A systematic review of interventions for the secondary prevention of skin cancer by self-examination (protocol)

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Citation

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Review question

What factors determine the effectiveness of interventions (directed towards secondary prevention of skin cancer programme achieved through self-examination of the skin by adults in the community?
What interventions facilitate appropriate early self-referral to primary care for a suspected skin cancer lesion (melanoma or non-melanoma skin cancer)?

Searches

1. Search strategy from MEDLINE
Database: Ovid MEDLINE(R), 1946 to April Week 3 2015
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1 Skin Neoplasms/ (96000)
2 (skin adj2 neoplasm*).tw. (603)
3 Melanoma/ (67853)
4 melanoma*.tw. (80129)
5 Carcinoma, Basal Cell/ (14140)
6 (basal cell adj2 carcinoma).tw. (7693)
7 (sebaceous cell adj2 carcinoma).tw. (54)
8 Nevus, Pigmented/ (6621)
9 (pigmented and (lesion* or n?evi)).tw. (5302)
10 (skin adj2 cancer*).tw. (13954)
11 (mole or moles).tw. (14940)
12 or/1-11 [skin cancer terms] (184352)
13 Mass screening/ (83777)
14 Secondary Prevention/ (15509)
15 "Early Detection of Cancer"/ (9760)
16 Early Diagnosis/ (14572)
17 Self-Examination/ (871)
18 Self Care/ (24571)
19 self efficacy/ (12820)
20 ((self or physical) adj2 exam*).tw. (48106)
21 (self adj2 check*).tw. (342)
22 SSE.tw. (521)
23 or/13-22 [secondary prevention] (202648)
24 Health Education/ (52752)
25 consumer health information/ (2026)
26 Health Promotion/ (55361)
27 Health Knowledge, Attitudes, Practice/ (76621)
28 Health Behavior/ (35638)
29 Patient Education Handout/ (4131)
30 information dissemination/ (11049)
31 ((education* or information*) adj5 (program* or intervention* or material* or resource* or provision or

provid* or session* or consultation* or class or classes or discussion* or meeting*)).tw. (229588)
32 ((education* or information* or material* or resource*) adj5 (book$ or leaflet$ or pack* or video* or tape* or phone* or telephone* or manual* or advice* or audiovisual or audio visual)).tw. (15859)
33 (written adj2 information).tw. (1533)
34 (print* adj2 information).tw. (272)
35 pamphlets/ (3246)
36 information services/ (15045)
37 Computer-Assisted Instruction/ (9700)
38 telemedicine/ (12049)
39 multimedia/ (1524)
40 (ehealth or e-health).tw. (1643)
41 exp Educational Technology/ (88169)
42 Internet/ (52157)
43 (interactive* or website* or web site* webpage* or web page* or web based online or on-line).tw. (59841)
44 exp cellular phone/ (5524)
45 telephone/ (9421)
46 ((smart or mobile or cell*) adj phone).tw. (3176)
47 or/24-44 [Educational terms] (618188)
48 12 and 23 and 47 (400)
49 limit 48 to yr="1990 -Current" (387)

Types of study to be included

Types of study design included: studies of all design types, as randomised controlled trails (RCTs) will examine cause and effect relationships, these will be the focus but other study design may help us to understand the psychological (related to behaviour change) and technological factors (related to effective health education) underpinning effectiveness of such interventions. This will also include quasi-experimental studies, observational/ population based studies and relevant qualitative studies giving insights into relevant behaviours and or interventions.

Condition or domain being studied

MSC can lead to mortality and NMSC morbidity. MSC is the third most common skin cancer in the UK, accounting for more deaths than all other skin cancers combined; in 2011 there were 13,348 new cases of MSC and 2209 deaths from MSC (NICE 2015). Early detection is important as delay can impact on prognosis. In the primary care community there is a problem with a lack of understanding and skill in self-examination of the skin for suspect skin cancer lesions, poor adherence and late self-referral to primary care (Kasparian et al 2009).

Participants/population

Types of participants (and setting) included:
Human studies.
All ages in the community 16 years + and in addition two high risk groups: i) including older men (55 years and ii) those adults with a primary or familial history of skin cancer (either NMSC and, or MSC).

Intervention(s), exposure(s)

Types of interventions included: Interventions that target behaviour change, that are directed towards the secondary preventions of skin cancer through self-examination of the skin for suspect potential skin cancer lesions (including either or both non-melanoma and melanoma skin cancers). Technological mediated approaches and their elements that support effective health education.

Comparator(s)/control

Types of comparison: in the case of experiments, these will be made for inactive controls (placebo, standard care, no treatment, or a waiting list control) and active controls (a different variant of the same intervention).

Main outcome(s)

Types of outcome measure included: an adaptive (UV protective) behaviour change, including an appropriate self-referral for skin cancer or a skin cancer related investigation a diagnosis (earlier detection) for skin cancer (melanoma or non-melanoma) subsequently i.e. that which leads either to a) an immediate diagnosis of skin cancer, MSC or NMSC) or a referral to dermatology for suspect skin cancer (subsequent

diagnosis/ related investigation). (Other factors may include temporal factors: shorter pathway to diagnosis or early detection- so a greater frequency in the presentation if suspect skin cancer lesions compared to normative levels). Theoretically, a change in the incidence of NMSC and MSC may be observed, but given the relative infrequency of the latter (melanoma incidence, despite its importance), these are unlikely to be outcomes employed in such studies, as it is due to the difficult of attributing cause and effect statistically and design a feasible power trial, due to the large numbers required. Another term we considered using was 'self-referral to GP', however, it was excluded because it narrowed the search too much.

Additional outcome(s)
None.

Data extraction (selection and coding)
Data collection process: a data extraction form has been designed to derive data from the published included study papers. This will be done by two independent reviewers and then any discrepancies discussed or if need be agreed with a third reviewer in the team. To ensure consistency across reviewers, we will conduct calibration exercises before starting the review. Data abstracted will include demographic information, methodology and design details, trial rigour checklist, intervention details and all reported patient-important outcomes, where appropriate to the design and our research questions. Authors will be approached where there are uncertainties.

Risk of bias (quality) assessment
The Cochrane Collaboration Risk of Bias tool will be used to assess bias for parallel group designs. To assess non parallel group designs, individual study quality will be assessed using the QATSDD (Sirriyeh et al. 2012), a validated quality assessment tool applicable to research with heterogeneous study designs (qualitative, quantitative and mixed methods). Risk of bias in the application of this tool will be assessed using the Kappa statistic.

Strategy for data synthesis
A narrative synthesis of the findings from the included studies will be planned. Meta-analysis of the parallel group studies will be undertaken were the studies have provided the sufficient information. Effect sizes will be averaged across appropriate time-points and measures for each study.
Where there are more than one intervention group reported within a study, the intervention that generated the largest effect on the skin self examination will be selected as the primary focus is on identifying the most effective techniques to promote this behaviour.

Analysis of subgroups or subsets
None planned.

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Type and method of review
Meta-analysis, Narrative synthesis, Systematic review

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09 October 2015

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01 August 2018

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None known

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England

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Subject indexing assigned by CRD

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Humans; Melanoma; Secondary Prevention; Self-Examination; Skin Neoplasms

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17 November 2015

Date of first submission
25 January 2019

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	Yes

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

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