

not known. The aim of this study is to examine the influence of presentation of the results of a preventive medical examination on willingness to seek help for work-related fatigue or being overweight.

**Methods** A factorial design experiment with counterbalancing was conducted by presenting  $n=82$  workers with vignettes including eight scenarios with hypothetical preventive tests results. The results were presented by stating either:

- i. a 'high score' only (Neutral label),
- ii. a 'high score, followed by a statement emphasising the risk of a current disorder' (Current label), or
- iii. a 'high score, followed by statement emphasising the risk of this situation progressing into a health condition in the future' (Progress label).

Participants rated the willingness to seek help on a VAS scale (0-not at all willing to 100-very willing) as if these were their own results. Differences between pairs of scenarios were tested with paired-sample t-tests.

**Result** Compared to the presentation with neutral labels, participants reported more willingness to seek help in both the scenarios with current vs neutral pairs (46, SD 27.1, vs 37, SD 27.1;  $p<0.000$ ), and the progress vs neutral pairs (47, SD 27.6 vs 36, SD 26.0;  $p<0.000$ ). No statistically significant differences were observed between scenarios about work-related fatigue and being overweight.

**Discussion** Workers are more inclined to seek help if the risk is explicitly presented in the results.

Our experimental design allowed us to compare various conditions, but we could not use actual test results. Testing whether workers react differently to results reflecting their own health rather than vignettes remains a challenge for future research.

### 303 PERSONAL PROTECTIVE EQUIPMENT FOR PREVENTING HIGHLY INFECTIOUS DISEASES DUE TO EXPOSURE TO CONTAMINATED BODY FLUIDS IN HEALTHCARE STAFF

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**Introduction** In epidemics of highly infectious diseases, such as Ebola Virus Disease (EVD) or SARS, healthcare workers (HCW) are at much greater risk of infection than the general population, due to their contact with patients' contaminated body fluids. Personal protective equipment (PPE) can reduce the risk. It is unclear which type of PPE protects best, what is the best way to remove PPE, and how to make sure HCWs use PPE as instructed.

**Methods** We systematically searched for and included all eligible controlled studies that compared the effect of types or components of PPE in HCWs exposed to highly infectious diseases with serious consequences, such as EVD and SARS, on the risk of infection, contamination, or noncompliance with protocols. We also included studies that compared the

effect of various ways of donning or removing PPE, and the effects of various types of training in PPE use on the same outcomes.

**Result** We found very low quality evidence that more breathable types of PPE may not lead to more contamination, but may have greater user satisfaction. We also found very low quality evidence that double gloving and CDC doffing guidance appear to decrease the risk of contamination and that more active training in PPE use may reduce PPE and doffing errors more than passive training. However, the data all come from single studies with high risk of bias and we are uncertain about the estimates of effects.

**Discussion** We need simulation studies, preferably using a non-pathogenic virus, to find out which type and combination of PPE protects best, and what is the best way to remove PPE. We also need RCTs of one type of training versus another to find out long term effects. HCWs exposed to highly infectious diseases should have their use of PPE registered.

### 305 HOW AND WHEN ARE NONRANDOMISED STUDIES INCLUDED IN COCHRANE SYSTEMATIC REVIEWS – AN OVERVIEW OF CURRENT PRACTICE

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**Introduction** It is generally felt that randomised studies are difficult to conduct in the work-environment. Then again, nonrandomised studies (NRS) are considered to provide less reliable evidence for intervention effects. However, these are included in Cochrane reviews, despite discouragement. There has been no evaluation of when and how these designs are used. Therefore we conducted an overview of current practice.

**Methods** We included all Cochrane reviews that considered NRS. We conducted study screening and data extraction in duplicate.

**Result** Of the included 202 reviews, 114 (56%) did not cite a reason for including NRS. In reviews that do cite a reason, the reasons were divided into two major categories: NRS were included because randomised trials (RCTs) are wanted ( $n=81$ , 92%) but not feasible, lacking, or insufficient alone, or because RCTs are not needed ( $n=7$ , 8%).

Review authors included a range of study designs with controlled before after studies being the most common.

Most interventions evaluated in Cochrane reviews incorporating NRS were non-pharmaceutical and the settings non-medical.

For risk of bias assessment, most review authors (38%) used Cochrane Effective Practice and Organisation of Care (EPOC) Group's checklists while others used a variety of checklists and self-constructed tools.

**Discussion** Most Cochrane reviews do not justify including NRS. Where they do, the majority is not in line with Cochrane recommendations. Risk of bias assessment varies across reviews and needs improvement. We provide an algorithm for when it is useful to include NRS in systematic reviews. If interventions are implemented at the group level as is often the case in occupational health studies, it is useful to also include NRS.