

MEN[®]; site of administration VISIne[®] (vision), OPTIcure[®], Pho-toDERM[®]; dosage form as Enemacort[®] (ENEMA CORTisone), Folicap[®] (FOLic acid CAPsules); dose regimen and duration Cefobid[®] (CEPHalosporin BID-twice daily), Lasix[®] it's effect LAsT for SIX hours, Slow K[®] is a SLOW release potassium(K), Novorapid[®] reflects short and Rapid acting insulin; drug history or story Nystatin[®] was named after the New York(NY) STATE, while warfarin[®] is an acronym for Wisconsin Alumni Research Foundation(W.A.R.F). Trade names affected by brand name as Glimaryl[®] affected by Amaryl[®] while Marivanil[®] affected by Marivan[®].

Conclusions The research highlights 12 observed patterns used in pharmaceutical trade naming. Implementation of these methods will help the students, pharmacists and health care providers to become more aware of the message that the drug trade name delivers.

55 HOW MUCH DO GENERAL PRACTITIONERS KNOW ABOUT THE ABSOLUTE VALUE AND POSSIBLE HARMS OF TREATMENTS FOR COMMON LONG-TERM CONDITIONS? A QUESTIONNAIRE SURVEY

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Objectives In Britain, GPs are responsible for prescribing multiple long-term treatments to their patients. To support shared clinical decision making, understanding of the absolute benefits and harms of individual treatments is needed. International evidence shows that doctors' knowledge of absolute treatment effects is poor, but this has not been researched among British GPs.

Aim To assess and describe the level and range of the quantitative understanding of the benefits and harms of treatments for common long-term conditions among British GPs.

Method An online survey distributed to GPs in Britain over two months in 2018. Participants were asked to estimate the percentage absolute risk reduction or risk increase conferred by 13 interventions across 10 long term conditions on 17 important outcomes. Responses were collated and presented graphically for each clinical question and analyses performed to estimate the proportion of correct responses.

Results 443 respondents, broadly representative of the British GP population, were included in the analysis. The majority of respondents demonstrated poor knowledge of the absolute benefits and harms of treatments with inaccuracies common and wide ranging. Per question, only 3.2 - 28.4% of responses were correct allowing for +/- 1% margin in ARR estimates and 10.4 - 55.6% allowing a +/- 3% margin. 65% of GPs self-reported low to very low confidence in their knowledge.

Conclusions GPs' knowledge of the absolute benefits and harms of treatments is poor, with inaccuracies of a magnitude likely to significantly affect clinical decision making and impede meaningful conversations with patients regarding treatment choices.

This represents a barrier to the practice of EBM as it is intended. The causes are complex and lie within the system of evidence dissemination, implementation and performance management of practitioners. These will be discussed along with potential solutions.

56 UNDERSTANDING BIAS, CONFLICTS OF INTEREST AND RESEARCHER ALLEGIANCE IN SYSTEMATIC REVIEWS

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Objectives Systematic reviews and meta-analyses are the foundation of modern evidence-based medicine and their use is becoming more prolific than randomised trials. However, systematic reviews are receiving increasing criticism for contributing to research waste, varying massively in their reporting or methodological quality, being misleading and serving conflicted interests.¹ Systematic reviews are upheld as being objective, dispassionate scientific processes but they can bias the evidence base. Influential decisions are made by people at all stages of a review including question setting, searching, study selection, interpretation, and making recommendations for research or practice. We know that biased research is prevalent in primary research and it is becoming increasingly apparent that questionable research practices also affect systematic reviews.

- Improve the systematic use of existing evidence by exploring and highlighting biases and poor conduct in systematic reviews
- Emphasise under-recognised biases or influences that can affect systematic reviews and disseminate them in a clear and accessible way to relevant audiences including health researchers, policy makers and journal editors

Method Initiatives for assessing methodological rigour and reporting such as Cochrane or PRISMA do not discuss errors, misconduct or bias which are attributable to the review team, and such influences can affect the reliability and validity of evidence syntheses.

Standard conflicts of interest (CoI) statements focus on narrow commercial interests and are inadequate to address potentially hidden agendas in systematic review teams. For example, CoI are frequently not declared as such by review authors who are psychological therapists when reviewing their own psychotherapy (researcher allegiance). Reviews with a high number of authors affiliated to the intervention are more likely to have positive conclusions and more likely to be lower quality reviews (confirmation bias). At least a quarter of investigators in biomedical research have industry affiliations, and a significant relationship exists between industry sponsorship and pro-industry conclusions (sponsorship bias).

Results Stakeholder participation in reviews, whilst being potentially beneficial, can also be problematic to manage as involvement of content area experts can make it more difficult to perform an unbiased review (one-sided reference bias). The opportunity to assess why the review authors were motivated to assess the evidence base is too limited if relying on information such as funding source and the expression of pecuniary conflicts.

Currently consumers of systematic reviews cannot rely on journal publication declarations to know whether those conducting a review have vested interests or are appropriately skilled. Policy decisions which ultimately affect patient care are influenced by systematic reviews therefore the integrity of their conduct requires more scrutiny.

Potential solutions:

- Empirical research to scrutinise less obvious CoI and examine the impact on published systematic reviews conclusions