Promoting healthy lifestyles in the NHS workforce: scoping and mapping the evidence. Protocol

Background

The health and wellbeing of staff working in the National Health Service (NHS) is a significant and long standing issue in UK healthcare. NHS England (2019) reported that the NHS sickness absence rate (4%) is higher than in other public sector organisations (2.9%) and the private sector (1.9%). The cost of sickness absence by NHS staff has been estimated at £2.4bn.[1] In addition to having financial implications for the NHS through levels of sick absence, there is strong evidence linking staff health and wellbeing with quality of care, safety, and patient outcomes/experience.[2-5] More broadly, the NHS has a responsibility to protect the health of all its employees.[6] The NHS constitution makes a pledge to support staff in maintaining their health, wellbeing and safety.[7] Guidance produced by the Health and Safety Executive also addresses staff wellbeing, including work related stress (for example, HSE, 2017).[8]

Consistent with the situation in other occupational sectors, data reveal that musculoskeletal and mental health conditions are major causes of ill health and sickness absence amongst NHS staff. Boorman (2009) found that musculoskeletal disorders account for almost half of all sickness absence in the NHS.[9] Findings from the 2017 NHS staff survey revealed that 26% of respondents experienced musculoskeletal problems as a result of work activities in the previous twelve months.[10] A large proportion of musculoskeletal disorders cases result in long-term absence.[6]

Approximately a third of sickness absence in the NHS is the consequence of mental health issues.[11] The 2017 NHS staff survey found that 38% of all staff, and 49% of individuals working in ambulance trusts, had felt unwell due to work related stress in the last twelve months.[12] As a professional group, doctors experience high levels of mental health problems and have one of the highest suicide rates.[4] The existence of a bi-directional relationship between mental and physical health is well recognised, and evidence suggests that poor mental wellbeing can negatively affect lifestyle behaviours. For example, a study conducted by the Nursing Standard of 3500 nurses, midwives and healthcare assistants in the UK reported that workplace stress had a negative impact on the diet of 60% of respondents.[13]

Health professionals, and nurses in particular, have been encouraged to promote healthy lifestyle choices amongst patients.[14] Emphasis has been placed on staff taking responsibility for their own health and acting as a positive role model for engaging in healthy behaviours.[15] Notably, a number of recent UK studies found that a large proportion of healthcare staff do not themselves meet public health guidance in relation to healthy lifestyle behaviours including: consumption of fruit and vegetables;[16, 17] consumption of fats;[16] consumption of sugars;[16] physical activity;[16, 17] alcohol consumption.[17] For example, Mittal et al. (2018) reported that 83% of all staff did not eat the recommended five or more portions of fruit or vegetables per day.[16] Similarly, Schneider et al. (2018) found that 68% of nurses, 53% of other health care professionals and 82% of unregistered care workers (including nursing auxiliaries and assistants) did not eat five or more five portions of fruit or vegetables daily. They also reported that 46% of nurses, 49% of other health care professionals and 44% of unregistered care workers did not meet physical activity guidelines.[17] These figures for physical activity are consistent with the proportion reported by Mittal et al. for all staff (44%).[16] In addition, the proportion of UK healthcare workers who reported being overweight or obese in four recent studies ranged from 44% to 69%.[14, 16, 18, 19]

Schneider et al. (2018) raised concerns about the potential impact of nurses' low personal adherence to public health guidance in relation to healthy lifestyles on their health promotion work

with patients and its effectiveness.[17] Furthermore, Kyle et al. (2017) highlighted an increased risk of both musculoskeletal and mental health conditions from having excess body weight, which as highlighted earlier, are leading causes of ill health and sickness absence amongst NHS staff.[14]

The negative influence that organisational level factors can have on the lifestyle behaviours of health care staff has been highlighted in past UK studies. For example, 51% of the hospital staff who responded in the study by Mittal et al. (2018) indicated that long working hours impeded their ability to stay fit.[16] Furthermore, in the Nursing Standard study reported by Keogh (2014), 79% of respondents indicated that eating a healthy meal whilst at work was made difficult by a lack of breaks. Over half (56%) also reported that inadequate staff levels had a negative impact on their food choices.[13]

Findings from the 2017 NHS staff survey showed that 15% of all staff, and around a third (34%) of employees at ambulance trusts, had experienced physical violence from patients, relatives or the public in the previous twelve months. In addition, over a quarter of all staff (28%) and nearly half of the staff at ambulance trusts (47%) also suffered harassment, bullying or abuse from patients, relatives, or members of the public in the last twelve months. Just under a quarter of all staff (24%) experienced harassment, bullying or abuse from other members of staff.[12]

The importance of improving the health and wellbeing of NHS staff has repeatedly been recognised in government and NHS England publications published within the last ten years. The NHS Long Term Plan re-emphasises the key role that employers have in supporting staff to remain healthy, and provides a clear commitment to the continued promotion of positive physical and mental wellbeing amongst the NHS workforce. This includes reducing the level of violence and abuse experienced by staff.[1]

Over a number of years, there have been various initiatives to improve the health and wellbeing of NHS staff. On a national level, the NHS Healthy Workforce Programme was established in 2016 to identify best practice in relation to promoting staff health. The focus within the programme was on the implementation of employer led health and wellbeing initiatives as well as creating organisational practices and culture that are supportive of staff health.[11]

The NHS Health and Wellbeing Framework introduced in 2018 was informed by the findings and learning from the Healthy Workforce Programme.[20] The framework document includes guidance and actionable steps to enable all NHS providers to plan and implement a staff health and wellbeing strategy.[21] There is a focus within the framework on promoting healthy lifestyles in addition to addressing mental health and musculoskeletal health. Health and wellbeing interventions incorporated into the framework comprise prevention/self-management focused approaches (e.g. physical activity classes) and more targeted forms of support such as weight loss services, health checks, addiction support, counselling and physiotherapy. An accompanying diagnostic tool enables organisations to carry out self-assessment against the Health and Wellbeing Framework.[21]

A Commissioning for Quality and Innovation (CQUIN) payment was introduced in 2016 in order to provide financial incentives for NHS providers to support staff health and wellbeing. Payment is dependent on (i) the introduction of workplace health and wellbeing initiatives, with a particular focus on physical activity, and improving support for mental health and musculoskeletal issues (ii) encouraging healthier food choices (iii) increasing staff uptake of the influenza vaccination.[11]

The York HS&DR evidence synthesis centre was asked to identify evidence relevant to the promotion of healthy lifestyles amongst NHS staff. An iterative and responsive process will be used to address this request.

Aim

The initial aim of this evidence synthesis will be to map existing evidence reviews that focus on promoting health and wellbeing in workplace settings. This will be achieved through conducting a scoping search to identify relevant reviews and then producing a descriptive overview of research evidence in this area. The map will seek to characterise existing reviews and identify potential gaps in the evidence base.

Scoping and mapping of the evidence

Identification of evidence

A scoping search will be carried out to identify relevant evidence reviews published from 2000 onwards. No language or geographical limits will be applied. Initially, we will restrict the search to those databases with a primary focus on indexing evidence reviews. It is anticipated that the following databases will be searched:

- Cochrane Database of Systematic Reviews (CDSR)
- Database of Abstracts of Review of Effects (DARE)
- HTA database
- Epistemonikos
- Health Evidence
- Database of promoting health effectiveness reviews (DoPHER)

We anticipate that the initial searching process will adequately identify reviews addressing a range of topics related to promoting health and wellbeing in workplace settings. In the event that these searches do not identify reviews of particular relevance to the NHS, a more focused search using additional databases will be performed to see if further reviews can be identified. It is anticipated that the following databases would be searched:

- Medline
- Business Source Premier

The PROSPERO database will also be searched to identify protocols of ongoing systematic reviews.

The database searches will be supplemented by searching relevant research, policy and government websites in order to identify additional relevant publications or grey literature. For example, Google Scholar; NICE; Health and Safety Executive; UK Department of Health and Social Care; The Work Foundation; What Works Centre for Wellbeing; CDC workplace health promotion; Institute for Work and Health; Institute for Employment Studies.

Selection criteria

Records will be screened for potential inclusion against the following selection criteria:

Population: Adult employees (aged 18 years or over) in any occupational setting and in any role. Any reviews focusing solely on self-employed workers will be excluded.

Interventions: Any intervention aimed at promoting or maintaining physical or mental health and wellbeing (however conceptualised). Interventions may also be focused on early intervention and reducing the incidence or symptoms of common mental health conditions (stress, anxiety or depression) amongst staff. Reviews of interventions addressing violence against staff, workplace bullying, or harassment are also eligible for inclusion.

Interventions can be either, or both: (i) individual level interventions, for example, initiatives focused on individual behaviour modification (ii) organisational level interventions aimed at modifying the workplace environment, culture, or ethos.

Outcomes: Any outcome related to the effectiveness of interventions. Relevant outcomes may include, (but 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 may also report on outcomes related to the implementation of initiatives.

Study design: Any form of evidence synthesis that meets the following criteria: authors (i) searched at least two sources, and (ii) reported inclusion/exclusion criteria. One of the sources searched must have been a named database. Other acceptable sources would be: conducting internet searches; hand searching journals; citation searches; reference checking; contacting other authors. Types of reviews that meet the two criteria may include, systematic reviews of effectiveness; systematic reviews of implementation; meta-analyses; qualitative reviews or realist reviews. Reviews can include primary studies of any design.

Selection procedure

A sample of title and abstracts will initially be pilot screened by two reviewers independently and their decisions compared. On achieving a high degree of agreement, the remaining title and abstracts will be screened against the selection criteria by one reviewer only. If there is uncertainty regarding the eligibility of any record, it will be discussed with a second reviewer. The full text of potentially relevant reviews will then be retrieved and screened independently by two reviewers. Any disagreements that arise will be resolved by consensus or consulting a third reviewer.

Data extraction

For each included review, data will be extracted on key characteristics including review methods, intervention, comparators (where applicable), population(s), and outcomes. Data extraction will be conducted by one reviewer and checked by a second reviewer.

Synthesis

The key characteristics extracted from the reviews will be used to produce a map and descriptive summary of the evidence. This will detail the extent and nature of the current evidence base relevant to promoting healthy lifestyles in NHS staff. It will also identify any areas in which there are gaps in the evidence base. Reviews will be classified according to relevant categories, such as regional origin of primary evidence (e.g. international or UK); setting (e.g. all workplaces, healthcare only, NHS only); review focus (e.g. effectiveness, implementation, cost effectiveness); topic focus (e.g. lifestyle behaviour, mental health, violence/bullying).

A draft evidence map and brief descriptive summary will be submitted to NHS England. A follow up teleconference will be arranged to discuss the findings and the utility of conducting further review work. At this stage, we would only propose conducting further work if NHS England colleagues have specific additional questions derived from the evidence map, which address clear gaps in knowledge or understanding. If further appropriate questions are identified, we will develop an expanded protocol outlining the work to be carried out in the second stage. We anticipate that this would involve conducting a more in depth rapid synthesis and quality assessment of a relevant sub set of evidence identified in the mapping exercise.

Patient and Public Involvement

We will not seek any patient and public involvement at the initial mapping stage of this work. If specific research questions are subsequently identified and further work is requested, we will obtain involvement from representatives with experience relevant to the question(s). The aim of this involvement will be to assist in defining and refining the questions to be addressed, to ensure that relevant and important outcomes are considered, and to highlight areas and issues from a patient and public perspective.

Dissemination

In the event that additional synthesis work is conducted, a full report will be produced. If appropriate, we will summarise the research for publication in an academic journal, and develop an evidence summary with sufficient flexibility to cascade implications for practice to key audiences (e.g. service users, providers, commissioners). If no additional work is required beyond the initial scoping/mapping exercise, the research team will produce a final report of the evidence map and also consider alternative outputs and channels for the findings.

Timetable for initial scoping and mapping exercise

	February	March	April	May	June
Literature searching					
Initial scoping and mapping exercise					
Draft evidence map and summary, and circulate to NHS England					
Follow-up teleconference with NHS England (to discuss findings and need for any additional evidence synthesis)					

In the event that additional synthesis is required, an updated timetable from June onwards will be produced.

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