 'sick day rules' (i.e. temporary cessation of medicines) to prevent Acute Kidney Injury (AKI) has the potential to address a major patient safety issue and reduce unplanned hospital admissions. The aim of this study is to examine implementation processes implicated in the implementation of 'sick day rules' for AKI prevention into routine care delivery in primary care.

Methods
40 Semi-structured interviews were conducted with patients with stage 3 chronic kidney disease, general practitioners, practice nurses and community pharmacists who either had, or had not, implemented a 'sick day rule'. Normalisation Process Theory was used as a framework for data collection and analysis.

Results
AKI prevention was considered a fundamental component of delivering comprehensive care as participants tended to express initial enthusiasm for sick day rules to prevent AKI. However, interest diminished with consideration of factors influencing their implementation. These included engagement within and across services; consistency of clinical message; and resources available. Participants identified that supporting patients with multiple conditions, particularly with chronic heart failure, made tailoring initiatives complex.

Discussion
Implementation of AKI initiatives into routine practice requires appropriate resourcing as well as training support tailored at a local level to support system redesign. There is a need to develop the evidence for the clinical and cost-effectiveness of such initiatives.

HeLP-Diabetes RCT: Randomised controlled trial of a web-based self-management programme for people with type 2 diabetes

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Introduction

Diabetes affects 6% of the British population. Supporting patients with self-management improves outcomes, but uptake of standard group education is low. Web-based support may promote uptake. This trial aimed to determine the effectiveness of a web-based self-management programme for people with type 2 diabetes in improving glycaemic control and reducing diabetes related distress.

Methods

Individually randomised two-arm controlled trial. Participants were adults aged 18 or over with type 2 diabetes registered with participating English general practices. Participants were randomised to either HeLP-Diabetes, an interactive, theoretically informed, web-based self-management programme or an information only website. Joint primary outcomes were glycated haemoglobin (HbA1c) and diabetes-related distress, measured by the Problem Areas in Diabetes (PAID) scale. Outcomes were collected at 3 and 12 months after randomisation, with 12 months the primary outcome point. The analysis compared groups as randomised (intention to treat) using a linear mixed effects model, adjusted for baseline data with multiple imputation of missing values.

Results

Of 374 participants randomised, 185 were allocated to the intervention group and 189 to the control. Follow up data for HbA1c were available for 317(85%) and for PAID 337 (90%) participants at 12 months. Participants in the intervention group had lower HbA1c than those in the control (mean difference -.23%; 95% Confidence Intervals -.42 - .041; p=0.017). There was no difference between groups for the PAID.

Discussion

Access to HeLP-Diabetes improved glycaemic control over 12 months. This programme could be rolled out nationally, improving overall access to self-management support.

Investigating views of smokers and smoking cessation advisors on a data sharing and communication facility within a cessation smartphone app (Q Sense)

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Introduction

More smokers receive cessation support in primary care than any other setting within the Stop Smoking Services. However, access rates have been declining significantly in recent years across all Stop Smoking Service settings. Smartphone applications could enhance the reach and effectiveness of Stop Smoking Service support. We have developed a smartphone app (Q Sense) which prompts smokers to log real-time smoking behaviour, including psychological and environmental antecedents such as mood and craving ratings and details of current activities, before and during a quit attempt. Giving cessation advisors access to clients' app-collected data and the facility to communicate via the app could improve advice tailoring and client engagement.

Method

One-to-one interviews with smokers who had used Q Sense as part of a quit attempt (n=10), including former and current Stop Smoking Service users, and smoking cessation advisors (n=10), including primary care and specialist service staff. Interviews were analysed thematically.

Results

Participants were largely very positive about a data-sharing and a communication facility. Perceived benefits included enhancements to advice, pharmacotherapy guidance, and opportunities for post-lapse support. Smokers who had not accessed a Stop Smoking Service felt an app-based communication link might encourage them to do so. Advisor concerns included additional time, consent, and client honesty. However, smokers expressed the desire to be honest when reporting their smoking behaviour and experiences, which advisors would potentially have access to.

Discussion

Strong participant support indicates that a data sharing and communication facility within a cessation app could be beneficial, warranting further investigation.

Impact of long-term conditions on the effectiveness of collaborative care for depression: an individual participant data meta-analysis

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Introduction

Collaborative care is an enhanced care model which is considered particularly effective in people with depression and comorbid long-term conditions. In England the National Institute for Health and Care Excellence recommend that collaborative care be only provided for people with depression and long-term conditions. However this guidance is based on old study level aggregate evidence and there is a case for using individual participant data meta-analysis to model treatment effects to better inform future clinical guidance.

Methods

One-step meta-analysis of individual patient data from 31 trials (n=10,962 patients) that included 33 comparisons of collaborative care with usual care in primary care or community settings. Main outcome measures were the moderating effect of the presence, number, and types of long-term conditions on depression severity.

Results

At study level, trials which explicitly identified patients with long-term conditions were associated with larger treatment effects compared with trials that did not explicitly identify patients with long-term conditions (interaction coefficient -0.13, 95% CI= -0.23 to – 0.02). At individual participant data level, no significant interaction effects were found between treatment group and presence (interaction coefficient = 0.03, 95% CI= -0.09 to 0.15), numbers (interaction coefficient = 0.01, 95% CI= -0.01 to 0.03) and types of long-term conditions.

Discussion: There is compelling evidence that collaborative care is effective for people with depression alone and also for people with depression and long-term conditions. Existing guidance that recommends limiting collaborative care to people with depression and physical comorbidities is not supported by this individual participant data meta-analysis.

An open-label randomised pragmatic trial comparing naproxen and low-dose colchicine for the treatment of acute gout in primary care: the CONTACT trial

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Introduction

Non-steroidal anti-inflammatory drugs (NSAIDs) are the most commonly-used treatments for acute gout, but have frequent side-effects. Although low-dose colchicine is effective, and better tolerated than higher doses, it has never been directly compared to a NSAID. The CONTACT trial aimed to compare the effectiveness and safety of naproxen and low-dose colchicine for treating acute gout in primary care (ISRCTN69836939).

Methods

Design: randomised multicentre open-label pragmatic trial. Adults presenting to primary care with acute gout were randomised 1:1 to (i) a single dose of naproxen 750mg followed by 250mg every eight hours for seven days or (ii) colchicine 500mcg every eight hours for four days. Outcomes were collected on days 1-7 and at 4 weeks. Primary outcome: change in pain intensity from baseline (worst pain in the last 24 hours; 0-10 numeric rating scale) across days 1-7. Secondary outcomes included time-to-treatment effect, side-effects, patient global assessment of response, and adherence. 400 participants provided 90% power to detect a small between-group effect size (0.3) (5% two-tailed significance level, 20% loss-to-follow-up). Analysis was by intention-to-treat of repeated measures using a linear mixed model.

Results: 399 participants were recruited (87% male, mean age 59 years). Responses for the primary outcome: 355 (89%) in the first seven days, 350 (88%) at 4 weeks. The final analysis comparing the primary and secondary outcomes measures between the treatment groups will be presented.

Discussion

The results presented will establish the relative effectiveness and safety of naproxen and low-dose colchicine for the first-line treatment of acute gout in primary care.

Improving prescribing safety in general practices in the East Midlands through the PINCER intervention

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Introduction

The PINCER intervention is a new model of care that involves searching GP computer systems to identify patients at risk from their prescriptions, and then acting to correct the problem with pharmacist support. It has been incorporated into national guidelines to support medicines optimisation by both NICE and NHS England. We have obtained substantial funding from the Health Foundation and East Midlands Academic Health Science Network for large-scale rollout and evaluation of PINCER across the East Midlands, using a new set of prescribing safety indicators.

Methods

Rollout is taking place in 17 CCGs over an 18 month period using a stepped-wedge study design. Improvement is being measured using anonymised routinely recorded data from general practices collected retrospectively, at three monthly time points. Qualitative methods are being used to explore the contextual factors for implementation, the acceptability and feasibility of the intervention in a range of settings and what factors (whether at CCG or practice level) enhance its effects.

Results

Eight CCGs have commenced the intervention in 165 general practices. A total of 1.34 million patient records have been searched and 10,900 instances of hazardous prescribing have been identified. Findings for each of the 11 prescribing safety indicators will be presented at the conference.

Discussion

Given that one in 25 hospital admissions relate to hazardous prescribing at an annual cost of around £650 million, the intervention should result in clinically important reductions in prescribing errors, anticipated reductions in medication-related hospital admissions and deaths, and net cost savings to the NHS.

Multimorbidity - an NIHR SPCR funded research programme

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Introduction

The growing prevalence of multimorbidity challenges conventional disease-centred approaches to health care. Since its foundation the SPCR has funded a series of projects on multimorbidity which have raised awareness of the issue and provided evidence about the implications for patients, doctors and the NHS.

Methods

In 2007, the SPCR commissioned the first UK study of the epidemiology of multimorbidity. This cross-sectional GPRD study described the prevalence and determinants of multimorbidity, and associations with consultation rates and continuity of care. Subsequent economic modelling explored the impact of multimorbidity on resource utilisation. In 2009, SPCR funded a systematic review of measures of multimorbidity to determine which best predicted outcomes. SPCR then funded an innovative study to explore the range of problems managed by GPs in typical consultations, based on videos of 229 consultations with 30 GPs. SPCR enabled a collaboration which has led to a large on-going cluster RCT of a new approach to the management of multimorbidity, funded by the NIHR HS&DR programme.

Result

Multimorbidity is common, particularly in deprived areas, and accounts for a high volume of consultations and health care costs. People with multimorbidity experience less continuity of care, despite having most to gain from it. Different measures of multimorbidity have similar performance at predicting associations with outcomes, but number of drugs prescribed is a useful proxy measure. GPs manage an average of 2.5 different problems per consultation.

Discussion

These findings informed an intervention to improve management of multimorbidity in general practice based on enhanced continuity of care and co-ordinated patient-centred reviews.

Blood Pressure Self-Monitoring in Pregnancy

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Introduction

Raised blood pressure (BP) and pre-eclampsia affect approximately 10% of pregnancies worldwide. We have evaluated the feasibility of, and adherence to, self-monitoring of BP and proteinuria in women at higher risk of pre-eclampsia in a feasibility study, and are now planning a large RCT to test this at scale.

Methods

This prospective feasibility study of self-monitoring of BP in pregnancy recruited women at higher risk of pre-eclampsia. Primary feasibility outcomes were recruitment, retention and persistence of self-monitoring; secondary outcomes were the difference between clinic and self-monitored BP readings and the potential performance of self-monitoring in the early detection of gestational hypertension compared to clinic BP. 30 participants were additionally asked to self-test their urine for protein.

Results

Of 201 women recruited, 162 (81%) provided readings suitable for analysis. BP readings from clinic and home had overlapping confidence intervals. Of the 23 who developed gestational hypertension that self-monitored, 9 (39%) had a raised BP at home prior to a raised clinic BP. Comparison of clinic and participant proteinuria testing showed that 93% were concordant and clinical action was not affected by discordance.

Discussion

Self-monitoring of BP and proteinuria in pregnancy are feasible and have the potential to be useful in the early detection of gestational hypertensive disorders, but maintaining self-monitoring throughout pregnancy requires support and probably enhanced training. NSPCR funding led to an NIHR Programme grant which will further develop the training and self-monitoring interventions, before trialing them at scale.

Missed Opportunities for Primary Prevention of Stroke and Transient Ischemic Attack in Primary Care

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Objectives

To determine the proportion of patients in primary care with a missed opportunity for prevention with lipid lowering, anticoagulant or antihypertensive drugs prior to first stroke/TIA.

Design

Analysis of anonymised electronic primary care records from the United Kingdom (UK) between 2009 and 2013.

Setting

561 UK general practices providing data to The Health Improvement Network (THIN) primary care database, which covers 6% of the UK population.

Participants

29,043 people with diagnosis of first stroke, first TIA or stroke with previous TIA, between January 2009 and December 2013, aged ≥18 years.

Main outcome

The proportion of strokes/TIAs with a prior missed opportunity for prevention with lipid lowering, anticoagulant or antihypertensive drugs. A missed opportunity was when these drugs were clinically indicated but not prescribed at the time of stroke or TIA.

Results

Of the 29,043 stroke/TIA patients, 17,680 had ≥1 prevention drug clinically indicated: 16,028 had lipid lowering drugs indicated, 3,194 anticoagulant drugs and 7,008 antihypertensive drugs. At least one missed opportunity for prevention was identified in 54% (9,579/17,680) of stroke or TIA patients in whom prevention drugs were indicated: 49% (7,836/16,028) had a missed opportunity for prescription of lipid lowering drugs, 52% (1,647/3,194) for anticoagulant drugs and 25% (1,740/7,008) for antihypertensive drugs.

Conclusion

Over half of people eligible for lipid lowering, anticoagulant or antihypertensive drugs had a missed opportunity for prevention prior to first-stroke/TIA. We estimate approximately 12,000 first strokes could potentially be prevented annually, in people >35 years in the UK, through optimal prescribing of these drugs.

Development of an online resource for families of children with otitis media with effusion in primary care

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Introduction

Otitis media with effusion impacts on the quality of life of young children and their families. Nasal balloon autoinflation is a feasible and effective treatment during the initial watchful waiting period, however there are uncertainties about its practical use and wider implementation. Our aim was to develop and evaluate an evidence-based online resource (LittleEARS website) to support self-management and use of the nasal balloon in primary care.

Methods

We used a 3 phased approach including i) qualitative semi-structured interviews with 31 GPs, 19 nurses and 14 parents ii) iterative development of the resource with 9 think-aloud interviews and expert panel review, iii) feasibility study.

Results

Qualitative work identified key areas to promote self-management and use of the nasal balloon. The final resource included topic information. self-help advice for home and school, instruction videos and guidance for continued monitoring. Overall feedback was good, with parents reporting the site as comprehensive, informative, relevant and practical. Most changes were focussed on improving the layout of the web pages and improving site navigation.

Conclusion

The multi-phased approach to development of the LittleEARS website, underpinned by implementation theory, used evidence from the literature and feedback from end-users, to develop a resource that was considered relevant to parents and provided practical advice to support self-management and use of the nasal balloon during the watchful waiting period. The feasibility study is currently underway.

The MoleMate Trial: outcomes and impact

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Introduction

UK incidence of the serious skin cancer melanoma is rising rapidly. Most referred pigmented skin lesions are benign, so interventions to improve primary care clinicians' diagnostic performance and referral efficiency are needed. We examined the effect of adding a diagnostic aid, the MoleMate system, to best practice to manage suspicious pigmented lesions in primary care.

Methods

Set in 15 general practices in eastern England, the RCT recruited adults with pigmented skin lesions not immediately detectable as benign. Patients were assessed by GPs using best practice (clinical history, naked eye examination, seven-point checklist) either alone (control) or with MoleMate (intervention). The primary outcome was appropriateness of referral: reference standard diagnosis was recorded for all trial lesions. Secondary outcomes related to clinician diagnostic performance and patient anxiety.

Results

1297 participants (1580 lesions) were randomised: 643 patients (788 lesions) to intervention and 654 (792 lesions) to control groups. While the systematic application of best practice guidelines and MoleMate both performed much better than reported current practice, adding MoleMate to best practice did not increase the proportion of appropriately referred lesions; instead, the lower specificity of MoleMate led to more referred lesions. Patients were not made anxious by this new diagnostic aid.

Discussion & Impact

These findings influenced the revised NICE guidelines for suspected cancer (2015). They have also underpinned the development of new approaches to the systematic use of best practice guidelines; electronic clinical decision support with an integrated seven-point checklist is currently being assessed in the MelaTools programme.

Predicting dementia risk in primary care: development and validation of the Dementia Risk Score (DRS) using routinely collected data

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Background

Routinely collected healthcare data has potential in assessment of dementia risk in clinical populations, without collecting further information from patients.

Methods

We used data from general practices in The Health Improvement Network (THIN) database. We randomly selected 377 practices for a development cohort and identified 930,395 patients without a recording of dementia, cognitive impairment or memory symptoms at baseline. We developed dementia risk models for two age groups (60-79 years and 80-95 years). We validated the model on a separate cohort of 264,224 patients from 95 randomly chosen THIN practices. Our outcome was five year risk of first recorded dementia diagnosis. Potential predictors included socio-demographic, cardiovascular, lifestyle and mental health variables.

Results

Predictors of dementia for those aged 60-79years included age, gender, social deprivation, smoking, BMI, heavy alcohol use, anti-hypertensive drugs, diabetes, stroke/TIA, atrial fibrillation, aspirin, depression. The discrimination and calibration of the risk algorithm were good for the 60-79years model; D statistic=2.03 (95%CI 1.95 to 2.11), C index=0.84 (95%CI 0.81 to 0.87), calibration slope=0.98 (95%CI 0.93 to 1.02). The algorithm had a high Negative Predictive Value, but lower Positive Predictive Value at most risk thresholds. Discrimination/calibration were poor for the 80-95 years model.

Conclusions

Routinely collected data predicts five year risk of recorded diagnosis of dementia for those aged 60-79 years, but not aged 80+ years. This risk score can identify higher risk populations for dementia in primary care. With a high negative predictive value it may be most helpful in 'ruling out' those at very low risk.

A Conversation Analytic Examination of Cancer Helpline Talk

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Introduction

Those 'affected' by cancer report a range of informational needs and are increasingly turning to a range of health services to address them, including cancer helplines. Cancer helplines are integral to the delivery of cancer care (DoH, 2011; 2014) but there is little evidence about their inner-workings including how participants talk through the problems associated with this disease during the calls.

Methods

This research used Conversation Analysis and examined 99 calls to a leading cancer charity in the UK. CA is a micro-analytic, qualitative method that uses audio recordings of real-time interactions to understand how communication processes operate in practice. Callers presented with a range of enquiries concerning information about current symptoms and treatment, what to ask doctors in future consultations, prognosis and recurrence of the disease, and information about how to support friends or relatives with cancer.

Results

Caller problems were more complex than is currently depicted in the current quantitative literature, with many callers presenting with more than one concern and problems that were sometimes outside the remit of the helpline to handle. Concerns about current symptoms and requests for prognoses were particularly challenging for call-handlers which sometimes led to communication problems (e.g. misalignments) between the participants.

Discussion

This study led to a greater understanding of the complex problems discussed on cancer helplines and how they were resolved (or not). The use of audio recordings (opposed to self-report data) could be used to train helpline staff in the future about what constitutes optimal or 'effective' call-handling practice.
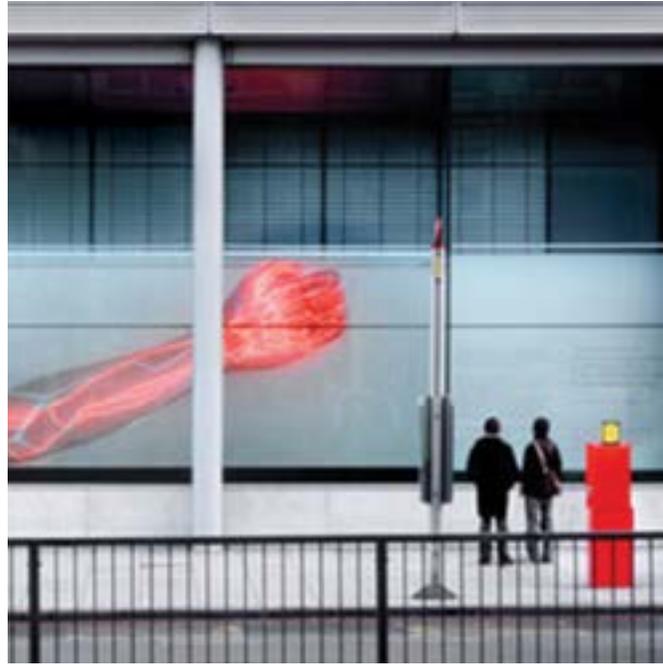
Developing a dyadic mental health intervention for people living with chronic physical conditions and their supporters: The literature review phase

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Introduction

Comorbid mental health problems are highly prevalent and worsen outcomes among people living with chronic physical conditions and their supporters. Most existing studies of mental health interventions for dyads living with chronic physical conditions have been conducted in narrowly defined populations, and few are truly dyadic. The literature review phase of this research seeks to identify and review the existing literature, to inform the development of an evidence-based dyadic mental health intervention for dyads living with one or more of a diverse range of chronic physical conditions.

Methods

The literature is reviewed in two ways: a) systematic scoping review of trials of dyadic interventions delivered to people living with chronic conditions and/or their supporters to improve mental health understanding or outcomes within the dyad; b) review of systematic reviews summarising the effectiveness of non-pharmacological mental health interventions for people living with chronic conditions or their supporters.

Results

The systematic scoping review search returned a total of 14,456 unique hits, from which 53 eligible studies were identified. The review of reviews identified 39 systematic reviews. Findings highlight strong similarities in the types of interventions tested and found to be effective among individuals and dyads living with different chronic physical conditions. Intervention components that are supported by findings from the literature review and will therefore be considered for the dyadic intervention are: mental health education delivered through active-learning; psychological therapies, particularly cognitive-behavioural therapy, acceptance-based therapy and mindfulness; problem-solving; couples/family therapy regarding communication and relationship intimacy; emotional expression; relaxation; music therapy; physical therapy; and peer contact.

Discussion

Findings will be synthesised with those of forthcoming formative work to inform the development of a dyadic mental health intervention for dyads living with chronic physical conditions. This formative work will use qualitative methods with patients and their supporters to ascertain their needs and preferences for the intervention.

VOICES: the primary care implications of children's exposure to domestic violence and abuse: findings from a synthesis of qualitative literature

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Introduction

Fourteen per cent of children will be exposed to domestic violence and abuse (DVA) in their childhoods. Children can experience health consequences as a result of growing up with DVA, many of which (post-traumatic stress disorder, depression, anxiety) will present to general practitioners. This study aims to synthesise qualitative evidence provided by children and concerned others on children's experiences of DVA. The work provides a counterbalance to survey research in this area, and will be used to make recommendations about how primary care might address children's needs.

Methods

VOICES draws on two other NIHR-funded projects: a review of interventions for children exposed to DVA (IMPROVE), during which papers reporting how DVA affects children were identified; and a qualitative, primary study that generated rich information from third parties about the impact of DVA on children. In VOICES, data from both projects is utilised and we derive overarching messages to give a picture of how children are affected by DVA.

Results

This work is ongoing; we expect to report full findings in November. Preliminary analysis has highlighted a variety of physical and emotional health impacts, as well as social effects (such as moving school, effects on friendships), on children that primary care professionals should be aware of.

Discussion

DVA is increasingly recognised as a public health issue with profound and long-term consequences for children. Primary care professionals have a key role to play in helping children recover from exposure to DVA.

Management of shoulder pain by general practitioners (GPs): a UK national survey

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Background

We aimed to describe self-reported management of common shoulder pain by GPs in the UK and assess whether it was in line with the best available evidence. For example, best evidence does not recommend routine use of shoulder radiographs, blood tests or diagnostic ultrasound scans (USS) in the management of rotator cuff tendinopathy (RCT) or adhesive capsulitis (AdhC).

Methods

Cross-sectional descriptive survey questionnaires with two clinical vignettes for RCT and AdhC were sent to a random sample of 5000 UK GPs using postal and online methods.

Results

Postal and online survey response rates were 22% and 7.4% respectively (overall 14.7%, n=714). Although 82% of GPs correctly diagnosed the first vignette and 92% the second, only 56% and 83% respectively were confident in their diagnoses. For the RCT case, 58% of GPs recommended investigations, including radiographs (60%), blood tests (42%) and USS (38%). For the AdhC case, of the 57% recommending investigations, these were most commonly blood tests (60%), radiographs (58%) and USS (31%). The most commonly recommended treatment for both cases was a combined physiotherapy and non-steroidal anti-inflammatory medications (NSAIDs) (45%, 52% for the two cases respectively). 17% and 31% of GPs would refer the two cases respectively to secondary care.

Discussion

GPs in the UK appear to be less confident in the diagnosis of RCT than adhesive capsulitis, and appear to be reliant on investigations, particularly blood tests and radiographs. The findings highlight important evidence-practice gaps that could help inform future research and education.

The Alt-Con Project: Practitioners' and patients' experiences of using alternatives to face-to-face consultation in general practice

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Introduction

Despite considerable rhetoric amongst policymakers about the need for general practices to offer alternatives to face-to-face consultations, little is understood about how, under what conditions, for which patients, and in what ways, alternatives to face-to-face consultations such as use of the telephone, email or Internet video may offer benefits to patients and practitioners in general practice.

Methods

Eight practices in three study sites across the UK were recruited as case studies due to their reported adoption of telephone, email or internet video consultations. A team focussed ethnographic study is underway with researchers observing and conducting informal conversations with staff members. In addition, formal interviews are being conducted with patients, GPs, nurses, practice managers and reception staff from the practices.

Results

Preliminary findings suggest that how the alternatives to face-to-face consultation are offered, used and integrated with other forms of consultation differs considerably between practices and populations. It is therefore unsurprising that perceptions of advantages and disadvantages by different practice staff and by different sub groups of patients also differs: we will describe and discuss these drawing on the full data set.

Discussion

The knowledge gained from this ethnographic study, which includes collaboration between SPCR departments in Bristol and Oxford and was supported by an SPCR fellowship for HA, is the first to gain an in-depth understanding of the use of alternatives to face-to-face consultations in primary care. It will be used to inform introduction of alternatives and form the basis of further evaluative work.

Facilitating long-term physical activity adherence following the completion of a community-based falls prevention exercise programme in older people

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Background

 Falls are extremely common in older people and low physical activity levels exacerbate functional impairment and increase falling risk. FaME (Falls Management Exercise programme) has been shown to increase physical activity levels, improve physical function and reduce the risk of falls in older people. However, these beneficial effects diminish if people do not maintain physical activity after the exercise programme. Currently little is known about maintaining physical activity in older adults after structured exercise interventions have ceased. This evidence gap is being addressed in the present study.

Study design

 We are currently conducting a systematic review to inform the development of an intervention to promote the maintenance of physical activity after participation in the FaME programme.   The maintenance intervention will be tested in a feasibility trial in which people coming to the end of the FaME programme will be randomised into the intervention or usual care group. Physical activity levels, physical function and fall-related factors will be measured on cessation of the FaME programme and 6 months after the completion of the feasibility trial.

Results

The results of the systematic review and the description of the intervention will be presented at the anniversary event.

Conclusion

This study will investigate the implementation of a physical activity maintenance intervention in older people who have completed the FaME programme.   The intervention developed and the knowledge gained will help inform the design of future randomised controlled trials to increase physical activity adherence in older adults following structured exercise programmes.

Why medical researchers need social science to stop them doing foolish research

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Introduction

There is enthusiasm for qualitative research within primary care, acknowledging that health and illness are complex, and that it is essential to understand patients' experiences and views in order to offer appropriate, acceptable and effective health interventions. However, qualitative/social scientific research receives much less funding, and findings are usually lower profile than trial results or epidemiological studies.

Methods

This poster presents examples from mixed methods sexual health research over the last 10 years, to reflect on the perspectives that social scientific approaches can bring to primary care research.

Results

Qualitative research allows deeper understanding of the meanings of social phenomena, and of the complexity of lived experience of health and illness. This poster gives some examples of potential pitfalls in sexual health research, for example of making assumptions about the meanings of terms such as 'sex', or 'partner', or failing to appreciate the complexity of 'irrational' risky sexual behavior. It is important to understand the reality of (young people's) sex lives, which helps to explain why health promotion may be low priority in the context of many competing pressures and priorities.

Discussion

The poster will make some suggestions on how researchers can avoid conducting foolish research, for example by understanding health problems in depth from patients' points of view, and addressing patients' priorities for intervention design and evaluation of 'success'.

Using Latent Class Analysis To Identify Clinically Meaningful Social Participation Profiles In The Older Population

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Social participation refers to activities involving direct interactions with others and fulfilment of social roles. Restricted social participation is associated with poorer health and increased risk of mortality, absence of restriction is associated with maintaining health. Previous studies have captured extent of social participation restriction but a method categorising older people into similar groups, which is not dependent on levels of restriction is required to explore benefits of maintaining social participation. The association of these groups with health and wellbeing factors may then be examined.

Data from 7266 participants participating in the English Longitudinal Study of Aging (ELSA) were used. Latent Class Analysis (LCA), a statistical method of identifying groups of similar individuals based upon attributes measured by indicator variables, was used to identify groups of participants with distinctive social participation characteristics . Groups were then described in terms of their health and socio-economic characteristics.

Four distinct social participation groups were identified: i)Infrequent socialisers(15%),ii) Moderate socialisers(38%),iii)Frequent socialisers with low community engagement(28%),and iv)Frequent socialisers with high community engagement(19%). Moderate socialisers reported regular contact with others but low levels of social outings. Both frequent socialiser groups reported regular holidays, daytrips and recreational outings than either infrequent or moderate socialisers. Frequent socialisers with high community engagement were also members of formal groups and/or organisations.

The four groups identified were distinctive both in terms of social participation characteristics and health and socioeconomic factors, suggesting LCA to be an effective way to identify clinically meaningful groups of older people with differing levels of health risk.

A qualitative systematic review of older adults' and health and social care practitioners' perceptions and experiences of alcohol consumption in later life

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Introduction

Alcohol presents many health risks to older adults, even when consumed in moderation. However, alcohol is also associated with a small number of health benefits in later life, and has implications for wider aspects of wellbeing. In order to improve policy and practice targeting alcohol use in later life, we need to understand how older adults and their health and social care practitioners perceive and experience the use of alcohol in old age. This study aims to synthesis available qualitative research evidence on the views of older adults and health and social care practitioners on alcohol consumption in later life.

Methods

A systematic search strategy has been developed and implemented to five relevant databases. Selected qualitative studies will be synthesised through meta-ethnography, with third order constructs produced describing themes identified within the data.

Results

2029 papers were screened against inclusion and exclusion criteria, with 68 papers identified for screening by full text. Themes are expected to include perspectives of the impact of alcohol use on health and socialisation, as well as its role in relaxation and coping, and views surrounding the normalisation and stigmatisation of alcohol use in old age.

Discussion

This review will provide timely input into understanding the roles of alcohol consumption in later life given recent changes in the United Kingdom's Chief Medical Officer's guidance for alcohol consumption. Exploration of both older adult and health professional perspectives will challenge stereotypes held within the medical profession of drinking in later life.

Validity, acceptability, and clinical usefulness of a smartphone/tablet application for monitoring pain in patients with musculoskeletal conditions (STAMP feasibility study)

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Introduction

Short-term monitoring of symptoms can improve estimation of prognosis, and assessment of the benefits and harms of treatment. In collaboration with our Research User Group (RUG) we designed a Smartphone Application ('Pain Recorder') to facilitate pain monitoring in patients with musculoskeletal disorders. The objectives of this feasibility study were to assess construct validity, acceptability and clinical utility of the Pain Recorder.

Methods

Adults consulting in general practice with musculoskeletal pain and receiving a new prescription for stronger classes of analgesics (opioid combinations, NSAIDs) were invited to take part. Following baseline assessment of pain and other symptoms using validated measures, participants received an electronic tablet or installed the Pain Recorder on their own Android smartphone. They recorded pain intensity, analgesic use, pain interference with sleep and activity, mood, and perceived side effects over a period of 4 weeks. After 4 weeks, they attended a follow-up consultation with their healthcare practitioner, and completed questions regarding symptoms, acceptability and ease-of-use of the Pain Recorder. Workshops with healthcare practitioners and patients were organised to further explore opinions regarding clinical utility the Pain Recorder.

Results

Data collection for the feasibility study will be completed in May 2016. Results will be available during the Showcase.

Discussion

The Pain Recorder received positive responses from patients and practitioners in terms of ease-of-use, and potential to support self-management of patients with musculoskeletal pain. Given the novelty of design and data collection many practical and technical difficulties had to be addressed, which will be discussed during the Showcase.

Case studies of Patient and Public Involvement in projects funded by the School for Primary Care Research

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Introduction

This year marks the tenth anniversary of the National Institute for Health Research and the School for Primary Care Research (SPCR). To celebrate this milestone, we review the impact of patient and public involvement (PPI) in SPCR-funded research studies led by Keele since 2006.

Methods

Using data from a SPCR funded study of the costs and consequences of PPI1 and a review of Keele's archive, we identified SPCR funded studies with evidence of PPI in their development and delivery. Using four case studies, we have highlighted the role and impact of PPI.

Results

Since 2006, SPCR has funded 19 research studies at Keele - 14 included PPI activity. These studies covered a range of primary care topics and research design. The impact of PPI was evident throughout the research cycle, including shaping grant applications, informing recruitment, intervention design, and dissemination activities. Case study 1: PPI members co-developed a smartphone app for patients to self-monitor musculoskeletal pain. Case study 2: PPI members collaborated on a survey of joint pain priorities and informed future studies. Case study 3: PPI members shaped gout studies, informing the qualitative and trial designs. Case study 4: Child and adolescent PPI members have informed recruitment strategies/materials into a study of pain in children.

Discussion

PPI has been integral to SPCR funded research led by Keele and has made a positive impact on research quality and conduct. Key to meaningful and sustained involvement of patient/public members is leadership and organisational commitment to PPI.

1Jinks et al. http://www.spcr.nihr.ac.uk/PPI

Measuring treatment burden in primary care: the potential of the MULTIPleS scale

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Introduction

The 'treatment burden' model suggests that patients with multimorbidity face a significant burden associated with the treatment of their disorders, alongside the burden of the disorders themselves. The model has informed the latest draft of the NICE guidelines for multimorbidity. Although much qualitative work has been conducted, there is less quantitative data on the measurement and impact of treatment burden. NICE considered measures for the assessment of 'treatment burden'. One measure identified was the MULTIPleS scale, developed using NIHR School for Primary Care Research funding.

Methods

We developed the MULTIPleS measure to measure treatment burden, using qualitative research with patients, detailed psychometric testing (including Rasch analysis), and longitudinal research.

Results

We conducted an initial validation on 490 patients, showing reliability and good fit to the Rasch model. In a short term cohort study of the same patients, we demonstrated that the scale predicted quality of life, even controlling for baseline quality of life. In prospective analyses of over 4000 older people in the CLASSIC cohort we found that higher MULTIPleS scores predicted lower patient activation over 6 months in those with multimorbidity.

Discussion

We discuss the performance of the MULTIPleS measure in relation to the requirements for assessment of 'treatment burden' outlined in the draft of the NICE guidelines for multimorbidity. We consider the potential role of the scale in achieving the 'tailored care' outlined in the NICE guidelines.

Global prevalence of antibiotic resistance in paediatric urinary tract infections caused by Escherichia coli and association with routine use of antibiotics in primary care: systematic review and meta-analysis

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Introduction

Antimicrobial resistance is an internationally recognised health threat. The majority of antibiotic prescribing originates in primary care, where children are high frequency recipients. We investigated the impact of routinely prescribed primary care antibiotics on urinary bacterial resistance in children.

Methods

We systematically searched for studies investigating resistance prevalence in Escherichia coli urinary isolates from children, and the relationship between previous primary care prescribed antibiotics and resistance. We calculated the pooled resistance prevalence for commonly prescribed primary care antibiotics in children, stratified by study country Organisation for Economic Co-operation and Development (OECD) status. We conducted a random-effects meta-analysis to quantify the association between previous antibiotic exposure and bacterial resistance.

Results

We found 58 observational studies investigating 77,783 E coli urinary isolates. In studies from OECD countries, the pooled resistance prevalence for ampicillin was 53.4% (95% CI 46.0%-60.8%), trimethoprim 23.6% (13.9%-32.3%), and co-amoxiclav 8.2% (7.9%-9.6%); nitrofurantoin was lowest at 1.3% (0.8%-1.7%). Resistance in studies in countries outside the OECD was significantly higher: ampicillin 79.8% (73.0%-87.7%), co-amoxiclav 60.3% (40.9%-79.0%), and nitrofurantoin 17.0% (9.8%-24.2%). There was evidence of an association between primary care prescribed antibiotics and resistance, whcih may persist for up to 6 months post-antibiotic treatment (OR 13.23, 7.84-22.31).

Discussion

Prevalence of resistance to commonly prescribed primary care antibiotics in E. coli UTIs in children is high, particularly in countries outside the OECD, where one possible explanation is over-the-counter antibiotic availability. This could render some antibiotics ineffective as first line treatments for UTI.

Assessing the Economic Impact of Oral Dexamethasone for Symptom Relief of Sore Throat: The TOAST Study

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Introduction

Approximately £400 million is spent on consultations and lost productivity associated with sore throat in the UK annually. TOAST sought to assess the clinical and cost-effectiveness of a single dose of oral dexamethasone (10mg), compared to placebo, in the treatment of sore throat.

Methods

Economic analysis adopting an NHS payer and wider societal perspective was undertaken alongside the TOAST trial. Patients were given a 7-day diary to complete. Patient NHS notes were reviewed up to 28 days post-intervention. Costs were estimated for the intervention, antibiotics used, over-the-counter medication reported, healthcare resource use and productivity losses due to missed work/education; costs were valued using national unit costs for 2015 (£). The Euroqol EQ-5D-5L quality of life instrument was used for estimating a quality-adjusted week (QAW). Mean differences in quality of life at 24 hours and 48 hours post-intervention were also reported.

Results

In the complete case analysis based on full EQ-5D-5L data, 373 (66%) patients were included, 172 and 165 in intervention and control groups, respectively. Incremental cost per patient (NHS payer perspective) was £5.42 (95% CI: £0.46, £10.38), the net cost of the intervention £5.04 and the adjusted incremental QAW was -0.0205 (95% CI: -0.594, 0.0184) at 7 days. There was no statistical difference in incremental effects at 24 and 48 hours. From a societal perspective the intervention was cost-saving (productivity losses were £17.81 per patient less in the intervention arm).

Discussion

This analysis suggests a one-off oral steroid is not cost-effective for the treatment of sore throat.

Refining a community-based psychosocial interventino, delivered by third sector practitioners, for older people with depression and anxiety

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Introduction

Anxiety and depression are prevalent among older adults, result in increased use of health and social care services, may be inadequately managed, due to both stigma and other barriers including access to, and acceptability of, treatment. We report the refinement of a psychosocial intervention to be delivered by third sector practitioners.

Methods

We conducted semi-structured interviews with nineteen older people who were recruited through third sector organisations. Participants described experiences of living with low mood and shared strategies, including membership of groups, that had been of help. Nine third sector workers also participated in interviews which explored their views on their role and experiences in supporting older people with anxiety and depression, and the training needed to develop confidence and competence to deliver the proposed intervention. A patient advisory group commented on the analysis and meaning of the data generated.

Results

Data were analysed thematically, using principles of constant comparison and TDF. Initial analysis suggests older people feel that attending groups can help manage low mood, but that accessing them requires "grim determination" and "courage" to overcome internal barriers (acceptance, motivation, physical health) and external barriers (transport, cost). Third sector practitioners identified key competencies that would be needed, suggested methods of training, and recognised the importance of supervision.

Discussion

The presentation will highlight how this qualitative study has informed the development of the psychosocial intervention which third sector practitioners will deliver to older people with anxiety and/or depression, and training, to be evaluated within a feasibility study.

Developing an educational intervention to improve the knowledge and skills of Foundation Year (FY1/FY2) junior doctors working with patients with medically unexplained symptoms (MUS)

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Introduction

Patients with MUS present frequently and are often associated with over-investigation and significant costs, as well as patient and clinician anxiety. This study focused on improving clinician education during the Foundation years, as relevant training is currently lacking at this critical early stage.

Methods

(i) Twenty-two junior doctors (FY1/FY2 level) took part in qualitative interviews exploring their experiences of managing patients with MUS and their recommendations for teaching.

(ii) UK Foundation Schools were surveyed to determine whether teaching about MUS currently takes place and to seek programme directors' recommendations for future education.

(iii) A professionals' workshop was held to consolidate junior doctors' and programme directors' views.

Results

Junior doctors expressed anxiety and frustration around such cases, and requested improved training about management strategies and delivery of appropriate explanations for symptoms. 53 (33%) of the 160 programme directors approached responded to the online survey. Only 6/53 (11%) of respondents reported any current provision of formal teaching about MUS, although the majority recognised the importance of this topic and recommended providing relevant teaching for 2-3 hours per year, predominantly as case-based discussions. Workshop attendees reviewed the suggested educational intervention and suggested the inclusion of video vignettes to illustrate various doctor-patient interactions, e.g. positive and negative examples of role modelling and the patient experience.

Discussion

Our study highlights an urgent need to improve postgraduate training about the topic of MUS, as current training does not equip junior doctors with the necessary knowledge and skills to effectively and confidently manage such patients.

Communication and decision making in consultations for children with an acute RTI

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Introduction

Acute respiratory tract infections (RTI) in children are the most common reason parents consult primary care in the UK and associated with over-prescription of antibiotics. This study examined clinician-parent communication and the decision making process within consultations.

Methods

Recruitment was conducted in six primary care practices selected from socioeconomically contrasting localities. 60 primary care consultations for children aged 3 months to 12 years were videoed. Video elicitation interviews with 13 clinicians and 27 parents were used to obtain parent and clinician views of the consultations. The consultation recordings were transcribed in detail and CA methods were used to analyse a subsample in detail. The entire dataset was then coded using a unique coding scheme developed from our analysis and supplemented by findings from published CA studies of primary care consultations.

Results

Parent pressure for antibiotics was rare, only 14% (7 cases) of parents suggested a diagnosis that might need antibiotics and in 6 of these cases, parents accepted non-antibiotic treatment recommendations without any sign of resistance. Overall, parents accepted 91% of treatment recommendations and there were very few challenges to diagnoses or treatment recommendations. Antibiotics were prescribed in 20% of consultations (12 cases) and in the decision to prescribe was primarily related to clinical symptoms and signs.

Discussion

There was little evidence of parental pressure for antibiotics. Clinician perception of which clinical symptoms and signs indicate a need for antibiotics was a much more important influence on whether or not antibiotics were prescribed.

Future diagnosis following recorded presentation of symptoms of breathlessness and wheeze in primary care: an electronic health record cohort study

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The potential to improve patient outcomes through earlier intervention makes research into prodromal symptoms of chronic disease an important priority. The study was to assess the risk of future diagnosis of COPD, asthma, and IHD following a recorded primary care consultation for breathlessness or wheeze symptoms.

This was a retrospective cohort study, performed within the Clinical Practice Research Datalink. Patients (≥18 years-old) with a first coded record of breathlessness or wheeze symptom in primary care (1997-2010) and with no prior diagnosis of COPD, asthma, IHD or other respiratory disease were identified as the 'exposed' cohort. They were then matched by age, gender and practice to an 'unexposed' cohort who also had no prior diagnosis of COPD, asthma, IHD or other respiratory disease, nor a recorded breathless or wheeze symptom. Risks of future diagnosis of COPD, asthma and IHD were then compared using Cox proportional-hazards models.

There were 265,940 patients identified for both cohorts (42% male; age 60 (IQR 44-73)), with a median follow-up of 6.1 years. In the exposed cohort, COPD incidence was 209 per 10,000 person-years (asthma 294/10,000; IHD 287/10,000). In the unexposed cohort, COPD incidence was 38/10,000; asthma 31/10,000; IHD 108/10,000. Patients recorded with breathlessness/wheeze had significantly higher risk of future diagnosis of COPD, asthma and IHD. The relationships were strongest during the first 6 months of follow-up but a significant relationship persisted even after 36 months.

Presentation to primary care of breathlessness and wheeze can be an early indicator of later diagnoses of asthma, COPD and IHD.

Prevalence of maternal and child adverse pregnancy outcomes recorded in primary care in the United Kingdom

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Background

Diabetes mellitus is one of the commonest chronic conditions affecting pregnancy, with increasing prevalence. Preexisting diabetes in pregnancy is related to adverse events for mother and baby.

Methods

Pregnant women permanently registered with a GP aged between 16 and 55 years were identified. Code lists were developed to identify the adverse outcomes: caesarean section, instrumental delivery, perinatal death, preeclampsia and major congenital malformations (MCM). Pregnancies affected by each outcome were identified.

The prevalence of each outcome was calculated by diabetes status (type 1, type 2 and not-diabetic) and by diabetes status and calendar period: 2000-02, 2003-05, 2006-08 and 2009-12, to investigate time trends.

Results

361,806 pregnancies were recorded, 0.33% and 0.55% were affected by type 1 and type 2 diabetes, respectively. The prevalence of caesarean section, perinatal death and MCM were higher in women with type 1 and type 2 diabetes compared to women without: 50%, 35% vs 17%; 1%, 1% vs 0.4%; and 5%, 3% vs 2%, respectively. The prevalence of preeclampsia was higher in women with type 1 diabetes compared to women with type 2 and without: 2% vs 1% and 1%.

For women with type 1 diabetes the prevalence of caesarean section, MCM and preeclampsia increased over the study period. For women with type 2 diabetes only the prevalence of instrumental delivery increased over the study period.

Conclusions

Women with diabetes have higher prevalence of adverse maternal and child outcomes in pregnancy when compared to women without.

Exercise for chronic knee pain: a national cross-sectional questionnaire survey of UK GPs

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Introduction

Older patients with chronic knee pain (CKP) frequently present to general practitioners (GPs). Exercise is a core management approach for CKP which reduces pain and improves function. This study investigated GPs' use of exercise for CKP and the extent to which current practice is in line with best available evidence.

Methods

A cross-sectional questionnaire survey investigated 5000 UK GPs' reported behaviours using a vignette-based multiple choice question and factors potentially associated with GPs' exercise use. Descriptive statistics were used to describe, and logistic regression was used to determine the factors associated with, exercise use.

Results

835 (17%) GPs returned a completed questionnaire of which 729 (87%) stated they would use exercise for the vignette patient. 538 (74%) reported using both local (lower limb) and general (aerobic) exercise. Of these, only 92 (17%) GPs employed local and general exercises in a way that was aligned to evidence-based recommendations, that is; they would advise, or refer for, and provide written information about local and general exercise. Most (98%) GPs had experienced barriers to initiating exercise for CKP. Factors significantly associated with exercise use included GPs' beliefs about consequences, moral norm, their role and their skills.

Discussion

Although most GPs reported using exercise for CKP, a minority did so in ways aligned with evidence-based recommendations. The low response risks response bias and may have overestimated exercise use. To maximise the benefit of exercise, GPs need to be supported to implement evidence-based exercise recommendations into patients' management plans.

Antidepressant use and risk of adverse outcomes in people aged 20 to 64: cohort study using a primary care database

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Introduction

Antidepressants are one of the most commonly prescribed medications in primary care. Many different antidepressants are available with broadly equal efficacy so the choice of an antidepressant largely depends on consideration of adverse effects. There is limited evidence on adverse effects comparing different antidepressants however so we carried out a cohort study to assess associations with antidepressant treatment for a range of adverse outcomes.

Methods

A cohort of 238,963 patients aged 20 to 64 with a diagnosis of depression was identified using the QResearch database. Information was extracted on antidepressant prescriptions and cardiovascular outcomes, epilepsy, self-harm, suicide, falls, fractures, gastro-intestinal bleeds, adverse drug reactions and all-cause mortality during follow-up. Cox models were used to estimate associations.

Results

During follow-up, 88% of the cohort received one or more prescriptions for antidepressants, the majority (71%) being for SSRIs.

Tricyclic antidepressants had significantly lower rates of fracture and higher rates of adverse drug reaction and all-cause mortality compared with SSRIs, whilst other antidepressants had higher rates of suicide, self-harm, arrhythmia, and all-cause mortality. There were significant differences between the most commonly prescribed individual antidepressant drugs for suicide, self-harm, arrhythmia, epilepsy, fracture, gastro-intestinal bleeds, adverse drug reactions and all-cause mortality.

Discussion

This study has found some important differences in rates of serious adverse outcomes between antidepressant classes and individual drugs in people aged 20 to 64 with a diagnosis of depression. These comprehensive findings across a range of outcomes indicate potential associations which should be considered with patients when antidepressants are prescribed.

Effectiveness of exercise as a treatment for postnatal depression: randomised controlled trial

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Introduction

Postnatal depression (PND) affects 10-15% of women in the year after birth. Exercise has the potential to address barriers associated with traditional treatments for PND; it is free, accessible, does not necessarily require childcare and is without stigma or side effects. Following a pilot trial the aim of this study was to evaluate the effectiveness of exercise as an adjunctive treatment for PND compared with usual care only.

Methods

94 women who fulfilled ICD-10 criteria for major depression or mixed anxiety and depression in the first six postnatal months were recruited and randomised.

Intervention

Both groups received usual care and the intervention group were offered two face to face consultations and two telephone support calls with a physical activity facilitator over six months to support participants to engage in regular exercise. Leaflets to further prompt exercise were mailed throughout the intervention.

Outcomes

The primary outcome was symptoms of depression using the Edinburgh Postnatal Depression Scale (EPDS) at six month post-randomisation. Secondary outcomes included EPDS score as a binary variable (recovered and improved), social support and physical activity at six and 12 month post-randomisation.

Results

After adjusting for baseline EPDS, analyses revealed a -2.04 mean difference in EPDS score, favouring the exercise group (95% CI: -4.11 to 0.03, p=0.05). When also adjusting for pre-specified demographics the effect was larger and statistically significant (mean difference=2.26, 95% CI:-4.36 to -0.16, p=0.03).

Discussion

This trial contributes new evidence to indicate exercise is likely to be an effective adjunctive treatment for postnatal depression.

Liver Disease Early Detection Study (LDEDs)

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Introduction

Mortality from liver disease has risen five times from 1970-2010 in the United Kingdom. Standard liver function tests are not useful in early identification of liver fibrosis therefore alternative diagnostic means are sought. Screening high risk drinkers in primary care using serum fibrosis markers generating a traffic light score (green = no fibrosis, amber = possible fibrosis, red = likely fibrosis/cirrhosis), and transient liver elastography (Fibroscan) may be effective.

Methods

Participants from five GP practices identified at increased risk of liver fibrosis due to alcohol from a previous study were invited to have a repeat traffic light test and a Fibroscan examination at their usual GP practice. Fibroscan scoring: <7.5 kPa = green, 7.5-12 = amber, >12 kPa= red. An overall traffic light score was allocated to participants and a recommendation based on this.

Results

56 participants aged 30-60 (mean 48, SD 8.3) were included. 3 scored amber on fibroscan, 0 scored red. Valid fibroscans were not obtained in 2/56 (3.6%). 7/56 scored amber on traffic light, 0 red. 2/7 amber traffic lights also scored an amber fibroscan. Only one participant with an amber score had abnormal transaminases.

Discussion

Transient elastography is feasible to use in primary care settings, and with serum fibrosis markers may help to identify early liver fibrosis, particularly in the context of normal liver function tests.

The reliability and diagnostic value of capillary refill time in children: systematic reviews and meta-analyses

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Introduction

Capillary refill time (CRT) is a simple and quick test requiring minimal equipment or time to perform, and which is widely recommended as part of the routine assessment of sick children.

Methods

We carried out two systematic reviews to assess the reliability and diagnostic value of CRT in children. We identified studies with information on the normal range of CRT, the effect of factors such as body site and temperature, and the diagnostic value to detect serious illness in children. Where there was sufficient data, we carried out meta-analysis to assess the diagnostic value of CRT.

Results

We found that the upper limit of normal CRT in healthy children is approximately 2s when measured on the finger, and that fever does not have a clinically significant impact on CRT. We identified that longer pressing times and low ambient temperature are associated with longer CRT.

Meta-analysis showed that prolonged CRT has high specificity (92.3%) but poor sensitivity (34.6%) for predicting mortality. Meta-analysis was not possible for other outcomes, but CRT showed consistently high specificity for outcomes including dehydration, sepsis, meningitis, dengue, admission to hospital, and severity of illness.

Discussion

We have developed a standardised method of measurement for CRT: the finger should be pressed with moderate pressure for 5s at an ambient temperature of 20°C-25°C.

A CRT of 3s or more may be considered abnormal, and is a specific sign for a variety of serious outcomes. However, low sensitivity indicates that normal CRT does not rule out significant illness.

Distinguishing between psychological disorder and emotional distress in primary care attenders

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Introduction

Distinguishing between emotional distress and psychological disorder is complex. Psychometric measures can help, however, with only one dimension (such as depression), patients' general emotional distress may result in scores that erroneously suggest psychological disorder. The aim of this study was to use the Four Dimensional Symptom Questionnaire (4DSQ) to explore the psychological symptoms of primary care attenders using four dimensions: distress, depression, anxiety and somatisation.

Method

This was a cross sectional survey study. Three hundred and eighty patients attending general clinics in Hampshire completed questionnaire packs containing the 4DSQ, PHQ-9 and the GHQ-12 whilst in the waiting room.

Results

The 4DSQ classified 22% (83/380) as having heightened distress levels; 9% (32/367) as cases of depression, and 6% (23/380) as cases of anxiety. The GHQ-12 classified 25% (90/354) as cases of emotional disorder. The PHQ-9 classified 16% (60/375) as cases of depression using score of 10 as a cut point. If a score 5 (mild depression) was used as a cut point, the PHQ-9 classified 36% (134/375) as cases. Of those deemed cases by the GHQ-12, the 4DSQ classified 64% (58/90) of those as having heightened distress; 32% (25/60) were classified as cases of depression. Of those deemed cases by the PHQ-9 (≥10), the 4DSQ classified 88% (53/60) as having heightened distress and 50% (28/56) as cases of depression.

Conclusion

Psychometrically distinguishing between distress and depression reduced the number of patients classed as cases. Conceptualising psychological symptoms in this way may help to reduce overdiagnosis and overtreatment of depression.

Exploring the ripple-out effect: the impact of domestic violence on informal supporters of survivors

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Introduction

Domestic violence (DV) is hazardous to health, due to injuries sustained, and chronic physical and mental health problems which ensue. Women experiencing DV often seek help from relatives, friends or colleagues; many rely predominantly or exclusively on informal support. This support is significant in survivors' lives, having associations with positive outcomes for mental health, QoL, and formal help-seeking. Crucially, informal support also buffers against women experiencing future abuse. Minimal research has been conducted with people who provide this vital support.

Methods

A systematic literature review and a qualitative study were conducted to explore the health and wellbeing impacts on informal supporters of DV survivors. For the literature review, 12 databases were searched, and framework analysis and meta-ethnography used to analyse 24 papers containing pertinent data. For the qualitative study, 23 semi-structured interviews were conducted with: parents, siblings, colleagues, friends, and non-abusive partners of survivors. A thematic analysis was performed.

Results

The impacts on informal supporters were numerous, varied and potentially severe, including negative impacts on: psychological wellbeing, physical health, relationships, and safety. These people were at direct risk of harm from the perpetrator.

Discussion

There is little recognition of people providing informal support to DV survivors, and yet both the value and impact is clear. These findings have informed a public health campaign across Bristol, and further research is being conducted to understand avenues of support which could be developed to help informal supporters help-seek and self-care, so that they in turn might be better equipped to support survivors.

Polymyalgia Rheumatica: challenges of diagnosis and management in general practice

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Introduction

Most patients in the UK with polymyalgia rheumatica (PMR) are diagnosed and managed exclusively by their general practitioner (GP). It is therefore a setting where improvements in care could create better outcomes for patients.

Method

A mixed methods study was undertaken involving a national questionnaire survey of 5000 UK GPs and a qualitative semi-structured telephone interview study of GPs from across the UK.

Results

Questionnaire response was 25%. 24 GPs were interviewed. Features used to identify PMR largely reflected PMR guidance. Inflammatory markers were universally requested. Other guideline advised investigations were requested less routinely. Challenges for diagnosis related to the atypical and vague way PMR can present. This was reflected in the qualitative study with developing a diagnosis and contributors to diagnostic uncertainty being the main themes.

56.4% responders would initially treat PMR as per guideline recommendation. Significant concern relating to long term treatment with prednisolone was evident and highlighted in the qualitative study with implications of treatment and practical treatment considerations being predominant themes.

Discussion

GPs report that PMR is a challenging disorder to diagnose and treat. An adequate process of exclusion of alternative diagnoses does not appear to be routine practice however. This represents a missed opportunity to improve clinical care. Although current treatment guidance is conflicting, 40% of GPs are initiating patients on excessive doses of prednisolone. There continues to be a need for a large pragmatic trial recruiting patients from all clinical settings to provide GPs and specialists with the evidence needed to optimise the management of PMR patients.

The performance of seven QPrediction risk scores in an independent external sample of patients from general practice: a validation study

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Introduction

To validate the performance of a set of risk prediction algorithms developed using the QResearch database, in an independent sample from the Clinical Research Data Link (CPRD).

Methods

Prospective open cohort study using the CPRD and QResearch databases. Outcomes were incident events relating to each prediction scores: QRISK2 (CVD); QStroke (ischaemic stroke); QDiabetes (type 2 diabetes); QFracture (osteoporotic fracture); QKidney (severe kidney failure); QThrombosis (venous thromboembolism); QBleed (intracranial bleed and upper gastrointestinal haemorrhage). Measures of discrimination and calibration were calculated.

Results

The CPRD validation cohort consisted of 3.3 million patients, aged 25-99 years registered at 357 general practices between 01 Jan 1998 and 31 July 2012. The validation statistics for QResearch were obtained from the original published papers which used a one third sample of practices separate to those used to derive the score. A cohort from QResearch was used to compare incidence rates and characteristics (6.8 million patients from 753 practices registered between 1998 and 2013. Baseline characteristics of both cohorts were similar though QResearch had higher recording levels for ethnicity and family history. The validation statistics for each prediction scores were very similar for each cohorts. For example in women, the QDiabetes algorithm explained 50% of the variation within CPRD compared with 51% on QResearch and the ROC value was 0.85 on both databases. The scores were well calibrated in CPRD.

Discussion

Each of the algorithms performed as well in the external independent CPRD validation cohorts as they had in the original published QResearch validation cohorts.

How do UK and Australian physiotherapists manage patients with hip osteoarthritis? Results of a cross-sectional survey

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Introduction

Hip osteoarthritis (OA) is common, painful and disabling. Physiotherapists have an important role in managing patients with hip OA, however little is known about their current management approaches and whether these differ internationally.

Methods

A cross-sectional survey was conducted in the United Kingdom (UK) and Australia. In the UK, the survey was mailed to 3126 physiotherapists and in Australia, a link to an online survey was provided. The survey explored physiotherapists' self-reported management of a patient with hip OA using a case vignette and clinical management questions, and captured demographic and practice data.

Results

The UK response rate was 53% (n=1646), with 1148 physiotherapists having treated a patient with hip OA in the last 6 months. These, along with 207 Australian physiotherapists, were included in the analyses. In both countries, a package of treatment incorporating advice, exercise (typically strength training (>90%)) and other non-pharmacological modalities, predominantly manual therapy (>60%) and gait re-training (>60%) was commonly provided. Australian physiotherapists provided more treatment sessions than therapists in the UK (5 or more sessions: Australia: 75%, UK: 40%, p<0.001).

Discussion

This is the first international survey of physiotherapists' management of patients with hip OA. A package of care broadly in line with clinical guideline recommendations was typically provided, although evidence supporting commonly used interventions is limited. There are some differences in management approaches between UK and Australian physiotherapists, but further research is needed to determine whether these differences impact on clinical outcomes.

Collaborating with patients to improve patient safety in primary care

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Introduction

Improving the safety of healthcare is an international priority, and there is a growing awareness of the value of partnering with patients and families to achieve this aim. Over recent years significant advances have been made in understanding what a service-user role might look like in the hospital setting, and how best that role can be supported. In UK primary care, estimates suggest that up to 25% patients are harmed by the care they receive. The role of patients for improving safety in this setting has received much less attention.

Methods

Qualitative methods and co-design. Twenty members of staff (GPs, nurses, managers and receptionists) and 20 patients (including patient panel members) recruited from five GP Practices in the North East of England, will each take part in an interview and three iterative, interactive workshops. Interview data will be analysed thematically and will inform workshop content.

Results

This study will inform adaptations to ThinkSAFE (an approach to supporting a collaborative patient and family role in improving patient safety www.thinksafe.care that is underpinned by best evidence, staff and patient experience, and behaviour change theory), and a conceptual model of patient involvement in improving patient safety in the primary care setting.

Discussion

This is a novel study that builds on a robust platform of intervention resources, systematically developed using co-design principles. Patient and Public Involvement is embedded in the project with PPI membership on both the project management team and an Advisory Group.

Which features of primary care affect unscheduled secondary care use? A systematic review

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Background

Unscheduled care is defined as any unplanned contact with the health service by a person requiring or seeking help, care or advice. Reducing unscheduled care use in the secondary care sector is a priority for many healthcare systems. Our aim was to conduct a systematic review to identify studies that describe factors and interventions at primary care practice level that impact on levels of utilisation of unscheduled secondary care.

Methods

This review was conducted following rigorous Cochrane methodology. We included relevant observational studies at primary care practice level which included people of any age of either sex living in Organisation for Economic Co-operation and Development countries with any health condition. The primary outcome measure was unscheduled secondary care measured by emergency department attendance and emergency hospital admissions.

Results

48 papers were identified describing potential influencing features on emergency department visits (n=24 studies) and emergency admissions (n=22 studies). Patient factors associated with both outcomes were increased age, reduced socioeconomic status, lower educational attainment, chronic disease and multi-morbidity. Being able to see the same healthcare professional reduced unscheduled secondary care. Generally, better access was associated with reduced unscheduled care in the USA. Proximity to healthcare provision influenced patterns of use. Evidence relating to quality of care was limited and mixed.

Discussion

The majority of research was from different healthcare systems and limited in the extent to which it can inform policy. However, there is evidence that continuity of care is associated with reduced emergency department attendance and emergency hospital admissions.

Does case management for patients with heart failure reduce unplanned hospital admissions? A mixed method systematic review with parallel quantitative and qualitative synthesis

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Background

Previous research suggests that case management (CM) is promising for reducing emergency hospital admissions of adults with HF. Our mixed method systematic review aimed to determine the effect of CM on unscheduled secondary care for adults with HF, and to investigate the contextual factors that facilitate or inhibit its effectiveness. .

Methods

This review used Cochrane review methodology. Inclusion: controlled intervention trials and qualitative studies that described CM interventions delivered predominantly in the community to adults with HF. Primary quantitative outcome: unscheduled secondary care. The qualitative review synthesised the experience and views of CM for HF patients and health professionals.

Results

Hospital-initiated CM reduces risk of readmission (rate-ratio 0.77 [95% c.i. 0.63, 0.94] p=0.01) and length of hospital stay (mean difference -1.28 days [95% c.i.-2.03,-0.53] p=0.0008) compared with usual care. Limited community-initiated CM studies showed no differences in risk of admission versus usual care (rate-ratio 1.08 [95% c.i.0.62, 1.87] p=0.8). Cost data were limited. The qualitative synthesis identified six patient themes: what is important for patients, information, self-management and self-care, changes in behaviour, checking on/being cared for, and enhanced access to care, and four health professional themes: feasibility of CM, patient benefit, health professional roles and relationships, and suggestions for improvements.

Discussion

Hospital-initiated CM can be successful in reducing unplanned readmissions and length of hospital stay for adults with HF. Data for community-initiated CM and costs for CM were limited. The qualitative synthesis will help us to understand the evidence of effectiveness of CM for HF patients.

General practice type and clinical quality of care: A mixed methods study

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Introduction

The presented research sought to understand variation in the clinical quality of primary care at practice level, whilst subsequently identifying implications for quality improvement.

Methods

Clinical indicators relating to Cardiovascular Disease and Diabetes were analysed in general practices in Sandwell (West Midlands). General practices showing unusually high or unusually low performance across these indicators were identified. Semi-structured interviews were then conducted with practice staff to explore reasons for variation and understand practice approaches to quality improvement.

Results

Clear differences emerged between practices' leadership, culture and care systems, and approaches to quality improvement. General practices could be categorised into four types: "biomedically-orientated", "patient-orientated", "organisationally-orientated" and "risk-orientated" practices. Practices were differentiated particularly in relation to beliefs and attitudes held around the primary driver of quality improvement in primary care practice. Practices demonstrating unusually high performance on clinical quality indicators were most commonly biomedically-orientated, with those demonstrating unusually low performance more "risk-orientated".

Discussion

Clinical quality appears to be linked to fundamental differences between general practices' philosophy of care, motivations for quality improvement and attitudes to care delivery. Individual practices placed different emphasis and importance on various aspects of primary care in quality improvement, such as implementation of standardised clinical protocols and processes, care centred around patient activation and experience, and focus given to organisational growth and development (delivering "primary care at greater scale"), for example. Understanding a practice's philosophy of care and practice type potentially offers a simple way to support practice self-reflection and identification of individual practice quality improvement strategies.

Patient self-management in primary care patients with MRC I/II COPD - a randomised controlled trial of telephone health coaching

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Introduction

The majority of COPD self-management trials have identified patients from secondary care populations. This trial assessed the effectiveness of telephone health coaching to encourage self-management in primary care patients with mild symptoms of COPD.

Methods

Randomised controlled trial in four NIHR SPCR centres of COPD patients with mild dyspnoea (MRC grade 1/2) recruited from primary care.

Intervention: A nurse-delivered telephone health coaching package of four components: accessing smoking cessation services, increasing physical activity, medication management and action planning (4 sessions over 11 weeks) followed by postal information at weeks 16 and 24.

Outcomes: Primary - HRQoL using the St Georges Respiratory Questionnaire (SGRQ-C) (1 year). Secondary (6 months and 1 year) - self-reported smoking and physical activity, anxiety and depression, MRC dyspnoea scale, self-efficacy for managing COPD and physical activity, EQ-5D-5L, health care utilisation, accelerometry to measure physical activity (1 year).

Results

577 participants from 71 practices were randomised to intervention (289) and usual care (288). Mean age 70.4 (SD 8.3) years; 63% were male; 29% had MRC dyspnoea 1 and 71% MRC 2; total SGRQ-C mean score 28.7 (SD 14.6).

The intervention was delivered with reasonable fidelity: 86% of the scheduled calls were delivered and 75% of participants received all 4 calls.

92% participants were followed-up at 6 months and 89% at 12 months. Data-analysis is ongoing.

Discussion

This trial will provide robust evidence about the effectiveness of a novel telephone health coaching intervention to promote behaviour change in patients with mild symptoms of dyspnoea in primary care.

Perceived barriers and facilitators in accessing dementia care by ethnic minority groups: a meta-synthesis of qualitative studies.

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Introduction

Dementia currently affects over 800,000 people in the UK, over 25,000 of whom are people from ethnic minority groups. Dementia in British ethnic minority groups remains under-recognised because research on dementia and ethnicity is lacking in the UK. The aim of this review is to conduct a meta-synthesis of barriers and facilitators in accessing care for dementia in ethnic minority groups.

Method: A systematic review and meta-synthesis of qualitative studies will be conducted to identify common themes across studies and derive new insights from the synthesised data. Papers will be read and re-read by two reviewers and first and second order constructs will be extracted and managed using Microsoft Excel. Reviewers will independently sift the second order constructs, compiling new third order constructs that summarise and encompass the various themes across studies.

Results: Three order constructs will be generated. Third-order themes reflecting the views of patients and carers from ethnic minorities regarding barriers and facilitators in accessing care for dementia will be presented.

Discussion: We will discuss how the findings could contribute to the design of efficient interventions to improve access to dementia care for ethnic minority groups. The findings of the meta-synthesis will advance the scientific evidence and will raise awareness about the barriers that make care for dementia less accessible in ethnic minority groups.

How can primary care and community based interventions support older people experiencing loneliness; the views of lonely older people

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Background

Loneliness in later life appears to be common and is associated with poor health. Attempts to ameliorate loneliness have a weak evidence base. The views of older people with loneliness are important in developing effective responses.

Methods

Twenty eight community-dwelling people, aged 65 years+ who reported being 'lonely much of the time' or identified as lonely from the de Jong-Gierveld 6-item loneliness scale, participated in face-to-face in-depth interviews in the London region. All interviews were recorded and transcribed. Thematic analysis was conducted by a multi-disciplinary team, including older people.

Results and Discussion

Older people were knowledgeable about local resources but for most community and primary care based services that might alleviate loneliness were not considered desirable or helpful, at this point in their lives. They were particularly reluctant to engage in services perceived as being for 'lonely old people'. Group based activities with a shared interest not targeted for people with loneliness were preferred to one-to-one support or groups with a social focus. Interviewees did not consider that primary care has a role in alleviating loneliness. Reasons included that loneliness is not an illness, a perception that primary care practitioners lack understanding of non-physical health problems and that a good relationship is difficult to establish but necessary to discuss sensitive subjects like loneliness. For many, loneliness was a complex and private matter that they tried to manage themselves.

A prospective cohort study to determine prognostic factors associated with outcome in primary care attenders with unexplained physical symptoms

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Introduction

Unexplained physical symptoms (UPS) that lack an organic explanation, even after appropriate investigation are extremely common amongst UK primary care attenders but knowledge about their outcome is limited. This study aims to:investigate the outcome of UPS at six months and identify prognostic factors associated with somatic symptom severity at follow-up.

Methods

Consecutive adults attending nine general practices completed a screening questionnaire to identify those with UPS. Eligible participants completed the baseline questionnaire that enquired about symptoms, physical and mental well-being and past health and social history; they were followed-up after six months.Multivariable regression analysis was conducted to identify prognostic factors associate with the outcome.

Results

The cohort included 294 participants,were largely female (231/294(79%)) with a median age of 44 years (IQR32,57) and moderately severe somatic symptoms (11.5,SD 4.9). Most had experienced symptoms for longer than a year.Response rate at follow-up was 83%. Mean PHQ-15 score was 10.5(SD 5.3);135/245(55%) reported UPS,103/245(42%) were still under investigation and only 26/245(11%) reported symptoms had resolved (options were not mutually exclusive). Being female (B=1.31,95% CI 0.12,2.50), childhood physical abuse (B=1.86 95%CI 0.27,3.45), higher somatic symptom severity (B=0.53,95% CI 0.42,0.64), perception of poor financial well-being (B=1.90, 95% CI 0.89,2.91) and lower physical functioning at baseline (B=-0.10, 95% CI -0.15,-0.04)were predictive of somatic symptom severity at six months.

Discussion

Most people with UPS and high symptom severity are unlikely to improve over six months. Historical and current difficulties are associated with higher somatic symptom severity at follow-up.

Implementing change to improve patient access in UK general practice: a mixed-methods exploratory case study

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Objective

To explore how general practices implement change to improve patient access and understand 'complex' change processes by focusing on the role of context.

Methods

A mixed-methods study was undertaken in three general practices across two Clinical Commissioning Groups in England. A focused ethnography was conducted in a number of settings, such as waiting rooms, administrative offices, staff meetings. Transcripts of observations and informal/ formal interviews with staff, as well as relevant documentary evidence were analysed thematically to explore aspects of context that influence implementation of a number of access initiatives. Relevant data were extracted from the National GP Patient Survey to describe patient experience related to access (e.g. questions related to use of online services, experience of appointment making, preferred GP), at practice- and CCG-levels.

Results

Data collection has ended and analysis is ongoing. Preliminary analysis suggests the three GP practices have adopted different approaches to improve patient access, e.g. variations in appointment structure, online services (e.g. online appointment booking/ prescriptions, use of social media), telephone services and Named GP scheme (allocating and informing patients). Many of these 'interventions' evolve over time to meet the changes in local context and policy. Data will be presented on the characteristics of included practices; data from field notes of observations, documents and semi-structured interviews with staff.

Discussion

This study provides insights into the complexity and challenges involved in implementing and delivering access initiatives, alongside the service commitment in general practices, in the context of the ever changing landscape of health care policy.

The management of patient concerns in GP consultations

Geraldine Leydon[1], Chris Elsey[1], Catherine Woods[1], Paul Drew[2], Rebecca Barnes[5], Fiona Stevenson[3], Mike Moore[1], Paul Little[1], Carolyn Chew-Graham[4], Rachael Summers[1]

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Introduction

Whilst patients often attend General Practice (GP) consultations in the UK with multiple concerns, they may not feel able to raise all of these during the consultation and, when they do, some concerns may remain unaddressed. Unaddressed concerns can have deleterious consequences for patients and their GP. These include worsening symptoms, poor health outcomes (e.g. decreased satisfaction for patients, poor adherence with treatment) and can result in repeated consultations.

Method

This presentation will report on a secondary analysis of an analytically driven sample of 186 GP-Patient video-recorded consultations with 186 patients and 15 GPs collected in 2013/4 across 11 practices in the South of England. All videos were initially coded quantitatively, verified by the team, to permit navigation of the data corpus for focused and fine-grained qualitative work using Conversation Analysis (CA). With its origins in Sociology, in particular Ethnomethodology, CA is an inductive, micro-analytic method for analysing real-time interactions across mundane and institutional settings.

Results

The presentation will discuss the CA findings on how UK GPs and patients collaboratively manage the voicing and discussion of multiple concerns in these so-called 'complex consultations'. Analysis will focus on practices that may work to enhance or inhibit the full disclosure and discussion of patient concerns.

Discussion

By paying close attention to the interaction during these medical visits we will begin to unpack the communicative patterns involved in GP-Patient interactions in which doctors clearly solicit multiple medical issues during medical visits and how patients can (and do) volunteer additional problems.

How can we reduce inequalities in access to health promotion opportunities for older people?

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Objective

We undertook a systematic literature review and surveyed stakeholders to identify facilitators and barriers for engagement of 'seldom-heard' older people (those ≥85 years, ≥65 years from black and minority ethnic (BME) and/or living in deprived areas) in health promotion services.

Methods

Literature review: Eight databases were searched to identify eligible studies. Strategies identified were analysed thematically for each group.

Web-based stakeholder survey: Stakeholders were purposively sampled across England from academic, public health, healthcare, voluntary sector and social care backgrounds. Open questions were asked about barriers and facilitators for these seldom-heard groups, and analysed thematically.

Findings

23 studies (three with ≥85years, 16 with BME, two within deprived areas, two overlapping) were included in the systematic review. Particularly important factors for those ≥85years included tiredness, feeling too old for preventive health care, building trust and gaining family support. Demonstrating social aspects of participation and personalised approaches were important when targeting those in deprived areas. Enhancing trust, involving community leaders and targeting cultural barriers, were important for BME groups.

31 stakeholders (70% response rate) participated. Showing respect and face-to-face contact were reported as important to successfully promote health to people ≥85 years. Building trust, empowering people and establishing relationships were important for those in deprived areas. Using gatekeepers, targeting language barriers and working with families across generations were highlighted for BME older people.

Interpretation

We identified multiple factors influencing engagement of 'seldom-heard' older people with health promotion, including specific factors for particular groups, which should be considered to address inequalities in access.

Promotion and prioritisation: the Tobacco Addiction Group's 20th anniversary project

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Background

The Cochrane Tobacco Addiction Group (CTAG) carry out systematic reviews of interventions to prevent and treat tobacco addiction. In 2016 we are conducting a promotion and prioritisation project (CTAG taps).

Objectives

To, 1) raise awareness of CTAG; 2) identify areas where further tobacco control research is needed from a stakeholder perspective; 3) identify CTAG specific research goals; 4) raise awareness of these goals.

Methods

We will establish priorities in an approach influenced by the James Lind Alliance. The first step is a two phase online survey. This was sent out to stakeholders, including healthcare workers, researchers and the public, asking for questions they would still like to see answered by tobacco control research. This information (700 questions from 300 participants) was collated and sent out to respondents to be ranked. This will result in a list of the most important questions tobacco research needs to address. The final step will be a workshop where stakeholders will be presented with the survey findings and discuss these in the context of CTAG specifically. The outcome will be a list of areas Cochrane TAG need to focus on and ways we may do this- new reviews, updates or changes to existing reviews. Aims and priorities of CTAG beyond 2016 will be disseminated to those who may be interested in getting involved with our work or using it to inform other research and clinical practice.

Discussion

This talk will outline the methods of the CTAG taps project, progress, findings and dissemination.

Identifying patients at raised risk of stroke due to paroxysmal or persistent atrial fibrillation in primary care populations

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Introduction

About 25% of strokes are associated with atrial fibrillation (AF), and about 25% of people who have a stroke that is associated with AF only have the arrhythmia diagnosed at the time of their stroke. AF is associated with a fivefold increase in risk of stroke. However the National Screening Committee currently recommends against a screening program due to insufficient evidence of patient benefit. We are designing a study to undertake analyses to support the development of an NIHR programme grant application to determine whether screening for AF is cost effective.

Aims of Project

Our proposal is to carry out key preliminary work using the Clinical Practice Research Datalink (CPRD) to address the following questions:

1. Is the prognosis of screen detected AF the same as clinically detected AF?

2. What proportions of people with screen detected AF are treated with anticoagulation?

3. Is anticoagulation in people with screen detected AF associated with similar reductions in stroke risk as observed in people with clinically detected AF?

4. What factors predict risk of AF in people under the age of 65?

Proposed Methods

A retrospective cohort of patients will be created in CPRD; outcomes of patients with "screen detected" AF will be compared to other patients with AF. Multivariate regression analysis will be used to identify factors associated with AF incidence in patients under 65, thus additionally supporting the development of a practical tool for targeting patients in future case detection or screening trials.

Selecting Primary Care Treatment for Patients with Shoulder Disorders: International Conjoint Analysis Study

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Introduction

Prognostic factors can help identify subgroups or individuals with a shoulder disorder likely to have a poor prognosis, however tools to support first-line clinical treatment selection are lacking. Treatment selection rationale for commonly used primary care shoulder pain treatments; (i) advice+analgesia, (ii) corticosteroid injection, and (iii) physiotherapy are unknown.

Methods

Previous research identified 12 patient attributes relevant to treatment selection. Hypothetical patient profiles were developed for an online international conjoint analysis study. Hierarchical multinomial analysis of survey data identified each attributes' impact on likelihood of selecting corticosteroid injection or physiotherapy over advice+analgesia.

Results

Data was received from 387 clinicians from 31 countries (64% UK). Patient attributes influencing treatment selection included; lack of condition improvement, previous positive response to injection/physiotherapy, and presence of weakness or instability. For patients with sleep disturbance clinicians selected corticosteroid injection over advice+analgesia (Relative Risk Ratio RRR(95%CI)=1.49(1.45,1.95)) but were less likely to select physiotherapy (RRR=0.67(0.55,0.82)). Similar results were found for high pain severity. Patients' treatment preference significantly influenced clinicians' treatment choice. Co-morbid neck pain and overuse significantly influenced choosing physiotherapy but not injection. Severe work/function impact increased injection but not physiotherapy selection, whilst having a traumatic onset, unstable diabetes or cardiac problems reduced injection selection.

Discussion

Relative importance of specific patient attributes in clinicians' selection of shoulder treatments was quantified. Logical clinical patterns emerged suggesting that clinicians use moderators of treatment effect to guide treatment selection. RCT secondary data analysis is indicated to test if the attributes identified in this study indeed modify effects of treatment.

Direct thrombin inhibitors and factor Xa inhibitors for atrial fibrillation

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Background

Recently, novel anticoagulants (NOACs) have been developed which aim to reduce the risk of blood clots and strokes but may need less frequent blood tests. However, some NOACs have been found to be more harmful than warfarin and have been withdrawn from use. Other NOACs seem useful and are now recommended by clinical guidelines. It is important to know the balance of benefit and harms with NOACs compared with standard treatments, to decide which treatment patients should use.

Study characteristics

We found 20 published RCTs, reporting on two types of NOAC; direct thrombin inhibitors (DTIs) and factor Xa inhibitors (FXai).

Key results

Compared with control treatment, DTIs gave a lower risk of major bleeds. For FXai compared with control, there was no difference in major bleeds, but one trial was stopped early because of too many unwanted major bleeds in the NOAC group. Both types of NOACs were associated with a lower risk of stroke than control. Neither NOAC group was different from control at preventing death. Serious adverse events were less common in FXai groups than in control groups. For other outcomes, the balance of benefit to possible harm was unclear.

Overall conclusion

Certain DTis or FXai may be an effective alternative to warfarin for some patients. However, before NOAC use becomes common practice a more thorough assessment (particularly on safety) of published and unpublished data needs to be carried out on these drugs to ensure the most effective use of benefit to harm knowledge in clinical decisions.

Child and Adolescent Musculoskeletal Pain (CAM-Pain) Study: A feasibility study in primary care

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Introduction

Musculoskeletal symptoms are common in children, with up to 40% of children reporting symptoms such as pain during any one month. Most epidemiological studies on musculoskeletal symptoms in children have been conducted in the general population (e.g. school) or specialist care settings, and a substantial gap exists in the literature from primary care. Currently there are no published studies on children consulting in UK primary care with musculoskeletal symptoms. This study aims to test the feasibility of identifying, recruiting and collecting data from children and adolescents aged 8-19 years consulting their GP about musculoskeletal symptoms.

Methods

Eligible patients will be identified by Read codes (GP recorded reasons for consultation). Fortnightly searches will be carried out to identify patients, and eligible patients will be mailed an invitation to participate. For those responding positively, research nurses will arrange visits to obtain informed consent and complete structured interviews to collect quantitative data. Baseline data includes: musculoskeletal symptoms, activity limitations, health-related quality of life, sleep quality and comorbidities. Participants will be followed-up after 6-weeks with a short self-report questionnaire.

Results

Data will be analysed to assess; study processes (baseline response, consent/assent rates, response to follow-up), data collection (content validity, acceptability and understanding of measures, timings), resources (workload, cost, capacity), ethics and safety. Descriptive statistics will be used to describe all variables. Planned start of recruitment is June 2016.

Discussion

The outcomes of this study will provide the foundation for a future cohort study and grant application aimed at addressing the current knowledge gap.

Qualitative study to determine views on, and preferences for, a digital diabetes prevention programme (DDPP)

Elizabeth Murray, Marie-Laure Morelli

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With 5 million adults in England estimated to be at high risk of developing diabetes, diabetes prevention has become an NHS and Public Health England (PHE) priority. Large-scale high-quality efficacy trials have shown that intensive lifestyle behavioural interventions (Diabetes Prevention Programmes - DPPs) can significantly reduce the incidence of diabetes among high risk individuals by up to 58%. 'Real-world' translations of DPPs have also been shown to be effective, and the NHS Diabetes Prevention Programme (NDPP) recently announced plans to roll out such group, 'face-to-face' programmes nationwide by 2020.

Evidence supporting digital or online behaviour change interventions is growing, including for DPPs, and these could represent a scalable, convenient and cost-effective alternative. We plan to develop a digital DPP (DDPP). Primary qualitative research assessing the needs and preferences of intended intervention users is a crucial first step in this process.

This study will aim to determine views on, and preferences for, a digital diabetes prevention programme (DDPP) among 1) individuals at high risk of developing Type 2 diabetes and 2) primary care clinicians. Focus groups and semi-structured interviews will be used to elicit users' needs and preferences. General views on the effect of 'pre-diabetic' and 'high risk' labels, as well as perceived barriers to, and facilitators of, behaviour change related to physical activity, dietary habits and weight loss will also be sought. The results of this study will be used to inform the planning and design for a DDPP.

Assessing dementia risk in general practice: a qualitative study of the attitudes and views of members of the public

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Introduction

A number of initiatives have been developed to promote "timely diagnosis" of dementia including identifying people at risk (case finding) and providing them with information about risk reduction. We do not know what the general public think of such initiatives. This study aims to explore public views of case finding and tools to assess dementia risk in primary care.

Methods

Three focus groups with members of the public were undertaken in northern England (n=17). Questionnaires were used to assess knowledge of dementia and attitudes towards risk reduction. During the group discussions information about dementia and approaches to timely diagnosis were presented and explored to elicit a range of views. The focus group discussions were audio recorded, transcribed and subjected to thematic analysis.

Results

Emerging themes included: limitations of case finding, objective measures of risk versus self-reporting and the need for information on risk. Participants identified limitations to case finding such as people not attending their surgery or the risk of over diagnosis. Many participants reported a preference for objective measurements rather than self-reported questionnaires. Participants had mixed views on dementia risk; if identified as high risk some stated they would be motivated to change while others felt they would not change their lifestyle. Participants called for more education on risk reduction.

Discussion

Findings should inform the development of new approaches to "timely diagnosis" of dementia and risk reduction. Research should focus on acceptable methods of identifying people at risk and education on initiating and maintaining behaviour change.

The Evidence of Effects Page: Refinement of a tool for optimising evidence-based informed treatment decisions In Clinical practice (The EEPIC-1 study)

David Nunan, Veronika Williams, Kamal Mahtani

University of Oxford, Oxford, UK

Introduction

Few evidence-based communication tools exist that successfully engage and aid consumer understanding in a format that facilitates evidence-based clinical decisions. Here we present the Evidence of Effects Page (EEP)

Objectives

Demonstrate a tool that presents treatment effects alongside additional key information enabling better-informed healthcare decisions.

Methods

Using treatment of hypertension with angiotensin converting enzyme inhibitors (ACEi) as an example, we searched the output of the Cochrane Hypertension Review Group for relevant systematic reviews and found one suitable review. Data on the mean effect (95% confidence limits (CI)) of 14 ACEi were used to create a modified bar chart. Each ACEi was displayed in descending order according to the certainty of effects based on GRADE scores. The modified chart is presented alongside a table providing data on the dosage of drug for the observed blood pressure effect, the cost on a daily basis based on the dose, the number of studies and participants for the observed effect and the duration of treatment/follow-up of these studies. Individual sections with the headings 'Technical Information', 'Cost information', 'Dose information', 'Quality information' and 'Usage information' are placed under the table and provide clarification and further details of the information contained therein.

Results

We present the methods and resultant EEP as a new and potentially more effective way to present the evidence for treatment effects and plans to refine the tool.

Conclusions

EEPs for treatments of most health conditions can now be refined and their efficacy for improving informed and shared-decisions assessed in suitable trials.

Female genital self-image. A qualitative interview study with women and professionals. Female genital self-image. A qualitative interview study with women and professionals

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Introduction

Healthcare professionals have reported increased numbers of women expressing dissatisfaction with their genitals. There is increasing demand for female genital cosmetic surgery. Concerns can be focused on various characteristics including appearance, smell, or how they feel to the touch. Surgical procedures are heavily marketed online using medicalised, authoritative language but evidence of safety and effectiveness are lacking. Day-to-day practices like vaginal douching with household cleaning products may be related to disgust or dissatisfaction. The side effects of these practices are seen in primary care. There is limited information available on the way that professionals address concerns about genital aesthetics. The aim of this research is to explore women's perceptions and experiences of their own genitals as well as any modification or hygiene practices they use and any experiences of help seeking. It will also explore professionals' experience of encountering women who are distressed or dissatisfied by their genitals.

Methods

Participants will be recruited via social media and in primary care health settings. Women will be purposively sampled according to age and interest or no interest in undergoing genital cosmetic surgery. Data will be collected using qualitative semi-structured interviews. I will also carry out qualitative semi-structured interviews with professionals from the multidisciplinary team such as GPs, psychologists and nurses. Interviews will be audio recorded and transcribed. Data will be analysed using thematic analysis.

Results

I will begin data collection in summer 2016.

Discussion

In this presentation I will provide reflections on the data collection process and preliminary findings.

Factors associated with postpartum smoking relapse: a systematic review

Sophie Orton[1], Tim Coleman[1], Tom Coleman-Haynes[1], Christine Goodair[2], Michael Ussher[2]

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Introduction

Finding effective ways to help pregnant women quit smoking and to remain abstinent in the long term is an important public health priority. In the UK, 26% of UK women smoke at some point during pregnancy; approximately half of UK women who smoke attempt cessation after conception. Unfortunately, up to 75% will have returned to smoking within 12 months postpartum. Interventions to prevent postpartum smoking relapse have not been shown to be effective. As an initial step towards finding effective components of interventions to address this issue, we are systematically reviewing the factors associated with postpartum relapse.

Methods

Systematic searches of electronic databases, trials registers and relevant conference proceedings were conducted.

Results

Searches identified 10,000 papers; after removal of duplicates, approximately 600 were screened using abstracts and/or full texts; 38 papers have been included. Data extraction is ongoing.

Discussion

Review findings will help identify which women are at greatest risk of postpartum relapse to smoking, and therefore which mothers and families could be most helped by preventative interventions. It will also identify factors associated with postnatal relapse and will investigate potential relationships between these and the timing of re-starting smoking. This will permit hypotheses to be raised about when 'relapse prevention' interventions are best delivered and which factors these might attempt to manipulate in order to be most effective.

A Cochrane Systematic Review of online self-management interventions for adults with type 2 diabetes.

Kingshuk Pal[1], Sophie Eastwood[1], Susan Michie[1], Andrew Farmer[2], Maria Barnard[3], Richard Peacock[3], Bindie Wood[1], Joni Inniss[1], Elizabeth Murray[1]

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Introduction

Structured patient education programmes can reduce the risk of diabetes-related complications four-fold but uptake is currently very low. Computer-based self-management programmes have the potential to meet this need by providing cheaper interventions that could be more conveniently accessed by patients. However the cost-effectiveness of such interventions is currently unclear.

Methods

We retrieved 8715 abstracts from a systematic search of six electronic bibliographic databases. The searches were run from inception to November 2011. Studies eligible for inclusion were RCTs recruiting patients aged 18 and over with type 2 diabetes. Interventions eligible for inclusion were those that interacted with users to generate tailored content that aimed to improve one or more diabetes self-management domains through feedback, tailored advice, reinforcement and rewards, patient decision support, goal setting or reminders.

Results

Sixteen randomised controlled trials with 3578 participants met the inclusion criteria. Computer-based diabetes self-management interventions appear to have small benefits on glycaemic control: the pooled effect on HbA1c was -0.2% (-2.3 mmol/mol); 95% CI -0.4% to -0.1%; I^2 = 58%, (suggesting substantial heterogeneity). A sub-group analysis on mobile phone-based interventions showed a larger effect: the pooled effect on HbA1c from 3 studies was -0.50% (-5.46 mmol/mol); 95% CI -0.7% to -0.3%; I^2 = 0%, (suggesting low heterogeneity).

Conclusions

Computer-based diabetes self-management interventions to manage type 2 diabetes appear to have a small beneficial effect on blood glucose control and this effect was larger in the mobile phone sub-group. There was no evidence of benefit for other biological, cognitive, behavioural or emotional outcomes.

Patient participation in undergraduate medical education in the UK general practice setting (PatMed)

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Introduction

We conducted a systematic review of general practice undergraduate medical education. Our meta-ethnography produced two models: general practice as a socio-cultural space for learning; and interpersonal interactions within the teaching consultation. PatMed explored and developed these findings with patients and medical students.

Methods

We conducted 2 student focus groups and 9 patient in-depth interviews. These were analysed iteratively and coded thematically. We examined areas of agreement and dissonance with existing models to develop findings.

Results

Patients, students and GPs are all implicated in a dynamic re-negotiation of power within teaching consultations. Our meta-ethnography positioned the GP as 'broker' of interactions between GP, patient and student. PatMed shows these relationships and brokering roles shift with time and experience: senior students brokering teaching encounters, and patients becoming 'educators' framing them as a legitimate member of the encounter. Consent was identified as a pivotal moment for re-negotiating these positions. Our meta-ethnography model of socio-cultural spaces positioned hospital and general practice as polarized spaces, with students negotiating competing cultures. In PatMed, students describe general practice as a space to put conceptual learning into practice, learning about common things and medicine that reflects society.

Discussion

PatMed extends our meta-ethnographic literature synthesis, exploring authenticity of findings with participants. PatMed develops Noblit and Hare's meta-ethnography methodology, expressing the synthesis to participants and using their experiential knowledge to interpret our synthesis of the literature. This process has affirmed many concepts developed from the literature and helped develop our models to inform and shape contemporary practice.

Systematic Review of undergraduate medical education in the UK general practice setting

Sophie Park[1], Nada Khan[1], Mandy Hampshire[2], Richard Knox[2], Alice Malpass[3], James Thomas[1], Betsy Anagnostelis[1], Mark Newman[1], Peter Bower[4], Joe Rosenthal[1], Elizabeth Murray[1], Steve Iliffe[1], Carl Heneghan[5], Amanda Band1, Zoya Georgieva[1]

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Introduction

UK medical schools deliver 10-15% of undergraduate curricula in general practice costing approximately £100 million per year. This study systematically identified, summarized and synthesized published research about undergraduate medical education in the UK general practice setting.

Methods

Searches of 7 medical and educational databases retrieved 12477 records. Following title and abstract and full text screening, we included 169 texts. We produced a descriptive summary of all included papers and conducted two in-depth syntheses of quantitative and qualitative papers.

Results

A wide range of learning activities across different specialities are taught in general practice placements. Students learned clinical skills as well or better in general practice as in hospital settings, and received more teaching and feedback from GP tutors compared to hospital tutors. Patient satisfaction and enablement were not affected, but patients experience lower relational empathy with GPs when students are present in consultations. GPs have a powerful role as a broker of interactions between patients and students. Students need support managing competing cultures across hospital and general practice spaces. Patient participation as transient members of the learning community needs careful facilitation.

Discussion

This review provides a descriptive summary of placements reported in the literature; a comparative quantitative synthesis; and a meta-ethnography synthesizing patient and student perspectives. At a time when many UK medical curricula are under development, this review shows that general practice has a significant contribution to make with benefits for both students and patients.

Online structured education for Type 2 Diabetes: a pilot study

Shoba Poduval, Kingshuk Pal, Rebecca Owen, Helen Gibson, Jamie Ross, Elizabeth Murray

University College London, London, UK

Introduction

The number of people living with TDM is growing. Structured education reduces the risk of complications, and it is NHS policy that newly diagnosed patients are referred. Uptake to group-based education is low. The internet could help surmount many barriers to accessing education. HeLP-Diabetes: Starting Out is an online-self management education programme for T2DM. We are conducting a 12 month pilot study in primary care, with the aim of determining acceptability and effectiveness, and to use the results to optimize the program.

Methods

Mixed methods study using pre- and post-intervention questionnaire scores and qualitative data from semi-structured interviews with participants.

Results

We have recruited to target (n=102) and have undergone one cycle of optimisation, which led to a more stream-lined course structure, referral system and facilitation package. Qualitative data confirms that patients find the program useful, and improvements in questionnaire scores show that patients become more confident about being able to manage their condition.

Discussion

Once we complete this research, and if we can prove the feasibility of a phase 3 randomised controlled trial (RCT), the likelihood of gaining further competitive funding for such an RCT and future implementation of the intervention in practice is high. This is because T2DM is such a priority, structured education is NHS policy and online education is likely to be more cost effective. The intervention is likely to appeal to commissioners due to the need for alternatives to face to face education, the potential for rapid implementation and the benefit to patients.

The Patient Frailty Informing Stratified Healthcare study (Pfish)

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Introduction

Health services, and primary care in particular, face a major challenge in how best to provide high quality and appropriate care to ever-increasing numbers of frail older adults, and also how to reduce an individual's risk of further frailty leading to increased dependence on carers and services. However, until now there was no easy method for identifying frail patients in primary care.

Methods

The electronic Frailty Index (eFI) is a tool recently developed by the NIHR York and Humberside CLAHRC for measuring patient frailty using the primary care record. The Pfish study is implementing the eFI in the Clinical Practice Research Datalink (CPRD), a large representative dataset of GP patient records, and using it to characterise the epidemiology of patient frailty in the UK, including incidence and prevalence and how these vary by age, sex, deprivation, medical conditions and region; how frailty progresses in individuals over time; whether there are distinct sub-domains of frailty, such and physical and cognitive; and relationships between frailty, receipt of drug treatments, and health outcomes including hospitalisation and death.

Results

Work ongoing

Discussion

A general frailty indicator that can stratify patients by their overall risk of adverse health outcomes could help GPs identify cases where preventative actions would be most beneficial and where targeted interventions can have maximum benefit. The knowledge generated will be used to inform the design of a large-scale trial of an intervention using the frailty index to better target patient care, for which further, external, funding will be sought.

A systematic review of self-management interventions in people with eczema

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Background

Eczema is a common, long-term condition associated with considerable physical, psychological and social morbidity. Most people with eczema are diagnosed and treated in primary care but adherence to treatments is poor. One reason may be patient/carer knowledge and confidence around the use of creams and ointments.

Methods

We undertook a systematic review of interventions designed to promote self-management in adults and children with eczema. We sought to examine the components of interventions and their effectiveness. MEDLINE, EMBASE, CINAHL and GREAT databases were searched from their inception for relevant randomised controlled trials. Two authors independently applied eligibility criteria, assessed risk of bias for all included studies and extracted data. We focused on eczema severity and quality of life outcomes.

Results

Eighteen studies were included (2088 participants). Studies were conducted in 10 different countries with the majority (16) being based in secondary care. Most (14) were targeted at children with eczema. Reporting of studies, including descriptions of the interventions and the outcomes themselves, was generally poor. Interventions include interdisciplinary intensive team-led educational programmes, education delivered in person by nurses, on-line educational interventions, and education delivered by video. Follow-up was often short and a primary outcome was not specified in 11 studies.

Discussion

Due to the lack of community-based studies, the heterogeneous nature of the interventions and poor reporting, it is not possible to from this review to make any recommendations regarding how best to support self-management in primary care.

Exploring the knowledge and attitudes of medical students towards early dementia diagnosis and prevention in general practice in the UK

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As there is still no cure for dementia, current policy focuses on 'prevention' and earlier diagnosis, with initiatives like case finding in high-risk patients recently introduced in primary care. Research with medical students shows that Tomorrow's doctors receive very little teaching on dementia as a clinical illness despite its costs to society; this research however did not investigate students' knowledge and attitudes to dementia prevention. The aim of this undergraduate study was to explore if current medical teaching develops the awareness of medical students regarding: dementia prevention and risk factor modification, and the ethical implications of targeting asymptomatic high-risk individuals. 2. We will survey a group of medical students from several English Universities in a range of teaching years using a short online questionnaire to assess their current awareness of dementia and it's risk factors. The questionnaire has been developed based on the findings of a systematic review and recent research. 3. We will present findings from the questionnaire with particular focus paid to what research has already been done and other relevant factors to risk assessment in general practice. We will focus on assessing the current understanding of UK medical students and how a development in their understanding may improve the quality of dementia care, early identification and prevention, in the future. 4. The findings will help to inform current undergraduate medical teaching, improving the awareness and attitudes of medical students, tomorrow's doctors, towards dementia, and hopefully influence future dementia care.

'On the Brink' in General Practice: A qualitative account of GPs' experiences of living and working with mental illness and distress

Johanna Spiers[1], Ruth Riley[1], Carolyn Chew-Graham[2], Marta Buszewicz[3], David Kessler[1], Clare Gerada[4], Chris Manning[5], Anna Taylor[1], Gail Thornton[1], Nick Leggett[1]

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Introduction

Doctors, including GPs, experience high levels of anxiety, depression, stress and/or burnout, which can impact on well-being and practice. This study explores the lived experience of GPs living and working with mental health problems and the ways in which they cope.

Methods

Semi-structured interviews were conducted with 36 GPs, based across England and recruited through social media, who were either living with mental health problems; returning to work following treatment for mental health problems; off sick or retired early due to mental health issues; or mentally healthy, but with opinions about how colleagues might seek help. Interviews were recorded with consent and transcripts subjected to a rigorous thematic analysis.

Results

Initial analysis has identified experiential themes and sub-themes including: shame and stigma; suffering in isolation; managing distress in an emotionally demanding role; connection between physical and mental health; and thoughts of suicide. Coping mechanisms described include: emotion-focused coping such as formal/informal support and meditation; problem-focused coping, such as reducing hours and adopting a portfolio career; and potentially harmful strategies, such as alcohol use.

Discussion

GPs continue to work whilst experiencing extreme distress, frequently in isolation, and often on the brink of breaking down or burning out. However, they are also survivors and demonstrate resourcefulness whilst profoundly unwell. Access to a specialist, confidential service for doctors, formal and informal peer support and a good relationship with GPs' own GPs may be beneficial factors for improving physician well-being.

Have you thought about being a GP? An exploration of factors which are related to choosing general practice training

Sharon Spooner, Kath Checkland, Dan Rigby, Jon Gibson, Emma Pearson

University of Manchester, Manchester, UK

Introduction

Recent difficulty recruiting GPs has prompted initiatives to attract doctors into general practice. However, there is little research evidence about the factors which influence doctors' career choices, and hence limited evidence to inform recruitment strategies. This study evaluates the influence of a variety of factors on career decisions made by second year Foundation Programme doctors.

Methods

A survey completed by over 800 F2 doctors (>12% F2 England cohort) gathered demographic and educational information and details of their 2016 training intentions. They also completed Best Worst Scaling (BWS) choice experiment exercises to elicit;

(i)   the relative importance of selected job attributes, and

(ii)   the extent to which they (dis)associated those attributes with GP work

These BWS exercises facilitated ranking the job attributes and cross-referencing for sub-groups in demographic, educational and experiential data and against their chosen specialisms. Their impressions of general practice work were compared with rankings supplied by GPs.

Results

Ongoing analysis is examining associations between demography, educational characteristics and working or training experiences and choice of general practice as a career. We will also evaluate the extent to which opinions of F2s and GPs are in agreement on job characteristics.

Discussion

We suggest that development of effective recruitment strategies would be strengthened by recognising and addressing background factors which influence career choices. Understanding (mis)alignment of perceptions of GP work may be significant in this context, as is awareness of how health policy, including employment contracts, affects doctors' choice of training programmes and commitment to NHS careers.

Interactional costs and consequences of discussion of the internet in GP consultations

Fiona Stevenson[1], Catherine Pope[3], Rebecca Barnes[4], Geraldine Leydon[3], Elizabeth Murray[1], Sue Ziebland[2], Helen Atherton[5], Trish Greenhalgh[2]

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Introduction

The doctor-patient relationship has acknowledged therapeutic power. Societal changes such as increasing emphasis on self-management and online access to previously privileged health information are fundamentally altering the GP-patient relationship. Research shows that patients use the internet for health information, but may not want to be seen to challenge medical authority so are reluctant to share this with their doctors. Similarly, many GPs report concerns about how best to respond when patients use such information in consultations. Even occasional miscommunications can lead to loss of trust and breakdown of the doctor- patient relationship. Much of the existing research relies on reports from patients and doctors, however what people say they do differs from what they actually do.

Methods

Questionnaire data will determine the help sought and information sources accessed prior to the consultation. Consultations will be video-recorded. Interviews with the GPs and patients up to a week after their consultations will investigate perceived barriers and facilitators to disclosing or promoting use of the internet in consultations.

Interviews will be analysed thematically and conversation analytic methods will be used to identify patterns of interaction and the consequences of what is said to better understand the use of the internet in consultations.

Results

Strategies used in consultations by both GPs and patients, together with their interactional consequences, will be presented.

Discussion

Evidence of strategies that make discussion of materials from the internet smoother will aid both GPs and patients in the potentially interactionally fraught area of discussion of the internet in consultations.

Exploring the Relationship between General Practice Characteristics, and Attendance at Walk-in Centres, Minor Injury Units and Emergency Departments in England

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Introduction

NHS Emergency Departments (ED) face increasing attendance rates. Many patients presenting to EDs, however, could be managed in primary care, suggesting that aspects of general practice might be associated with ED attendance. This study investigated associations of general practice and practice population characteristics with (i) self-referred discharged ED or (ii) combined ED, Walk-in Centre (WiC) and Minor Injury Unit (MIU) attendance rates/1000 population.

Methods

A longitudinal design with practice-level measures of access and continuity of care, practice population demographics and use of emergency care for four financial years 2009/10 to 2012/13. Multilevel models estimated adjusted regression coefficients for relationships between practices' emergency attendance rates and between and within practice characteristics.

Results

Every percentage-point decrease in patients satisfied with waiting time and decrease in patients having a preferred GP were associated with an increase in emergency attendance/1000 population by 0.22 (95%CI 0.02 to 0.43) and 0.12 (95%CI 0.02 to 0.21) respectively. Population influences on higher attendance included more elderly, more female and more unemployed patients, lower male life-expectancy and urban-conurbation location. Net reductions in ED attendance were only seen when practice's MIU or WiC attendance rates were above the 60th and 75th centile, respectively. Every percentage-point increase in patients' satisfaction with opening hours within a practice was associated with a decrease in combined emergency care attendance/1000 population by -0.26 (95%CI -0.45 to -0.08).

Discussion

Higher proportions of patients satisfied with waiting time and opening hours, having a preferred GP, and using MIU and WIC services might reduce ED attendance.

Ongoing impairments following transient ischaemic attack (TIA): retrospective cohort study

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University of Birmingham, Birmingham, UK

Background

Clinical management after transient ischaemic attack (TIA) is focused on stroke prevention; however, a number of small studies suggest patients may experience ongoing residual impairments.

Methods

Retrospective matched-cohort study using anonymised electronic primary care records from The Health Improvement Network (THIN) database, which covers approximately 6% of the United Kingdom population. Adults (≥18 years) who experienced a first TIA between 2009 and 2013 were matched 1:5 to controls by age, sex and general practice. Time to first consultation for fatigue, psychological impairment or cognitive impairment was estimated by Kaplan-Meier (K-M) survivor functions and adjusted hazard ratios.

Results

9,419 TIA patients and 46,511 controls were included. The K-M curves showed that TIA patients were more likely than controls to consult for all three impairments (P<0.0001). Within 7.1 months (95% CI 6.2 to 8.2), 25% of TIA patients consulted for psychological impairment compared to 23.5 months (95% CI 22.5 to 24.6) for controls. Hazard ratios for TIA patients were 1.43 (95% CI 1.33 to 1.54) for consulting for fatigue, 1.26 (95% CI 1.20 to 1.31) for psychological impairment and 1.45 (95% CI 1.28 to 1.65) for cognitive impairment.

Conclusion

TIA is associated with significantly increased subsequent consultation for fatigue, psychological impairment and cognitive impairment. These findings suggest that impairments exist after initial symptoms of TIA have resolved which should be considered by clinicians when treating TIA patients.

Exploring patients' treatment journeys following randomisation in mental health trials to improve the evaluation of complex interventions: a synthesis and secondary analysis of multiple qualitative data sets

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Introduction

The way in which pragmatic trials are designed suggests there are important differences between the experiences of participants randomised to usual care and intervention arms regarding not only what treatment they receive but also, for example, how they access care. This study identified differences between the treatment journeys of participants randomised to different trial arms, within different trials, which researchers may want to consider when designing future trials.

Methods

We analysed and synthesized data collected during three qualitative studies, all of which were nested within large, primary care depression trials and entailed conducting in-depth interviews with trial participants. Transcripts from 37 participants were purposefully sampled, 20 of which were from interviews held with individuals allocated to receive usual GP care. Data were analysed thematically.

Results

Findings indicated that there are important differences between participants' experiences of intervention and usual care arms regarding how they access care, what treatment and practitioner expectations they have, the extent to which they consult the same practitioner, the regularly with which they consult, the extent to which they feel able to discuss their mental health during the consultation, and their confidence in the treatment offered and the practitioners' ability to help them manage their depression.

Discussion

Researchers may want to consider introducing mechanisms or procedures when designing future trials, in order to measure or reduce differences regarding how patients randomised to usual care and intervention arms experience accessing and receiving care, and perceive the potential effectiveness of the treatment offered to them.

Feasibility of Improving Identification of Familial Hypercholesterolaemia in General Practice: Intervention Development Study

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Introduction

Familial Hypercholesterolaemia (FH) affects up to 1/500 individuals in the UK and, left untreated, can lead to premature CHD. This can be prevented by statins but 80% of individuals still are not being identified. We assessed the feasibility of improving identification of FH in primary care, and of collecting outcome measures to inform a future trial.

Methods

This was a feasibility study over 6 months in six general practices which patients with raised cholesterols were assessed for possible FH opportunistically through PSRs and systematically by post. Those fulfilling Simon-Broome criteria were invited for GP assessment and referred to specialists for definitive diagnosis.

Results

Of 173 general practices, 18 expressed interest and 6 were recruited. From 831 eligible patients, 127 (15.3%) were recruited and completed family history questionnaires: 86 (10.7%) through postal invitation and 41 (4.9%) opportunistically. Among the 127 patients, 32 (25.6%) had a possible diagnosis of FH in primary care. Within six months, 7 patients had specialist assessments which confirmed 2 patients with definite FH (28.6%) and 5 patients with possible FH (71.4%). Potential trial outcome measures for lipid tests, statin prescribing, and secondary causes of hypercholesterolaemia were extracted using automated data extraction from electronic records alone without recourse to other methods.

Discussion

The intervention is feasible to implement in general practice and facilitates recruitment of patients with raised cholesterol for targeted assessment and identification of FH. Extracting data directly from electronic records could be used to evaluate relevant outcome measures in a future trial.

Improving Identification of Familial Hypercholesterolaemia in Primary Care in line with National Guidelines: Findings from the FAMCHOL Intervention Development Study

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Introduction

Familial Hypercholesterolaemia (FH) affects up to 1 in 500 individuals in the UK and, left untreated, can lead to premature CHD. This can be prevented by statins but 80% of individuals still are not being identified. We developed an intervention which could improve identification and management of this condition in primary care.

Methods

This was a feasibility study over 6 months in six general practices which patients with raised cholesterols were assessed for possible FH opportunistically through PSRs and systematically by post. NICE guideline compliance for identifying FH was assessed by analysing data extracted from general practice computer records before and after the study period.

Results

Compliance to clinical guideline recommendations could be assessed for 118 patients pre- and post-intervention. During the 6 month intervention, total cholesterol was reduced by an average of 0.24 mmol/L (95% CI -0.44 to -0.04) while there was a smaller reduction in mean LDL cholesterol of 0.19 mmol/L (95% CI -0.40 to 0.01). The proportion of patients with cholesterol levels ≥ 7.5 mmol/L, after intervention had fallen significantly (AOR: 0.43 95% CI 0.25 to 0.76). There was increased recording of repeating cholesterol testing, diagnoses of secondary causes, family history of coronary heart disease, serum creatinine assessment, diagnoses of arcus senilus or xanthalasma, statin prescribing, and smoking cessation advice.

Discussion

After a short intervention period, improvements in relevant investigations and health outcomes for FH, in line with national guideline recommendations, were demonstrated using data extracted from general practice health records.

Assessing dementia risk: a qualitative study of the attitudes and views of primary care health professionals.

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Introduction:

Increasing the number of people with a timely diagnosis of dementia is a government priority. NHS England introduced dementia "case finding" in the form of the Dementia Enhanced Service in the 2015/16 GP contracts. General practitioners were expected to question people at high risk of developing dementia about symptoms of dementia. Although this has been removed initiatives continue to increase earlier diagnosis. We do not know what professionals in general practices think about case finding, what impact there may be and whether there are any harms or benefits.

Methods:

Primary care health professionals (general practitioners, practices nurses, health care assistants in UK general practice) and people who have experience of case finding were purposively sampled and interviewed using semi structured interviews.

Results:

We will present findings from the interviews and iterative thematic analysis. Particular focus will be paid to the benefits, shortcomings and factors to consider when undertaking dementia risk assessment in practice. We will also present the implications for future practice.

Discussion:

Outcomes from this study will enhance policy implications for primary health care providers and voluntary organisations to improve dementia diagnosis and the support provided after diagnosis.

Understanding antibiotic prescribing for respiratory tract infections in primary care out of hours services (The UNITE Study)

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Respiratory tract infections (RTI) are usually brief, self-limiting conditions. Antibiotics have little or no clinical benefit in most cases, however RTIs account for over 80% of all antibiotic prescriptions issued in primary care. In addition to the risk of side effects, the unnecessary prescription of antibiotics contributes to the spread of resistant bacteria.

From 2010 to 2013, the total number of annual community prescriptions of antibiotics increased by 32%. The English Surveillance Programme for Antimicrobial Utilisation and Resistance has suggested that this increase needed to be investigated. In light of this, the study aims to explore medical and non-medical prescriber's views on and experiences of facilitators and barriers to antibiotic prescribing in this setting.

30 semi-structured interviews have been conducted to elicit General Practitioner (GP) and Nurse Prescriber (NP) views and experiences of prescribing antibiotics for RTIs in primary care OOH. Initial findings suggest that antibiotic prescribing is influenced by patient characteristics and expectation as well as contextual factors. Respondent's report that patients within this setting are more acutely ill, suggesting that more antibiotics may be required than within in-hour general practice.

The study findings will describe similarities and differences between NPs and GPs and compare findings with existing evidence on 'in hour' antibiotic prescribing for RTIs. The study will also explore NP and GP views on the need for a training intervention. If warranted, data generated from this project will be used to develop a training intervention to help improve prescribing behaviour in OOH services.

The addition of a vocational advice service can improve work outcomes in patients with musculoskeletal pain in primary care: the SWAP trial (ISRCTN 52269669)

Gwenllian Wynne-Jones[1], Majid Artus[1], Annette Bishop[1], Sarah Lawton[1], Martyn Lewis[1], Jesse Kigozi[2], Sue Jowett[2], Chris Main[1], Gail Sowden[1], Simon Wathell[1], Kim Burton[3], Danielle van der Windt[1], Elaine Hay[1], Nadine Foster[1]

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Introduction

Musculoskeletal pain is a common cause of work absence. The objective of the SWAP randomised controlled trial (RCT) was to investigate the addition of a brief vocational advice (VA) service to best current primary care, compared to best current primary care alone, for adults consulting with musculoskeletal pain.

Methods

A cluster RCT was conducted in 6 general practices; 3 randomised to best current care and VA service (intervention), 3 randomised to best current care alone (control). Eligible patients were ≥18 years, consulting with musculoskeletal pain, absent from work ≤6 months or struggling at work. Primary outcome was number of days off work over 4 months. Intention-to-treat, cost-effectiveness and cost-benefit analyses were undertaken.

Results

338 participants (158 intervention: 180 control) were recruited; 4 month follow-up rates were 78% overall. Intervention participants had significantly fewer days off work over 4 months (mean 9.3 days, SD 21.7) compared to control (mean 14.4, SD 27.7); adjusted incidence rate ratio (IRR) 0.51 (0.26, 0.99), p=0.048. This difference was predominantly due to fewer GP certified absent days (mean 8.4 days (SD 21.0) intervention, compared to 13.5 days (SD 27.5) control). The VA service demonstrated a cost saving of £7.20 per sick day avoided, with a net societal benefit of £763 in favour of the VA service and a return-on-investment of £51 for every £1 invested.

Discussion

The addition of a brief vocational advice intervention to best current primary care for adults consulting with musculoskeletal pain is cost effective and likely to lead to fewer absent days over 4 months.

Risk factors associated with future hip and knee replacement: preliminary findings from a systematic review and a population-based case-control study

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Introduction

The prognosis of osteoarthritis varies between patients and is difficult to predict. Our project planned to derive and validate prediction models to estimate individual risk of total hip and knee replacement (THR/TKR) in patients consulting for osteoarthritis using the electronic primary healthcare record. This abstract reports studies undertaken to identify risk factors for inclusion in prediction models.

Methods

Risk factors for primary THR/TKR were identified from three sources:

1) A systematic review of Medline and Embase;

2) A review of generic risk factors used in QResearch® algorithms;

3) Hypothesis-free case-control studies using Clinical Practice Research Datalink. We identified 96,450 and 165,413 primary THR and TKR cases in 1992-2013 and 1:1 age-, gender-, practice-matched controls by risk-set sampling. 6,109 third-level Read codes and 325 BNF sections were investigated. Factors recorded ≥ 1% of cases in 3 years prior to replacement date, a population attributable risk ≥ 1% / ≤ -1% and significant Bonferroni-Corrected P-values (Read codes: < 8.185×10^{-6} ; BNF sections: < 1.539×10^{-4}) were identified.

Results

Of 17,982 titles, 35 full-text papers were included in the systematic review and identified 29 and 21 risk factors for THR and TKR respectively. 74 generic risk factors were identified from QResearch® algorithms. From case-control analyses, 55 and 58 third-level Read codes with 32 and 33 BNF sections satisfied the criteria for THR and TKR respectively.

Discussion

All identified risk factors will be combined and reviewed by our advisory group comprising GP and PPI members for final selection before prediction models derivation and validation.