

CA: A Cancer Journal for Clinicians

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Older adult participation in cancer clinical trials: A systematic review of barriers and interventions

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First published: 01 October 2020 | <https://doi.org/10.3322/caac.21638>

Objectives

1. Why are older adults underrepresented in cancer clinical trials?
2. What has been done about it?

1 prior systematic review performed, but with limitations

VOLUME 23 · NUMBER 13 · MAY 1 2005

JOURNAL OF CLINICAL ONCOLOGY

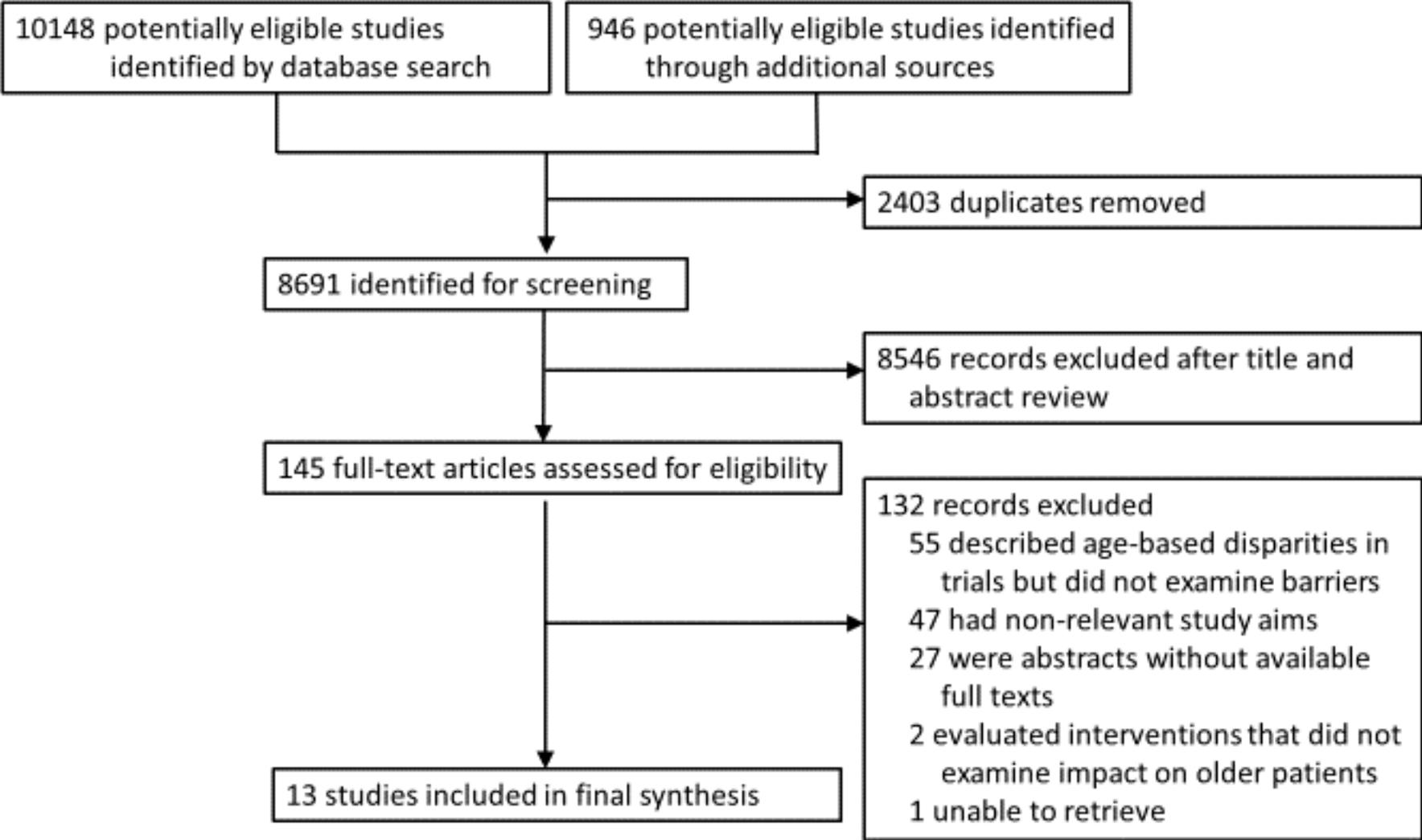
REVIEW ARTICLE

Systematic Review of Barriers to the Recruitment of Older Patients With Cancer Onto Clinical Trials

Carol A. Townsley, Rita Selby, and Lillian L. Siu

- Included studies from 1994-2004
- Focused on barriers, not interventions
- Lacks evaluation of study bias
- Lacked systematic, rigorous methods (pre- PRISMA era)

PRISMA Flow Chart of Systematic Review, 2020



What keeps older adults out of cancer clinical trials?

N=12 studies

		Kombliith (2002)	Kemeny (2003)	Moore (2004)	Townslley (2006)	Basche (2008)	Puts (2009)	Javid (2012)	Hamaker (2013)	Ayodel (2016)	McCleary (2018)	Prieske (2018)
System	Eligibility criteria	•		•				•	•		•	
	Consent form language							•	•			
	Trial availability			•								
Provider	Concern for toxicity	•	•	•				•	•		•	
	Concern for patient age	•						•	•		•	
	Time/burden	•						•	•		•	
	Preference for another treatment	•	•						•			
	Lack of personnel							•	•			
	Preference against research in general	•			•			•		•	•	
	Unaware of available trials	•	•									
Patient	Knowledge	•			•			•		•		•
	Transportation	•				•		•		•		•
	Time/burden					•	•	•	•			•
	Concern about efficacy and toxicity				•	•	•	•		•		•
	Against experimentation	•	•			•		•	•			
	Treatment preferences	•	•					•	•			
	Finances	•				•		•				
	Age (e.g., believing they are too old)				•					•		
	Emotional burden						•					
Caregiver	Preferences	•			•			•				
	Burden	•						•				

What interventions have been studied to improve older adult participation beyond trials designed specifically for them?

N=1
study

VOLUME 23 · NUMBER 10 · APRIL 1 2005

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Improving Accrual of Older Persons to Cancer Treatment Trials: A Randomized Trial Comparing an Educational Intervention With Standard Information: CALGB 360001

Gretchen G. Kimmick, Bercedis L. Peterson, Alice B. Kornblith, Jeanne Mandelblatt, Jeffrey L. Johnson, Judith Wheeler, Robin Heinze, Harvey J. Cohen, and Hyman B. Muss

- Cluster RCT (N = 125 institutions)
- A physician-directed geriatric educational intervention
- No impact on accrual of older patients

A detailed blueprint for restructuring cancer clinical trials so that the translational power of personalized oncologic medicine is inclusive of older and frail adults with cancer

- Design trials specific to older adults
- Modify trial design to collect more data on older adults
- Leverage population cohort studies
- Establish post-marketing surveillance studies
- Embed biological or functional age evaluation in trials
- Conduct concurrent differential dosing trials
- Measure relevant endpoint
- Broaden (further) eligibility criteria
- Advance regulatory and policy efforts
- Evaluate and address site/stakeholder-specific barriers
- Engage referring providers in the clinical trial process
- Design pragmatic clinical trials
- Leverage real-world data

**Multi-System Problems Need Multi-System Solutions
by Multi-Stakeholder Partnership**

