Workplace-based interventions to promote healthy lifestyles in the NHS workforce: a rapid scoping and evidence map

Gary Raine,* Sian Thomas, Mark Rodgers, Kath Wright and Alison Eastwood

Centre for Reviews and Dissemination, University of York, York, UK

*Corresponding author gary.raine@york.ac.uk

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Scientific summary

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Background

The health and well-being of staff working in the NHS is a significant and long-standing issue for UK health care. Sickness absence among NHS staff is known to be higher than in other public sector organisations as well as among those in the private sector. Poor staff health and well-being has significant financial implications and also potentially has an impact on quality of care, patient outcomes and safety.

Research has indicated that musculoskeletal and mental health conditions are major causes of ill health and sickness absence among NHS staff. The level of violence, harassment and abuse experienced by staff from a number of different sources has also been identified as a key issue. Evidence indicates that poor mental well-being can negatively affect lifestyle behaviours, and vice versa. Notably, studies suggest that a large proportion of individuals working in the NHS do not meet public health guidance in relation to healthy lifestyle behaviours; however, this is not solely the result of factors under the control of individuals. The negative influence that organisational-level factors can have on the lifestyle behaviours of health-care staff has been highlighted in past UK studies. This includes long working hours, inadequate break times and low staffing levels.

Over a number of years, there have been various initiatives to improve the health and well-being of NHS staff; for example, the *NHS Health and Wellbeing Framework* [NHS England. *Workforce Health and Wellbeing Framework*. 2018. URL: www.nhsemployers.org/-/media/Employers/Publications/Health-and-wellbeing/NHS-Workforce-HWB-Framework_updated-July-18.pdf (accessed 10 January 2019)] was introduced in 2018 to assist NHS providers to develop and implement a staff health/well-being strategy. The framework has a key focus on promoting healthy lifestyles in addition to addressing mental health and musculoskeletal health.

In December 2018, the York Health Services and Delivery Research Evidence Synthesis Centre was asked by NHS England to identify evidence relevant to the promotion of healthy lifestyles among NHS staff. For this piece of work, the term ‘NHS staff’ was conceptualised broadly as any individual working for the organisation in any post.

Objectives

To map existing reviews on workplace-based interventions to promote health and well-being, and to assess the scope for further evidence synthesis work. It was not the purpose of this piece of work to extract, evaluate and synthesise findings from individual publications.

Methods

A scoping search of nine databases was conducted to identify systematic reviews on health and well-being at work. Results were limited by publication date (2000 to January/February 2019). No language or geographical limits were applied. The following databases were searched:

- Cochrane Database of Systematic Reviews (CDSR)
- Database of Abstracts of Reviews of Effects (DARE)
- HTA database
- Epistemonikos

- Health Evidence
- Database of promoting health effectiveness reviews (DoPHER)
- PROSPERO
- MEDLINE
- Business Source Premier.

Owing to the large number of potentially relevant publications identified, reviews were screened for inclusion in the evidence map based on information in the title and abstracts of records only; however, the full text of a number of 'reviews of reviews' identified during the selection process was retrieved in order to conduct a more detailed examination of these publications.

Records were selected for inclusion in the evidence map based on the following criteria:

- Population – adult employees (aged $\geq$ 18 years) in any occupational setting and in any role. Any reviews focusing solely on self-employed workers or including participants from other settings (e.g. school students) were not eligible for inclusion.
- Interventions – any intervention aimed at promoting or maintaining physical or mental health and well-being (however conceptualised). Interventions could also be focused on early intervention and reducing the incidence or symptoms of common mental health conditions (stress, anxiety or depression) among staff. Reviews of interventions addressing violence against staff, workplace bullying or harassment were also eligible for inclusion. Occupational health interventions and those aimed at returning employees to work after absence were considered beyond the scope of the review. Occupational health interventions were conceptualised as those with a predominate focus on promoting safer working environments and practices, and reducing injuries and workplace health risks. Interventions could be either or both (1) individual-level interventions, for example, initiatives focused on individual behaviour modification, (2) organisational-level interventions aimed at modifying the workplace environment, culture or ethos.
- Outcomes – any outcome related to the effectiveness of interventions. Relevant outcomes could include (but were not limited to) staff satisfaction, sickness absence, mental resilience, staff uptake of flu vaccination, lifestyle choices (smoking rates, alcohol consumption, physical activity levels, sedentary behaviour, dietary behaviour), coping skills, symptom reduction, levels of violence against staff and levels of bullying. Reviews could also report on outcomes related to the implementation of initiatives.
- Study design – any form of evidence synthesis including systematic reviews of effectiveness, systematic reviews of implementation, meta-analyses, qualitative reviews or realist reviews. Reviews could include primary studies of any design or other reviews (i.e. reviews of reviews).

The reviews of reviews that were examined in greater detail also met the following additional study design criteria: authors (1) searched at least two sources and (2) reported inclusion/exclusion criteria.

Data on key characteristics were extracted from titles and abstracts only into a spreadsheet, including type of document, focus of the review, intervention type (where identifiable), population(s) and whether the review had a primary focus on effectiveness, costs/cost-effectiveness or implementation. Data from the spreadsheet were subsequently imported into the software package IBM SPSS Statistics version 25 (IBM Corporation, Armonk, NY, USA) and descriptive statistics for key characteristics generated (counts and percentages). Data from the reviews and reviews of reviews were used to produce a map and descriptive summary of the evidence. The mapping work was conducted to meet the requirements of NHS England, which was consulted at the start of the process to establish the goals and scope of the work. Further consultation with NHS England and National Institute for Health Research colleagues occurred via a teleconference following the submission of an interim report. The purpose of the teleconference was to discuss the interim results, conclusions and scope for further evidence synthesis work. Owing to the rapid and responsive nature of the work, patient or public representatives were not asked to be involved.

Results

The title and abstracts of over 8241 records were screened and a total of 408 potentially relevant publications were identified. Evidence relating to a broad range of physical and mental health issues was identified across 12 reviews of reviews and 312 other reviews, including 16 potentially relevant Cochrane reviews, published since 2000. There also exists National Institute for Health and Care Excellence guidance addressing multiple issues of potential relevance ($n = 6$). Existing reviews largely addressed effectiveness, but some focused primarily on cost-effectiveness and implementation issues. A total of 78 protocols for reviews were also identified, 19 of which focused on health-care staff only. Out of the 296 standard (non-Cochrane) reviews and meta-analyses:

- 144 focused on aspects of lifestyle ($n = 78$) or general health/health promotion ($n = 66$)
- 94 focused on mental health
- 18 focused on work relations including violence and bullying
- 27 focused on other health-related issues such as sleep/fatigue, and influenza vaccination among health-care workers
- 13 focused on general work issues including absenteeism and presenteeism.

In addition, 95 reviews and meta-analyses focused solely on individuals working in a health-care setting. Most of these reviews and meta-analyses addressed mental health issues rather than lifestyle or general health/health promotion.

The 12 reviews of reviews addressed workplace interventions targeting a range of physical and mental health issues. There was a considerable degree of heterogeneity between reviews of reviews in terms of specific focus, interventions and outcomes. Reviews focused predominantly on evidence of effectiveness and few data were reported on intervention costs or implementation issues. Five of the 12 reviews of reviews were over 5 years old and several reviews of reviews, regardless of their publication date, included reviews from before 2000. This could have implications for the current relevance of some of the findings reported. The same issue could also apply to the reviews and meta-analyses in the evidence map as some may have included primary studies that were conducted prior to 2000.

Conclusions

The review team is doubtful that further evidence synthesis work at this stage would provide NHS England colleagues with substantial new knowledge, particularly within the context of the new *NHS Health and Wellbeing Framework*. Additional synthesis work may be useful if it addressed an identifiable need and it was possible to identify one of the following:

- A specific and focused research question arising from the current evidence map. It may then be appropriate to focus on a smaller number of reviews only, and provide a more thorough and critical assessment of the available evidence.
- A specific gap in the literature (i.e. an issue not already addressed by existing reviews or guidance). It may then be possible to undertake further literature searching and conduct a new evidence review; for example, the limited number of reviews that focused specifically on groups of health-care-based staff other than doctors, nurses or medical/nursing students could indicate a potential research gap.

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This report

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