

## What types of interventions generate inequalities? Evidence from systematic reviews

### Web-only supplement

#### **Methods**

##### **Searching**

References were located through two sources. First, all the review reports included in Welch et al.'s review<sup>1</sup> were retrieved and screened. Second, a limited search was carried out in Medline in early February 2012 using the term "(inequalit\$ or equit\$ or inequit\$ or disparit\$).tw." in conjunction with SIGN's filter for systematic reviews (<http://www.sign.ac.uk/methodology/filters.html#systematic>); no date or language filters were used.

##### **Screening**

The following inclusion criteria were applied sequentially and exclusively:

- 1) Is the study a systematic review (defined as a review which, at a minimum, reports some details of the search strategy and inclusion/exclusion criteria)?
- 2) Does the review explicitly concern inequalities between groups and/or disadvantaged groups (defined in terms of PROGRESS-Plus categories)?
- 3) Does the review include findings on the effectiveness of interventions? (Reviews which only included observational data on the extent or nature of inequalities in health status or access to care were excluded.)
- 4) Does the review include data from high-income (OECD member) countries?
- 5) Does the review include data on interventions outside the healthcare system, offered to people without diagnosed illness? (Reviews of the following were excluded: clinical treatments; palliative or rehabilitative interventions; healthcare system interventions, e.g. training healthcare professionals; and interventions to promote access to healthcare, including interventions to promote the uptake of clinical screening.)
- 6) Does the review present data on differences in intervention effectiveness between groups defined by some PROGRESS-Plus dimension? (Reviews which sought such data but did not locate any were included. Reviews presenting subgroup or stratified analyses or meta-regressions were included; those which only reported on interventions targeted at a particular PROGRESS-Plus group, or on the demographics of study samples, without presenting data on differential effectiveness, were excluded.)

For the analysis presented in the paper, we focused only on studies which presented data on a PROGRESS-Plus dimension related to socio-economic status (including income, occupational status, employment status, housing tenure, or level of education).

Screening was carried out by one researcher alone (TL).

##### **Data extraction**

Data were extracted on: the broad intervention type covered by the review; the outcome types included; and the main conclusions reached by the review authors. In one case where the review

report only briefly characterised the findings on inequalities,<sup>2</sup> the relevant primary study<sup>3</sup> was located and data cross-checked against the primary study report.

### **Data synthesis**

The extracted data were synthesized in a table (Table 1). The table shows those reviews which found no relevant data where they are the only ones conducted for that intervention type and outcome type; where another review did locate data, reviews without conclusions are ignored. The type of SES measure used is shown, although findings are not disaggregated by type of measure where separate analyses were conducted in the reviews.

### **Results**

The flow of literature is shown in Figure 1. A total of 679 unique references were screened, and 14 reviews initially included. However, of these, one<sup>4</sup> was not included in the analysis because all the relevant data came from another included review,<sup>5</sup> and a further one<sup>6</sup> because it did not look at any SES-related determinants. The analysis thus included 12 reviews.

---

<sup>1</sup> Welch V, Tugwell P, Petticrew M, et al. How effects on health equity are assessed in systematic reviews of interventions. *Cochrane Database Syst Rev* 2010;**8**;MR000028.

<sup>2</sup> de Sa J, Lock K. Will European agricultural policy for school fruit and vegetables improve public health? A review of school fruit and vegetable programmes. *Eur J Public Health* 18;**6**:558–68.

<sup>3</sup> Bere E, Veierød MB, Klepp K-I. The Norwegian School Fruit Programme: evaluating paid vs. no-cost subscriptions. *Prev Med* 2005;**41**:463–70.

<sup>4</sup> Jepson RG, Harris FM, Platt S, et al. The effectiveness of interventions to change six health behaviours: a review of reviews. *BMC Public Health* 2010;**10**:538.

<sup>5</sup> Thomas S, Fayer D, Misso K, et al. Population tobacco control interventions and their effects on social inequalities in smoking: systematic review. *Tob Control* 2008;**17**:230–7.

<sup>6</sup> Albarracín D, Durantini MR. Are we going to close social gaps in HIV? Likely effects of behavioral HIV-prevention interventions on health disparities. *Psychol Health Med* 2010;**15**:694–719.

Figure 1. Flow of literature through the review

