Guidelines and recommendations: can we trust them?


Background

Why should family planning health professionals be interested in the standards of World Health Organization (WHO) recommendations? The Clinical Guidance documents produced by the Clinical Effectiveness Unit (CEU) for the Faculty of Family Planning and Reproductive Health Care appear on the Faculty website1 and are sent to members in a print version. They include the UK adaptation of the WHO recommendations for contraceptive use and these are usually referenced in the other guidance documents. Indeed, many of the CEU guidance documents draw directly on what has been recommended by WHO. We should therefore understand some of the difficulties inherent in drawing up recommendations.

A previous review2 looked at the parameters for citing randomised evidence in guidelines. They found that those produced by governments or professional bodies were poorer than those from pharmaceutical sources. The review demonstrated that we should understand how a guideline is developed before adopting it. Even if good quality randomised evidence is available, how it is interpreted and be subject to bias. A useful exercise to illustrate this appeared in Bandolier.3 Most contraceptive guidance recommendations are made from randomized evidence. The evidence but at evidence Level C – even more recommendations are not from randomised trials. The difficulties inherent in drawing up recommendations. One director was quoted as saying that: “No harms are likely, since the recommendation was made by the top experts.”

The description the directors provided of the group processes suggested that the participants were implicitly weighting evidence of benefits and harms, alongside other considerations. One director obviously recognised the dangers inherent in an unstructured group process and is quoted as saying: “There is a tendency to get people around the table and get consensus – everything they do has a scientific part and a political part. This usually means you go to the lowest common denominator or the views of a ‘strong’ person at the table”.

In 2003, WHO produced in-house standards for guideline development similar to other organisations. The findings from this study clearly indicate that these standards were not followed, and only one more directors had plans to use the guidelines for WHO guidelines. The authors provide references to show that reviews of clinical practice guidelines produced by other organizations are similar to WHO’ guidelines. If they do not adhere to their own guidelines for producing recommendations. Processes for developing the recommendations typically relied on experts in particular areas and not on representatives from those who might use the guidelines. Also, there was little use of experts in methodological areas such as information retrieval or group facilitation.

Following the conclusions of this study, WHO announced the establishment of a Guidelines Review Committee. The commentary by Hill and Pang commends this action. The commentary concluded that: “Basing guidelines on explicit and transparent consideration of the best evidence is crucial to WHO’s international credibility, standing and reputation”.

Comment

Guidelines are important, and are proliferating. Some guidelines are contradictory. They should be based on the best available evidence but studies show that many are not. Involving those who are to use the guidelines, and the use of information retrieval experts and group facilitators might also enhance the process.

Incorporating how the guidelines are to be disseminated and evaluating the outcomes from their use are also important. It is crucial for guideline developers and their users to understand the necessary processes so that harm caused by the unthinking application of biased guidance is reduced.

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References

1. Hill S, Pang T. Guidelines Review Committee. The commentary by Hill and Pang commends this action. The commentary concluded that: “Basing guidelines on explicit and transparent consideration of the best evidence is crucial to WHO’s international credibility, standing and reputation”.


Effects of different doses of physical activity on cardiorespiratory fitness among sedentary, overweight or obese postmenopausal women with elevated blood pressure. A randomized controlled trial. Church TS, Earnest CP, Skinner JS, Blair SN. JAMA 2007; 297: 2081–2091

Physical activity, although not a drug, is frequently prescribed by health care professionals in an attempt to prevent development of chronic disease and as an adjuvant to drugs being used to treat conditions including cardiovascular disease and diabetes. However, the minimum and maximum safe dose of physical activity to achieve these benefits is not known, nor whether increasing amounts of physical fitness produces graded health benefits. As a consequence, various expert groups have produced recommendations and guidelines for recommended levels of physical activity. These recommendations differ, resulting in confusion amongst patients and clinicians as to the optimum levels of physical activity required to achieve health benefits.

The primary aim of the Dose-Response to Exercise in post-menopausal Women (DREW) trial was to examine the effects on 150% of the National Institute of Health (NIH) Consensus Panel physical activity recommendation on cardiorespiratory fitness in women. The study randomly allocated 164 sedentary, overweight or obese postmenopausal women with a mean body mass index of 31.8 and systolic blood pressure of 139±8 to a control group or to three groups with different exercise regimes (4, 8 or 12 kcal/kg per week). Exercise sessions were directly observed and 6-month follow-up over the intervention was excellent. The exercise groups adhered to the NIH recommendations in terms of minutes of exercise per week and energy expenditure but the number of exercise sessions undertaken per week was lower than recommended (2.6 to 3.1 instead of 5). The primary outcome was aerobic fitness as assessed by a cycle ergometer and quantified as peak oxygen consumption (VO2peak in litres/min).

The study demonstrated that there was a linear, dose response relationship of aerobic fitness over the three groups with significant increases in peak absolute oxygen consumption (4% in the 4 kcal/kg, 6.0% in the 8 kcal/kg and 8.2% in the 12 kcal/kg per week group). However, the other parameters measured including weight, lipid profile and blood pressure showed no significant improvement in any of the exercise groups. Although this study can only comment on the model of exercise studied in this trial, it supports the statement that “Even a little is good; more may be better” in terms of exercise and aerobic fitness. However, it cautious against exercise being used in isolation without other interventions (e.g. dietary) to achieve other health benefits such as weight loss and improvements in other cardiovascular risk factors such as blood pressure.

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References


2. Linn IM. Dose-response relation between physical activity and fitness; even a little is good; more is better. JAMA 2007; 297: 2137–2139.