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Can financial incentives promote a healthy life style and disease prevention among older people?

*Marzena Tambor,
Milena Pavlova, Stanisława Golinowska,
Jelena Arsenijevic, Wim Groot*

Background

- ▶ Health promotion and prevention → Prolonging life in good health
- ▶ People neglect preventive measures
- ▶ Variety of mechanisms used to modify behavior: informing & educating → nudging → incentivizing...
- ▶ Explicit financial incentives (rewards & penalties)
- ▶ Lack of clarity on the effectiveness of financial incentives for older people

Aim

To review the recent evidence on
explicit financial incentives
(rewards and penalties)
for health promotion and prevention
among older people

Methods

- ▶ Systematic literature review:
PUBMED, ECONLIT, COCHRANE LIBRARY.
- ▶ The search was conducted in November 2015 (publications 2005–2015)
- ▶ Directed (relational) content analysis method:
 - Characteristics of the study
 - Study population
 - Behavior targeted by the incentives
 - Characteristics of financial incentives
 - Findings of the study
- ▶ Qualitative evaluation of quality of evidence

Search strategy

Health promotion

health promotion OR promotion OR primary prevention OR prevention OR screening OR screenings

• AND

Incentive

incentive OR incentives OR motivation OR motivations OR motivate OR stimulus OR stimuli OR stimulate OR reward OR rewards OR reinforcement OR reinforcements

• AND

Financial

financial OR economic OR economics OR monetary OR money OR payment OR payments OR pay OR bonus

• AND

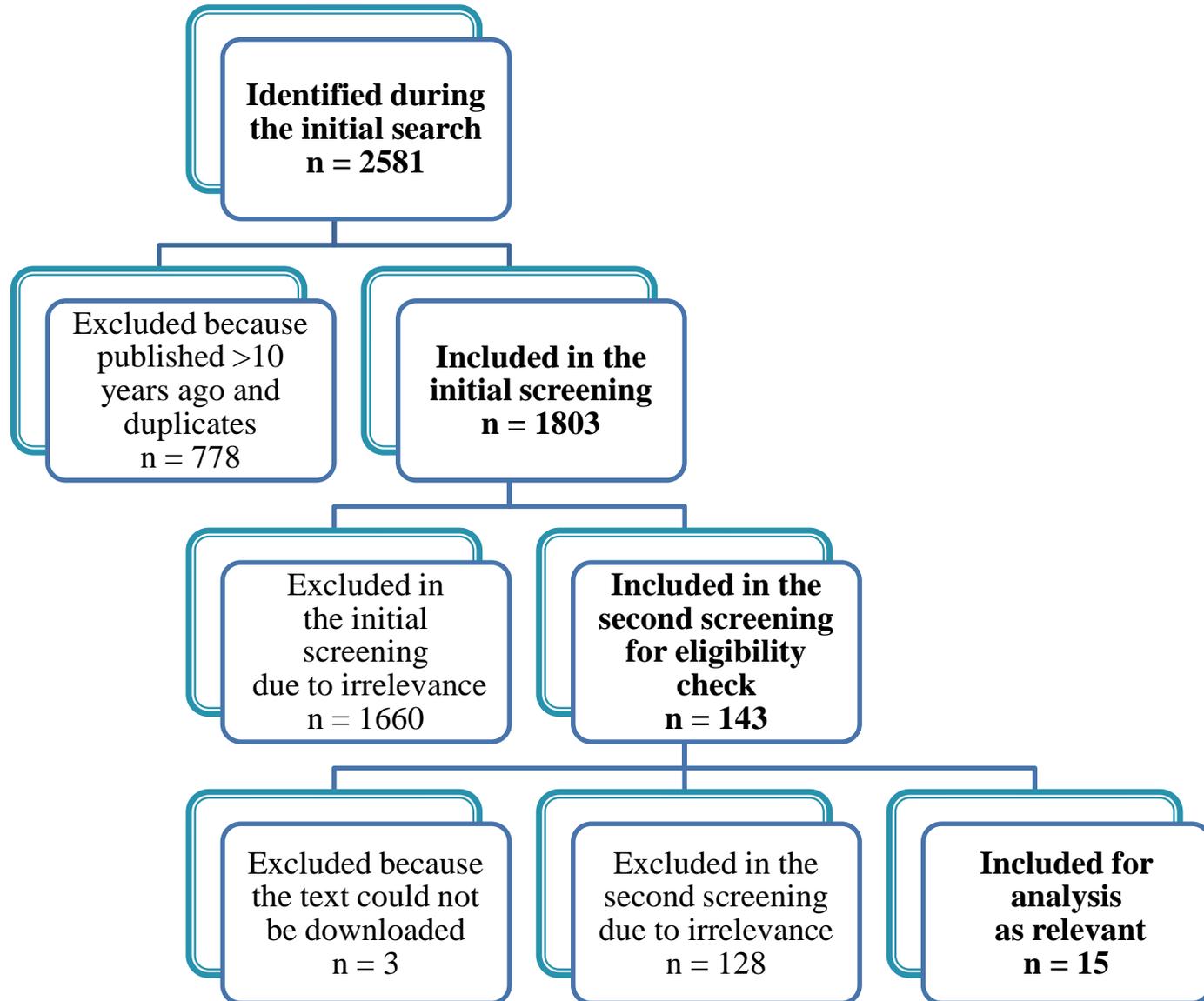
Elderly

elderly OR aged OR old OR senior OR seniors

Inclusion/exclusion criteria

Health promotion	<ul style="list-style-type: none">• Health promotion and primary prevention• Screening
Financial incentives	<ul style="list-style-type: none">• Explicit incentives (we exclude implicit incentives – increasing/decreasing price of goods)• Rewards (cash, gifts or voucher for positive behavior change) and penalties (commitment contracts)• Guaranteed and non-guaranteed (lottery)• Incentives for consumers (we exclude incentives for providers)
Elderly	<ul style="list-style-type: none">• Study population: ≥ 50 or mean age ≥ 60
Time	<ul style="list-style-type: none">• Last 10 years
Location	<ul style="list-style-type: none">• No limits
Study characteristics	<ul style="list-style-type: none">• Only English full-text publications• Original empirical studies (quantitative or qualitative) or a review of empirical studies (we exclude discussion papers, opinion papers and editorials)

Selection of publications



Results

Characteristics of study	<ul style="list-style-type: none">• 11 Quantitative studies on the effectiveness of financial incentives, incl. 6 RCT (1–6 months) and 3 non-experimental studies on government/insurer programs• 4 Qualitative studies on the acceptability of incentives US (n=7), Europe (n=3), other (n=5)
Study population	<ul style="list-style-type: none">• Specific groups of seniors (e.g. veterans, sedentary adults)• Size (quantitative studies): from 45 to 1549 participants
Behavior targeted	Physical activity (n=6), screening (n=4), other or mixed (n=5)
Characteristics of financial incentives	<ul style="list-style-type: none">• Rewards (n=14) > penalties• Guaranteed > non-guaranteed (lottery, raffle)• Cash > non-cash• Value: up to \$500 in lottery

Results

Effectiveness of incentives

- Randomized controlled trials: **mixed results**
- Non-interventional studies: **positive results**

Acceptability of incentives

- **Negative attitude** towards incentives: inappropriateness and unfairness, questionable effectiveness and adverse effects

Quality of evidence

- Short study duration (1–6 months for RCT) and lack of follow up
- Small study sample
- Non-representative character of the samples (e.g. veterans, women, those with higher socio-economic group)
- Unmeasured confounding factors

Conclusions

- ▶ There is a scarcity of evidence on financial incentives for health promotion and prevention among older adults
- ▶ The most attention is being paid to the use of cash rewards in promoting physical activity
- ▶ The research provides mixed results of the effectiveness of incentives
- ▶ The heterogeneity of the studies and their limitations do not allow to conclude on the most effective design of the incentives
- ▶ The acceptability of financial incentives for changing health consumer behavior among older people is limited

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