

TOO MUCH MEDICINE

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Abstracts

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Overestimation of depression prevalence in meta-analyses via the inclusion of primary studies that assessed depression using screening tools or rating scales rather than validated diagnostic interviews

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Depression prevalence should be based on validated diagnostic interviews to determine case status and not screening tools or symptom rating scales, which are not intended for this purpose and tend to overestimate prevalence substantially. Meta-analysis authors, however, sometimes base depression prevalence estimates on screening or rating scales. We aimed to determine what ascertainment methods are used to classify depression in studies included in meta-analyses of prevalence, the terminology used in meta-analyses to describe prevalence, and the extent to which counting positive screens as cases overestimates prevalence in meta-analyses. We searched PubMed (2008-2017) for meta-analyses that reported pooled depression prevalence in the abstract. For each meta-analysis, we recorded whether the abstract reported a pooled prevalence based on (1) diagnostic interviews, (2) screening or rating scales, and (3) a combination of interviews, screening or rating scales, and other methods. For each prevalence, we recorded whether the abstract indicated the ascertainment methods included, the terminology used to describe prevalence, and the pooled prevalence. 81 pooled prevalence estimates from 69 articles were included (9 for diagnostic interviews, 36 for screening or rating scales, 36 for combinations). Mean pooled prevalence was 17% for interviews, 31% for screening or rating scales, and 22% for combinations. Among 11 articles that reported prevalence for screening or rating scales and also for interviews or combinations, screening or rating scale prevalence was always higher. 22 of 36 screening or rating scale meta-analyses referred to the prevalence as for “depression” or a “depressive disorder”, despite using screening or rating tools. 5 studies that did not report prevalence based on interviews in the abstract provided one in the text; on average, it was half the abstract’s prevalence value. Overall, most meta-analyses of depression prevalence combine estimates from primary studies that used methods other than diagnostic interviews to assess depression, which exaggerates prevalence.

Clinician, patient and general public beliefs about diagnostic imaging for low back pain: A qualitative evidence synthesis

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Objective: This study aimed to systematically review qualitative research that has explored clinician, patient and general public beliefs about diagnostic imaging for LBP.

Method: Studies that used qualitative methods were included if they interviewed the general public about LBP management, clinicians who treat LBP, and/or patients with LBP and explored beliefs about diagnostic imaging for LBP. We searched 5 databases (MEDLINE, EMBASE, CINAHL, AMED, and PsycINFO). Two reviewers independently screened articles and extracted data. Initial synthesis of the results was done by open coding results into key-themes and subthemes. The protocol was registered on PROSPERO (CRD42017076047).

Results: Of 6157 studies from the search, we screened 429 full-texts, and 63 studies (32 with patients, 22 with clinicians, four with community members with LBP, five were mixed sample, and none with general public) met our inclusion criteria. We identified five key themes from our initial synthesis: (1) clinical presentation justifies scanning e.g. severe, worsening, long lasting and relapsing pain warrants scanning; (2) scans have benefits to clinicians e.g. help make correct diagnosis, locate the source of the pain; (3) scans have benefits to patients e.g. provide reassurance that there is no serious problem; (4) scans have risks e.g. causes unnecessary disease labelling and risk of radiation exposure; (5) health system drivers e.g. ordering tests because occupational system require it.

Conclusions: Our review identified that clinicians, patients and community members with LBP have misconceptions about the value of imaging. They believed that imaging is an important diagnostic tool for LBP. These beliefs are at odds with evidence that diagnostic imaging often adds little value to clinical decision-making or patient outcomes. Therefore, public health interventions such as education campaigns should target mistaken beliefs that imaging is part of standard procedure for the assessment of low back pain and are more informative than clinical evaluation.

Overdiagnosis of low back pain

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Low back pain cannot be overdiagnosed, at least not in the narrow sense of the word. However, it is a common symptom, and one that is often given a diagnostic label (slipped disc, pinched nerve, instability, arthritis, degeneration, and so on), despite there being no reliable way of determining the pain source in most cases. Once the symptom is labelled, the consequences begin to resemble those of overdiagnosis: many will experience no clinical benefit from receiving a diagnostic label, but will feel less well because of it, and are more likely to undergo costly, invasive treatments with questionable efficacy. If one were to consider the broader definitions of overdiagnosis proposed by Carter et al. (BMJ 2015;350:h869), healthcare for low back pain would have examples abound: disease mongering (“Pain as the 5th vital sign” campaign by US Veteran’s Affairs), overutilisation (spinal injections, opioids), overdetection (diagnostic imaging), overtreatment (spinal fusion surgery, early physiotherapy), and false positives (red flags for serious pathology). In 2013 Americans spent US\$81.6 billion on care for low back pain. How did we end up here? Unlike other well-known examples, overdiagnosis of low back pain appears to have little to do with altering disease definitions or thresholds, or providing screening programs for the healthy. Some people with low back pain may receive no diagnosis but are overtreated. We argue that many of the problems with overdiagnosis and overtreatment of low back pain arise because people enter a health system that is set up to encourage inappropriate care and discourage appropriate care. We will present our current understanding of overdiagnosis of low back pain, discuss how low back pain might differ from other well-known examples of overdiagnosis, and detail efforts from within our research group and beyond to develop and evaluate solutions.

Defining overdiagnosis of mental health disorders: Secondary analysis of an overdiagnosis scoping review

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Background: The term overdiagnosis has been used most frequently to describe negative outcomes from screening for early-stage asymptomatic cancers. Definitions of overdiagnosis commonly used in the context of screening for asymptomatic early-stage disease are not generally applicable in mental health where diagnoses are not made in the absence of symptoms. There is currently no agreed upon definition of overdiagnosis in mental health.

Objectives: To describe how the term overdiagnosis has been defined explicitly or operationalized implicitly in mental health.

Methods: A scoping review of overdiagnosis across medical disciplines searched PubMed in August 2017 for published articles that used keywords related to overdiagnosis. Articles from the scoping review were eligible for the present analysis if they were classified as related to mental health. Explicit definitions were extracted. For implicit definitions, the reviewer provided an explanation of how overdiagnosis was operationalized in the article.

Results: 148 articles were included. Of the 14 articles that explicitly defined overdiagnosis, 9 defined it as a false positive diagnosis, 2 as misdiagnosis, 1 as diagnosis of an individual who would not be expected to benefit from treatment, and 2 had vague descriptions. In the other 134 articles, implicit definitions fit into 4 categories; 68 articles implicitly defined overdiagnosis as diagnosis of people who do not meet diagnostic criteria, 59 as misdiagnosis, 13 as diagnosis resulting from overly broad or changed diagnostic criteria; and 2 as no net benefit from diagnosis.

Conclusions: Results from the present review indicate that the term overdiagnosis is used most commonly in mental health to describe potential drivers of overdiagnosis. Some articles define overdiagnosis in mental health as occurring when there is no net benefit from diagnosis. Agreement on an approach to defining overdiagnosis in mental health is needed so that evidence of overdiagnosis can be more readily evaluated.

Evaluating the content of Choosing Wisely recommendations and prevalence of interdisciplinary finger pointing

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Background: Choosing Wisely is an initiative to reduce low-value care, with >1,200 recommendations published worldwide. The wording of these recommendations could support or prevent adoption, but no one has evaluated their content. Furthermore, some societies are publishing recommendations only relevant to non-members ('finger pointing'), and by doing so, avoid publishing recommendations against treatments that would affect members' incomes.

Objective(s): To evaluate the content of Choosing Wisely recommendations and determine the proportion of recommendations that: i) discuss tests or treatments; ii) are worded appropriately (i.e. target a reduction in low-value care and provide actionable and direct recommendations); and iii) target income generating treatments that are directed towards society members or non-members ('finger pointing').

Methods: We will perform a content analysis of all Choosing Wisely recommendations, with recommendations extracted from Choosing Wisely websites. Two researchers will independently apply the following checklist to determine the frequency of recommendations that: i) are tests or treatments; ii) recommended 'for' or 'against' a procedure ('do' vs. 'don't'); iii) are direct ('don't') or indirect ('consider avoiding', 'don't routinely'); and iv) advise against an income-generating treatment (and whether it targets members or non-members). Disagreements in coding will be resolved by discussion or consultation with a third researcher. The frequency of coded data will be presented using descriptive statistics (counts and percentages).

Results: We found 1,265 Choosing Wisely recommendations across the United States (n=535, 42.3%), Canada (n=297, 23.5%), Italy (n=175, 13.8%), Australia (n=172, 13.6%), the United Kingdom (n=56, 4.4%) and the Netherlands (n=30, 2.4%). Coding is ongoing and the full results will be presented at the conference.

Discussion: Evaluating the content of these recommendations is the first step towards increasing their use in practice. Our findings could also have implications for ensuring societies aren't using 'finger pointing' to avoid publishing recommendations against treatments that could affect their members' incomes.

Inadequate prescription of medicines for Parkinson's disease in the autonomous community of the Basque Country. An observational study.

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Background: The great variety of non-motor comorbidities in Parkinson's Disease (PD) makes its clinical management a challenge due to the clinical worsening caused by some of the drugs commonly used. In fact, among the recommendations “don't do” of the Spanish Scientific Societies is: Do not use drugs with extrapyramidal side effects (antiemetic, antivertiginous, prokinetic) in PD.

Objectives: This study aimed to evaluate the prevalence of inadequate prescription in the Health System of the Basque Country and its association with different clinical variables. On the other hand, we wanted to evaluate the same associations with fluoxetine, a drug surrounded by uncertainty.

Methods: All patients older than 18 years registered with PD during the period of one year (09/01/2014 - 08/31/2015) were included. The association of inadequate prescription and fluoxetine with the prescription of benzodiazepines and anticholinergics was analyzed using the chi square test and logistic regression models to adjust by covariates. Association with consultations in Neurology and admissions in hospital through the non-parametric Mann-Whitney test.

Results: 8216 patients were included. Inadequate prescription affected 9.9% of them with a high variation between regions (Variation Ratio: 2.5). Women (OR: 1.56, 95% CI) and older than 85 years (OR: 1,277, 95% CI: 1.01-1.64) showed greater risk. There was a significant increase in prescriptions for benzodiazepines ($p < 0.001$) and anticholinergics ($p < 0.001$). Admissions in Psychiatry increased ($p < 0.001$), whereas in Traumatology and Neurology did not vary; outpatient clinics in Neurology decreased ($p < 0.001$). Prescription of fluoxetine was not associated with psychiatric admissions or anticholinergic prescriptions.

Conclusions: The variability of inadequate prescribing is not limited to difficult clinical management. Despite worsening motor symptoms, the results have not shown a greater demand for neurological or trauma services; but use of symptomatic medication and psychiatric increased. Further research on the role of antidepressant therapy is needed.

Is it always necessary to treat nocturia? Natural history of nocturia among men and women during the 5-year period.

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Aims of study: At the population level, an increased frequency of nocturnal voiding is one of the most prevalent bothersome urinary symptoms. We evaluated the natural history of nocturia among Japanese men and women in a longitudinal study.

Materials and Methods: A longitudinal evaluation of the status of nocturia among Japanese men and women during the 5-year period from 2003 to 2007 was conducted in the Fukui health screening program. Nocturia was defined as two or more voids per night (experienced "sometimes" or "always"). Using a questionnaire, the prevalence, incidence, and remission rate of nocturia were determined annually.

Results: A total of 8,265 individuals (2,532 male and 5,733 female) participated in the health screening every year. Mean age of participants was 66.3 years (range, 24–95 years). Overall prevalence of nocturia each year between 2003 and 2007 were 11.6%, 11.3%, 13.3%, 15.1%, and 13.6%, respectively, and prevalence were higher among males and older age groups. In a cluster dendrogram of changes in nocturia, 32 patterns of fluctuation in nocturia were noted, and 71.6% of participants did not experience nocturia during the 5-year period. The annual incidence of nocturia was higher among males and older age groups. The annual remission rate of nocturia was relatively high (36.9-43.5% in males, 40.7-45.9% in females), and was higher in younger age groups.

Interpretation of results: The present results showed fluctuations in nocturia during the 5-year period. These fluctuations might have been due to the multifactorial etiology of nocturia, including aging, lifestyle, obesity, hypertension and diabetes. Further study is therefore needed to determine factors related to the incidence or remission of nocturia.

Conclusions: Although the prevalence of nocturia increased with age, the remission rate was high; therefore, clinicians should consider the natural history when deciding on therapeutic strategies for nocturia.

The monocriterial source of over-testing and over-treatment: the case of bone scanning

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Introduction: A test or treatment is 'needed' only if one has the 'net capacity to benefit' from it. This requires separately assessing the harms and benefits for all available options, including no test and/or no treatment, to identify the individual's net capacity to benefit from each. Legal consent to a test or treatment requires exploring the multi-criterial harms and benefits of the available options, not just the single criterion on which guidelines and standard practices are typically focused. In person-centred care the individual's criteria weights should be applied in the preference-sensitive assessment of harms and benefits.

Method: A multi-criteria personalised decision support tool was developed in the area of bone health, with 18 options (11 medications, 6 lifestyle changes, plus 'do none of these'). The criteria are avoiding Fracture in the next 10 Years (ratings evidence- and expert-based), Side Effects (ratings expert-based), and (self-rated) Treatment Burden. The preliminary opinion of the tool is the set of option scores established through combining the patient's criteria weightings with the option performance ratings. It was delivered by nurses to a convenience sample of 32 patients attending a bone scan clinic.

Results: Given their Frax-based fracture risk assessments, local and international guidelines would send many for a DXA - as all 32 had been - as the necessary basis for diagnosis and medication prescription. But medication was in the top 5 option scores for only 1 patient. The average weight to Avoiding Fracture was 43%. Thus, based on their Treatment Burden ratings and Criterion Weightings 31 patients would not have come for a scan, if they had followed the preliminary opinion of the multi-criteria tool.

Conclusion: Guidelines and standard practices focusing on a single criterion threaten preference-sensitive person-centred care and are likely to be a major source of over-testing and/or over-treatment.

PODIUM PRESENTATION:

Increasing prescription of opioid analgesics and neuropathic pain medicines for spinal pain in Australia

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Background: Limited evidence exists on secular trends of analgesic medicines for spinal pain.

Aim: We investigated general practitioner's (GP) recommendations of analgesic medicines for spinal pain and investigated characteristics associated with their recommendation.

Methods: We accessed data on spinal pain consultations from the Bettering the Evaluation and Care of Health (BEACH) database, a nationally representative database on GP activity in Australia. Data extracted included consultation details and management provided. Medicines recommended were grouped as simple analgesics, non-steroidal anti-inflammatory drugs (NSAIDs), opioid analgesics or neuropathic pain medicines. Multivariate logistic regression determined if patient characteristics and GP characteristics were associated with medication recommendations.

Results: We analysed BEACH data for 9100 GPs who managed 39,303 patients with spinal pain between 2004 and 2014. Over the decade, analgesic recommendations increased. After accounting for patient and GP characteristics, there was a significant increase in the rate single-ingredient opioid analgesics (e.g. oxycodone) [annual relative increase of 6% (Rate Ratio (RR) 1.06 (95% CI 1.05–1.07))] and neuropathic pain medicines (e.g. pregabalin) [annual relative increase of 19% (RR 1.19 (95% CI 1.16 to 1.22))] were recommended; and a significant decrease in the rate NSAIDs were recommended [annual relative decrease of 4% (RR 0.96 (95% CI 0.95 to 0.97))]. Logistic regression identified several patient and GP characteristics associated with medicine recommendations, e.g. stronger opioids were less likely recommended for Indigenous patients [Odds Ratio 0.15 (95% CI 0.04 to 0.56)].

Conclusion: GP's analgesic recommendations for spinal pain have become increasingly divergent from guideline recommendations over time.

PODIUM PRESENTATION:

No benefit of additional care for ‘high-risk’ patients with acute low back pain: The PREVENT randomized, placebo-controlled trial

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Objective: Recent international guidelines advocate additional care for patients with acute low back pain who are at risk of chronicity. Unfortunately, the tools designed to identify risk have only modest accuracy, and could easily misclassify people who will recover with minimal or no care as being high-risk. In addition, no randomized trial has tested whether patients screened as high-risk benefit from additional care. We aimed to determine whether high-risk screened patients with low back pain benefit from intensive pain education.

Methods: The PREVENT Trial was a randomised, parallel-group placebo-controlled clinical trial. Participants were included if they had sought primary care for acute low back pain and were classified as being at high-risk of poor outcome using ‘PICKUP,’ a validated prognostic model. All participants received recommended first line care. We randomised eligible participants to an additional two x 1h sessions of pain education (n=101) or sham pain education (active listening, n=101). Blinded trial staff assessed the primary outcome, pain intensity (11-point Numeric Rating Scale), at 3 months. Trial Registration: ACTRN: 12612001180808.

Results: Primary care practitioners (general practitioners or physiotherapists) referred 618 potential participants between 10 September 2013 and 2 December 2015. We included 202 participants with acute low back pain who were at high risk of developing chronic low back pain. Retention was 96% at the primary endpoint of 3 months. Pain education was not more effective than sham pain education at reducing pain intensity (3-month mean pain intensity for pain education group = 2.1 (SD, 2.4), and for sham pain education group = 2.4 (SD, 2.2), mean difference [95% confidence interval] = -0.3 [-1.0 to 0.3], p = 0.309). There were no reported adverse events.

Conclusions: Guideline recommendations to provide additional care based on prognosis has the potential to increase, rather than decrease, the overtreatment of low back pain.

Overdiagnosis, overtreatment and low-value care in physiotherapy: a scoping review

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Background: Overdiagnosis, overtreatment and low-value care are concepts receiving substantial attention in medicine; but it is unclear how much attention these concepts are receiving in physiotherapy. Understanding whether these concepts are receiving attention in physiotherapy is important because the profession is expanding, the provision of low-value physiotherapy care is common, and improving the quality of physiotherapy could reduce the burden of conditions physiotherapists commonly manage (e.g. musculoskeletal pain).

Objective(s): To define concepts and map the available research in the area of overdiagnosis, overtreatment and low-value care relevant to physiotherapy by answering the following questions: i) What terms are being used to describe overdiagnosis, overtreatment, and low-value care relevant to physiotherapy? ii) Which areas of physiotherapy are these concepts most often discussed? iii) What is the prevalence and impact of overdiagnosis, overtreatment and low-value care in physiotherapy?

Methods: This review will be conducted in accordance with the PRISMA statement. An electronic keyword search combining terms synonymous with “low-value” and “physiotherapy” will be run in numerous databases. Additional articles will be identified by hand-searching references lists and forward searching on included articles. Articles discussing concepts related to low-value physiotherapy (e.g. guideline adherence) will be included. There will be no restriction on the article type, analysis type, or area of physiotherapy discussed. Two reviewers will independently perform the selection of studies and extracted key data (e.g. data relevant to research questions). Analyses will primarily be qualitative (e.g. thematic analysis) unless quantitative data is considered sufficiently homogeneous for meta-analysis.

Results: We were screening full-texts of potentially eligible articles at the time of submission. Hence, I'm confident the full findings of this review will be presented at the conference.

Conclusion: This review will map out the available research on overdiagnosis, overtreatment and low-value care relevant to physiotherapy and guide future research in this field.

Targeted information based on reimbursed drug registry

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Background: In Finland, information on purchased and reimbursed pharmaceuticals is stored in the Social Insurance Institution's (SII) Prescription Registry. Since 1997, this database has been used to analyze differences among physicians in prescribing. Until 2014, a personalized letter was sent to each physician which included information on how their prescriptions compared as to geographic area, specialty and total costs. In 2012, dentists received access over the internet to similar personalized data. Since 2015, dentists and physicians have had access to such data through a secure internet gateway.

Objective: To identify overmedication and to send targeted information letters.

Method: Physicians having in 2016 prescribed a combination of paracetamol and codeine with a total prescribed quantity of at least 100 tablets to patients who had not purchased this combination during the previous 3 years were identified in 2017 and sent information letters.

Results: 4 535 out of 26 785 physicians and 14 out of 5 201 dentists prescribing pharmaceuticals in 2016 were identified. An information letter on the risks of using a paracetamol and codeine combination for acute pain was sent to these physicians and dentists. An article with the same information was published in professional journals for the wider audience of physicians and dentists. Both the information letters and the article were well accepted, and received interest in the media. A follow-up study on prescribing paracetamol-codeine combinations in 2017 is under way to analyse the effects of this new type of targeted information guidance.

Conclusion: Targeted information on prescribing pharmaceuticals was well accepted. Targeted information guidance has been approved by SII as a continuous tool to identify overmedication and the prescribing of medications with a poor risk benefit ratio or poor cost-effectiveness.

Journal registration policies and prospective registration in randomized trials of non-regulated interventions: A meta-research review

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Background: It is not known to what degree journals from speciality areas that provide healthcare interventions not subject to government regulation have implemented and enforce prospective trial registration policies.

Purpose: To determine if these journals require prospective trial registration and whether registration policies are associated with publication of prospectively registered trials, publication of trials with prospectively and adequately registered primary outcomes, and publication of trials with primary outcomes consistent with prospectively registered primary outcomes.

Design: Cross-sectional study.

Data sources: Daily PubMed search from March 18 to September 17, 2016 of journals in the Thomson Reuters Journal Science Citation Index - Expanded categories of Behavioral Sciences, Nursing, Nutrition and Dietetics, Psychology, Rehabilitation, and Surgery.

Study Selection: Eligible publications were trials of interventions not subject to US Food and Drug Administration regulation.

Data extraction: One investigator extracted journal registration policy from journal author instructions and determined trial registration status. Two investigators independently extracted trial registration and publication data.

Data Synthesis: We identified 953 non-regulated intervention trials published in 254 journals. Prospective registration was required by 11% (29/254) of journals. Only 20% (189/953) of trials were registered prospectively, including 34% (33/98) in journals with prospective registration policies versus 18% (156/855) in journals without policies ($p = 0.004$). Only 3% of trials in journals with policies and 4% in journals without policies published primary outcomes consistent with prospectively and adequately registered outcomes ($p = 0.620$).

Limitations: The study focused on journals from certain specialty areas and did not include trials of non-regulated interventions published in other journals.

Conclusions: Few journals from specialty areas that deliver non-regulated healthcare interventions require prospective trial registration, and policies are rarely enforced.

Pharmacotherapy and behavioural problems in Autism Spectrum Disorders

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The most autistic patients suffer from serious self-destructive disorders (incl. head banging, tearing of hair, nails and skin) and aggressive behaviors (hitting, strangling, biting, kicking) towards other people and personal property. These symptoms may be caused by several reasons such as e.g. from problems in social interactions and/or sensory hypersensitivities. Consequently, behavioral interventions and individually tailored, structural daily activities are the first line treatment options but are rarely sufficient. In these cases risperidone is usually tried first. It is the only antipsychotic medicine in Europe that has an official indication for 6 weeks use in behavioral disorders related to intellectual disabilities. Some patients may respond to other neuropsychiatric medications, like to clozapine most of which are prescribed off-label. According to the literature and our own clinical experience the benefits of psychotropic drugs are often modest and the severe adverse reactions are possible in the long-term treatment (1). An illustrative case example from polypharmacy induced severe tardive dyskinesia that was ameliorated by deep brain stimulation is presented (a video clip available). We need urgently new and safe interventions for the treatment of self-destructive and aggressive behaviors related to autism spectrum disorders.

Simultaneous under and over eye health care in Finland

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The objective of health care is to allocate the limited tax-funded resources to produce sufficient services (enacted in the Finnish Constitution). It is not possible nor expedient to guarantee all possible services to everyone - not now nor in future.

Instead of agonising, the Finnish chief ophthalmologists have taken the stand of signpost and responsibility by developing a model for sustainable eye health care. The P5SE model consists of Prioritization, Segmentation, Standardization, Streamlining, Shared care, Sustainability and Evaluation at patient and system levels. P in the model prioritizes the care for permanently blinding eye diseases: macular degeneration (causing 60 % of visual disability), glaucoma (ranking number 2 for blindness in the elderly) and retinal diseases (representing major cause of visual impairment at working age). Yet, only cataract gets prioritized politically and in the media - although cataract does not cause permanent blindness and the treatments for macular degeneration have increased >10-fold during 10 years. Altogether, these four eye diseases account 2/3 of patients, visits and costs in eye care.

Interestingly, in spite of introducing the P5SE model almost 5 years ago, the model has not gained official authoritative recognition. The core challenge is the missing political as well as organizational willingness to define what presents sufficient level of care. The belief 'more is always better' strives for over-diagnosis, over-treatment and over-spending also in the blinding diseases, e.g. half of treated glaucomas do not have manifest disease and there are huge discrepancies on drug costs for macular degeneration.

Although the P5SE increased productivity 70 % in Tays during 6 years, it is not enough. To evaluate and bench-mark what represents 'sufficient' eye care, an RWDE project has been kicked off in Tays Eye Centre (Real World Data and Evidence). RWDE is based on two clinical measures defining visual disability and HRQoL.

PODIUM PRESENTATION:

Decision support and knowledge translation tools to highlight the benefits and downstream harms of screening: Resources from the Canadian Task Force for Preventive Healthcare

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Objective: The Canadian Task Force for Preventive Healthcare (CTFPHC) has developed a library of thirty-six paper-based tools to support clinical and shared decision-making for screening. <https://canadiantaskforce.ca/tools-resources/>. We report the proportion of guidelines in the CTFPHC library which recommend against screening based on harms such as overdiagnosis and overtreatment. We set out to describe the access and dissemination metrics for these resources.

Methods: The CTFPHC tools include clinical and patient algorithms, clinician and patient FAQs and infographics designed to communicate harms and benefits of screening. Resources were developed with input from clinicians and patients. We examined website access and report on dissemination strategies for tools using website analytics as well as data from the Canadian Medical Association Journal (CMAJ). Results are reported descriptively for the years 2016 and 2017 inclusively.

Result: Eleven of fifteen CTFPHC guidelines recommend against screening certain target populations. The most widely viewed tools were the clinical algorithm for Hypertension and the “1000-person tool” for prostate cancer which highlights the harms of screening. Childhood obesity, developmental delay, and cognitive impairment screening were among the least viewed. Two CTFPHC guidelines specifically recommend against treating or preventing obesity in children and adults with either behavioral, pharmacologic, or surgical interventions (children). In 2017, 70,000 hard copies of tools for abdominal aortic aneurysm, Hepatitis C screening, and tobacco smoking in children and adolescents were distributed with the CMAJ.

Conclusions: The CTFPHC guidelines highlight the benefits and harms of screening, including downstream harms of overdiagnosis and overtreatment, and have recommended against screening in controversial areas such as breast cancer screening for women aged 40-49 and colon cancer screening for men aged greater than 75; the prostate specific antigen test is also recommended against as a screening tool. The CTFPHC develops resources to support decision-making that inform overtreatment.

PreventionPLUS: A free access literature awareness portal that surveilles high quality research and guidelines to inform benefits and downstream harms of screening and prevention strategies in healthcare

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Aims: The scientific literature that addresses both screening and preventive healthcare is growing at an increasingly unmanageable pace. Thousands of potentially relevant publications, including clinical practice guidelines of varying methodologic rigor, emerge annually. Clinicians, policymakers and guideline developers can be challenged when it comes to staying abreast of this literature including the science that informs the risk of false positive testing, overdiagnosis and the repercussions of these that manifest as overtreatment, as well as the role of shared-decision making to mitigate those risks. The Canadian Task Force for Preventive Healthcare in collaboration with the Health Information Research Unit at McMaster University has launched a free access, interactive and customizable literature awareness resource called PreventionPLUS. PreventionPLUS screens over 120 journals for studies meeting pre-defined criteria and sends candidate articles to a cadre of peer reviewers who evaluate each paper for relevance and newsworthiness with an option to provide critical analysis. Relevant research can be delivered to any email inbox in line with user preferences for topic, frequency and study relevance thresholds. This workshop aims to introduce this resource to those in attendance highlighting its functionality and value as the prime resource for scientific evidence and guidelines that inform the harms and benefits of screening and prevention. Please note a device with internet access is needed to take full advantage of this workshop.

Outcomes: At the completion of this session participants will become familiar with the methodology and configuration of PreventionPLUS website. In addition, using a case-based approach, we will showcase the PreventionPLUS database for research that addresses specific aspects of screening and prevention. These include resources that provide insight as to the risks of false positive screening tests and overdiagnosis for cancer and other conditions, and studies and reviews that facilitate shared decision-making, and evaluate the provision of patient decision aids.

From “Non-encounters” to autonomic agency. Conceptions of patients with low back pain about their encounters in Finnish health care system

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Low back pain is a considerable health problem which affects people around the world, causing major healthcare costs and suffering. The use of qualitative research methods enables us to describe and understand patients' experience of, and attitudes to, healthcare.

The aim of the present phenomenographic study was to identify and describe the contextual nature of the conceptions of patients with low back pain of their encounters in the health care system. Seventeen patients with chronic or episodic low back pain were interviewed in open recall interviews using videos of patients' initial physiotherapy sessions that had been recorded previously. The data were analyzed using phenomenographic method.

Patients' conceptions of their clinical journey were formulated by a variety of themes: convincing care, lifestyle change, participation, reciprocity and ethicality of encounters. The themes varied in four categories: “non-encounters”, seeking support, empowering cooperation and autonomic agency. The results showed a range of clinical interactions – from very negative and disempowering to empowering and life changing. The key differences between the first and second categories were professionals “being present” and patients starting to understand their low back pain. Between the second and third category, the key aspects were strong therapeutic alliance and the active participation of the patient. Finally, the key differences between the third and fourth category, that enabled autonomic agency of the patient, were the patient being in charge and taking responsibility while knowing that help was available if required. The results may help health care professionals in reflecting on their own practice and in improving the care of patients with low back pain.

Does the use of CAM reflect patients' response to "too much medicine"?

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One third of the population in Europe use CAM (Complementary and Alternative Medicine) at least once within past 12 months. In April 2018 the 10-year follow up survey (face to face interviews) was conducted for 1020 Finnish respondents (15-79-year-old) on the prevalence and self-reported usefulness of CAM. The most popular CAM modalities used (ever by the respondent or a family member) were natural products 53% in 2018 (62 % in 2008), dietary supplements 53(47)%, prayer 34(45)%, herbal remedies 28(36)%, acupuncture 28(25)%, chiropractic 27(27)%, and reflexology 14(21)%. The proportions of those reporting the modality to have "helped much or very much" accordingly were: natural products 32(32)%, dietary supplements 26(32)%, prayer 40(52)%, herbal remedies 28(25)%, acupuncture 45(49)% chiropractic 68(65)%, and reflexology 37(49)%.

The majority of the respondents had (ever) used prescription medication 96(99)% and surgery 84(83)%, which were considered much or very much helpful as follows: prescription medication 90/92% of the users and 92(92)% of the surgery users. Psychotherapy was used by 21(17)% of the respondents and was reported to have helped much or very much by 67(70)% of the users.

The 12 months prevalence of CAM was 20% of the respondents, men 14%, women 24%. The use of mind-body-practices (ever by the respondent or a family member) was 49%, men 42%, women 55%.

Conclusion: The preliminary results indicate the decrease of popularity and self-reported usefulness of CAM from 2008 to 2018, while the self-reported usefulness of medicine remain the same.

Preferred Reporting Items for overview of systematic reviews for abstracts (PRIO-abstracts)

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Introduction: An overview of systematic reviews (OoSRS) is a study designed to synthesize multiple evidence from existing systematic reviews (SRs). The abstract (or summary) is an important part of an OoSRS, as it can determine whether the reading of full text is needed. However, strict word limits for abstracts force authors to make difficult decisions about prioritizing information. The aim of this project was to offer a reporting guideline to promote clear, transparent, and sufficient reporting in abstracts when OoSRS of health care interventions are conducted.

Methods: The items were developed by combining key features from abstracts of OoSRS of health care interventions, PRISMA for Abstracts and our recently published reporting guidelines for OoSRS. The initial checklist was distributed to experts who gave us feedback and then it underwent pilot testing by a group of physicians. Inter-rater reliability for the final form of the checklist, calculated with the Gwet's AC1 statistic, was conducted by two reviewers independently using a convenience sample of 40 abstracts.

Results: The instrument Preferred Reporting Items for OoSRS for abstracts (PRIO-abstracts) consisted of 6 sections with 15 topics including 20 items in total. In addition, we provided a brief explanation and at least one published example of good reporting for each abstract item. The agreement between reviewers was very good.

Conclusions: The PRIO-abstracts tool can be used in every OoSRS that addresses health care interventions. This instrument will assist overview authors to write abstracts for OoSRS in a transparent and sufficient way and it could be introduced and adopted by journals that publish OoSRS.